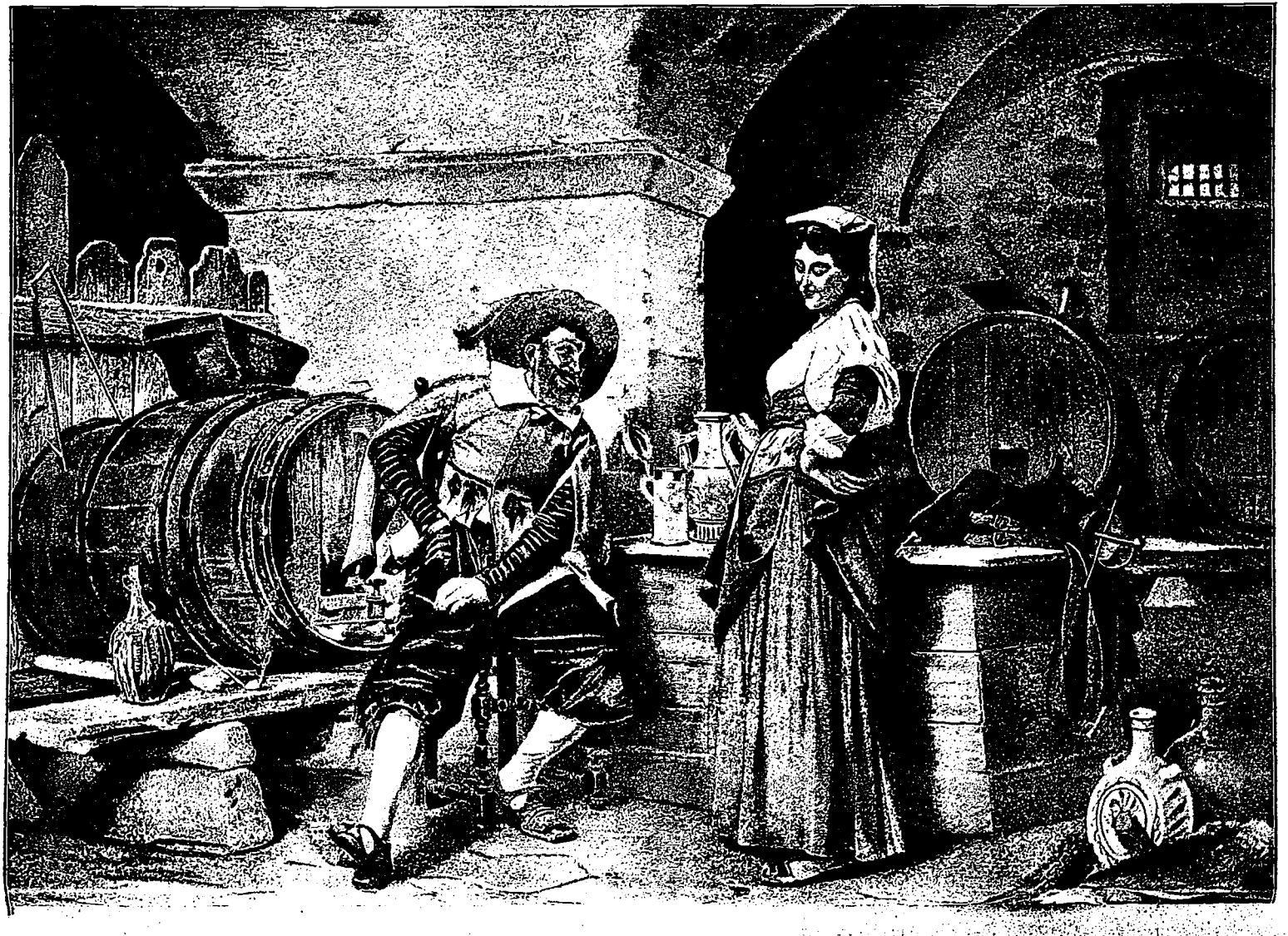

The Canadian Photographic Journal

DEVOTED TO THE INTERESTS OF THE

Professional and Amateur Photographer

G. Gilson, H. C. Tugwell, } *Publishers.*
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WE wish to thank the many who have sent us such kind, encouraging and even flattering words. Nearly every mail brings us expressions of good-will, wishes for our success and appreciation of our efforts to give Canadians a really good home journal; these expressions have reached us from every quarter of the Dominion, and as an idea of the general feeling regarding our new venture are very welcome.

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The journal has met with a coldness and opposition in a very few instances, and in quarters least expected, and while we feel sorry indeed that there exist people and firms who are so prejudiced against anything Canadian that they use their influence to crush any efforts made in this country to give them as good as they get from other countries, still we are glad to say there are few of this class, and thank goodness they grow beautifully less every year, and we and others who are trying our best for Canada have the majority with us, and feel the day is dawning when Canadians will have the heart and spirit to risk their money and to devote their time and best energies in literary and other ventures deserving support, knowing they have their country with them.

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We regret to learn from various sources that there is an impression in the minds of some photographers that this journal is under the control of a photographic stock house in this city. We desire at this early date to disabuse the minds of those holding this erroneous idea, and we wish to state emphatically that this journal is *not* connected, either directly or indirectly, with any stock house or photographic establishment in the country; that is, no stock house or photographic establishment has the power or right to dictate to the

publishers anything in reference to the publication. We are at all times glad to receive suggestions from any of the houses, and will act upon them should they be considered practicable. Those stock houses who have used the columns of our journal to advertise their goods have paid, and are willing to pay, for every line they use, and it is not just to infer that because one firm, in its wisdom, sees fit to have several advertisements through the journal, its columns are being controlled by and used for the benefit of that firm alone. Such is not the case, and we trust that this explanation will be sufficient and satisfactory to those who have had thoughts in this particular direction.

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It has also been said that no photographic publication can be a success in Canada unless controlled by some responsible stock house, and mention is made of several American journals published in this manner to support their assertions. We believe this is a mistake. We are aware that quite a few of the photographic journals on the American side are the products of certain celebrated stock houses. We have nothing to say against them. A stock house, if it feels so disposed, has just as much right to issue a journal as it has to issue a catalogue. Whether the publication is a success financially or not is none of our business. They reach the point they have in view, and they know what that point is. But we can name several journals that are *not* controlled by any stock house, and we consider them superior in every way to those controlled by the stock house. They are richer in views, the reading is more plentiful and generally more useful and their advertising pages represent no particular house or article. We think, however, a comparison is hardly necessary. Our circumstances are entirely different to those on the American side. The field there is so wide that both methods of publication appear to be successful. In Canada, we believe, a journal published by independent parties is of more value to the photographers than one published under the direct control of any stock house. We have undertaken this work, and we believe success is with us. We have given a straight denial to the rumor that we are connected with any stock house, and we now look for the unanimous support of the photographers in this country. This journal is yours, its colums are open to you at all times and we trust that you will let us hear from you. We will endeavor to help you, and we know that the feeling will be reciprocated.

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Our Picture.

Our picture for this month is a fine specimen of half-tone work done by the Canadian Photo-Engraving Bureau. We think it will be more interesting for our readers—we have, in fact, been requested by several—to run a sample of different kinds of work made practicable and possible by photography, in a few issues during the year, and have secured some very fine examples of this kind of work. Our April picture will be a photograph by one of the best-known artists of Canada.

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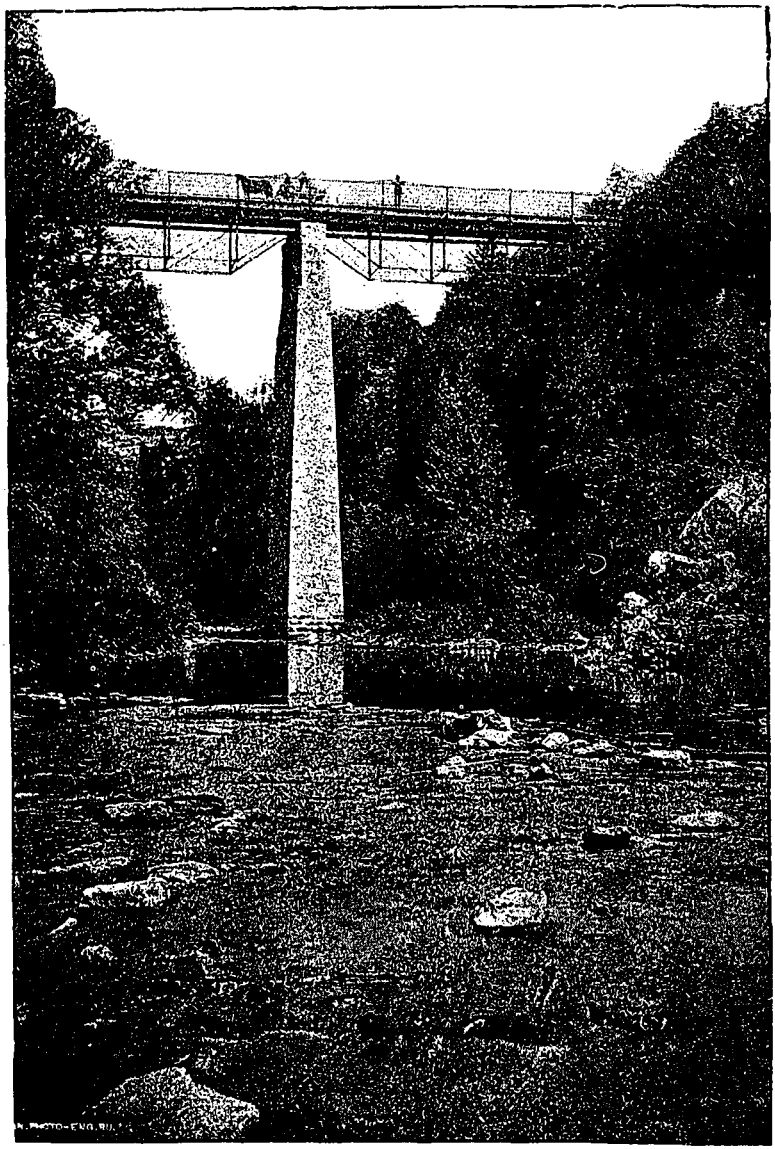
THE WATER LILIES.—PHOTO BY DR. N. A. POWELL

The three half-tones given in this number are from negatives made by Messrs. F. D. Manchee, W. B. McMurrich and Dr. N. A. Powell, members of the Toronto Camera Club, and are good examples of the excellent work that is being done by the members of that club.



IRVINE RIVER, ELORA.—F. D. MANCHEE

THE DEVIL'S GAP, LAKE JOSEPH, MUSKOKA.- W. B. M'MURRICH

New Lenses.

We hear from the laboratory of the world-renowned optician, Carl Zeiss, of Jena, Germany, as follows:

For several years past, the members of the scientific department of our optical works have been engaged in theoretically and practically investigating the possible means of improving photographic lenses afforded by the extensive material placed at the disposal of practical opticians by the glass works of Messrs. Schott & Co., of Jena.

These investigations have resulted in the construction of two new types of photographic lenses, namely, an anastigmatic doublet and a triplet, which essentially differ in principle from all other lenses, and which, from the critique of numerous experts, are in several respects superior to any of the lenses hitherto constructed.

The lenses of either type are chromatically corrected for both the axial and extra-axial portions of the field; the photographic image is coincident with the visually focused image, and both are of equal magnitude. The lenses are, therefore, free from difference of focus and chromatic difference of magnification.

They are spherically corrected for the aperture of the largest of the diaphragms supplied with each lens, and a sharp image is, therefore, obtainable even with this largest diaphragm. Focusing is, accordingly, not affected by interchange of diaphragms, and the plate may be focused with any diaphragm other than that which is to be actually employed during exposure.

In computing the formulæ, particular attention has been paid to compensating, as far as possible, the evil effects arising from reflections. All the images due to reflection have successfully been brought into such positions as not to exercise any prejudicial influence on the "brilliancy" of the image. In this respect, the new doublets, as described below, are hardly inferior to single lenses, while the triplets compare, to say the least, favorably with the usual lenses consisting of only two separate lenses.

The "flare spot" does not show itself with any of these lenses; it does not even appear when dazzling light enters the lens.

The glasses used for these lenses are, with the exception of the apochromatic triplet, which necessarily contains a light borate-flint, exclusively very colorless silicate glasses, and are in a high degree transparent to actinic rays. The lenses are, therefore, rapid in proportion to their effective aperture, and thus satisfy one of the great wishes of photographers, namely, combination of rapidity with depth of focus. — *The Beacon.*

[Messrs. Ross & Co., London, Eng., whose advertisement appears in this journal, write us that they have just entered into a contract with Messrs. Zeiss & Co., of Jena, to manufacture their patent anastigmatic lenses, and that their license covers the whole of the British Empire.—EDITOR.]

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Is Blurring Desirable in a Photograph?

THE focus question seems to be attracting considerable attention lately, and is one of the points upon which widely different opinions exist. The following article was handed us by an enthusiast on the subject. It would be interesting to hear from our photographers regarding the matter. Our columns are open. What is *your* view of the question?

In the paper on "The Unnaturalness of Naturalistic Focusing," read last week, it was pointed out that the desirability, as a matter of taste, whether occasionally or generally, of representing objects in the camera with the blurred definition of a lens out of focus, is a point that may be fairly argued, even though it may be demonstrated that such blurring does not represent the image of nature impressed upon the retina.

The question arises, What are the advantages, real or supposed, to be

obtained by means of blurring the picture in whole or in part? A claim which has been put prominently forward is that, by placing all but the principal object in a picture out of focus, attention is attracted to that object, and it is recognized as a leading feature. Now, as a matter of fact, does the fineness of detail in any part of a picture cause that part to strike the spectator with the prominence implied by this argument? It does to some extent, probably; but the idea that fine detail is so potent in attracting attention, causing the part where it is present to be recognized as the leading feature of the composition, is probably due to the confounding of fine detail with decision of outline or harshness, both happening to be described by the word "sharpness"; photographers understanding detail by the term, whilst painters use it in the sense of decision of outline. If the part of the picture which is the sharpest photographically—being in best focus, that is—is thereby really made so predominant, we must take it that in Dr. Emerson's "Barley Harvest" the corduroy trousers and hodnailed boots of the sitting figure constitute what Mr. Everitt calls the *motif* of the picture. The sharp contrast between the faces of the figures and the sky will, I think, be generally felt to lead the eye to that part of the photograph rather than to the boots, although the faces are not, photographically speaking, so sharp—not so finely detailed, that is—as the hobnailed soles of the boots.

The difference between the two senses in which the word "sharpness" is used, which was pointed out in the previous paper, is illustrated in this photograph. The corduroy trousers of the sitting figure close to the boots are in good focus, finely defined, and, therefore, what a photographer calls sharp. The upper part of the figures and the scythe stand out sharpely, as a painter would say, against the sky; and although not in the best focus, and, therefore, photographically not so well defined or "sharp" as the trousers, are more immediately striking as the leading theme of the picture.

A real gain that may arise in some special cases from the use of such a large diaphragm as to throw part of the picture out of focus, is when some foreground object has its outline obscured by lines in the background. Suppose the case of a horse with foliage behind. In nature we have the help of color to enable us to separate the one from the other, but in the photograph the leaves and twigs are in places so much of the same depth of tone, that the outline of the animal is either partly lost, or, at all events, requires to be looked for. Now, there are several artificial means which may be adopted quite legitimately to separate more distinctly the foreground object which we wish to represent from the background. One plan is to light a fire where the smoke will blow between the two planes, and thus dim the lines of the background. Another artifice that may be employed is to use the so-called naturalistic focusing—to use, that is to say, a stop large enough to put the background much more decidedly out of focus than it is seen by the eye to be. This method, indeed, will most likely be employed without the special intention mentioned when photographing anything so restless as animal life.

Other cases where advantages may be claimed for an out-of-focus representation are where it is desired to idealize, as, for instance, in portraits or studies from the life, when the irregularities and asperities commonly existing on the skin are felt to be blemishes that it would be better not to include in the picture. There is no doubt, too, that we often see these skin marks more prominently in the photograph than in nature. The more perfect is the photograph in lighting and half-tone, the less will such asperities obtrude themselves, and it is, of course, open to argument that the crudness and harshness due to imperfections of the photograph are more objectional than the absence of the fine definition seen in nature, and that if losing the detail will enable us to obscure the harshness, it is legitimate to do so. The use of orthochromatic methods, and greater perfection in the photographic registration of half tones, will help to overcome the objection to

detail, although, of course, where it is desired to idealize, and to obscure what are considered to be defects in the original, artificial means of some sort must be resorted to, and throwing the image out of focus is one such means. In subjects of a portrait character, we find that artists more frequently avail themselves of the licenses both to use a certain amount of blurred definition in the subject, and a good deal of indistinctness in the background, than is customary in landscape and other paintings.

A departure from perfect definition of an opposite character to that implied by differential focusing was introduced by Professor Petzval in 1859. He showed how, by separating the components of the back lens of one of his combinations, the sharpness of the focal plane was destroyed by the spherical aberration thus introduced, and that, out-of-focus planes not having sharp ones to contrast with, the blurring that existed in them did not strike the eye so prominently. He was careful, however, to describe this quality, which he called depth of focus—using the expression, however, with a different meaning from that of increased definition now generally understood by it—as an imperfection of the lens, and gave no countenance to the idea that there was any real gain of detail in the out-of-focus planes, but only an apparent gain by absence of contrasting sharpness anywhere. This line of argument has also been adopted by Mr. W. K. Burton and others.

Pinhole photography is another way—quite opposite to differential focusing—of obtaining a blurred effect. If the pinhole is small, the blurring is small also, and in a large photograph may be scarcely noticeable at all. A good deal may be said in favor of the pinhole photography, particularly on the ground of the equality of definition all over the picture, and absolute freedom from distortion. An objection, of course, exists in the length of exposure necessary, but this does not come into the present discussion.

With respect to the image given by the pinhole, Mr. T. R. Dallmeyer, in a paper read at the Camera Club Conference, started a very strange proposition to the effect that the image given by it tended to exaggerate foreground objects. Dr. Emerson, in "Naturalistic Photography," had very justly observed that "the drawing of pictures taken in such a way would obviously be correct." He now appears, however, to have assumed that there was some foundation of scientific fact for Mr. Dallmeyer's proposition, for in *Photography* of August 21st last he writes that "the 'pinhole' picture is inadmissible, because the smallness of the aperature falsifies modelling and perspective."

When we are told that the details in all but one plane of the picture are too finely defined in photographs generally, and that it is more artistic to have them decidedly out of focus, we are naturally led to look to the works of recognized artists—painters and draughtsman—to see how they represent nature. We then find that, with the exceptions before mentioned, painters generally give us a fineness of detail throughout the picture which we cannot in most cases rival in the photograph except near to the focal plane, simply from the fact that the use of such a small stop as would be required to imitate in this respect the handiwork of the painter would necessitate too long an exposure.

Take as examples familiar to photographers the photogravures of paintings. In the "Al Fresco Toilet," by Luke Fildes, we see not one face, but all the faces and figures, and not merely these, but the background, and even the vine leaves in the corner, so well defined that, if a photographer were to try to get equal definition in a study of figures similarly arranged, he would have to use such a small diaphragm that the lengthy exposure would almost certainly involve movement of some of the subjects. Take the painting of "Diana or Christ?" by Edwin Long, R. A. Will any one pretend that if he had a group of figures and natural background—the living scene, in fact—thus arranged, he could use a small enough stop in his lens to get the figures throughout so well defined as they are in his painting? Then look at the landscape by R. W.

Leader, A. R. A., and see whether the definition throughout is more like that of the "naturalist" or of the photographer who tries to get as good focus as he can throughout the picture. These paintings are not exceptional in respect of detail, but represent the great majority of work of the best painters—subjects of a portrait character excepted—as before mentioned. If, therefore, Dr. Emerson is right in condemning the photographers who get what definition they can throughout the picture, he also condemns the painters whose work we naturally look to as ideals for photographers to imitate artistically. It is not to the point to say that photography will define more minutely than artists paint. This argument only applies to the part in focus, and does not apply to the great part of the picture, which, according to "the naturalist" contention, should be more or less out of focus. Moreover, although at the one plane the representation may be more minute in detail than the painter would think it worth his while to imitate, the difference in this respect is not necessarily either an objection, or even noticeable at ordinary viewing distance.

The fine definition of details in parts not desired to be prominent is often spoken of as though prominence was mainly due to the presence of fine detail. This is not necessarily so, and it is, indeed, generally speaking, due to the character of lighting or amount of exposure rather than to focus that details become objectionably prominent.

Criticism of particular pictures is distasteful and not conclusive, because a principle may be right or wrong, independent of the character of individual results. Dr. Emerson, however, so challenges criticism by such statements as this is just as it should be, that one may be excuse for specifying what seem to us to be faults in the models he puts before us. With regard to the photograph, "Where Winds the Dyke," one of our members, at a former meeting, remarked that if the lower part of the picture were covered, it could not be told what that which does duty for a tree was intended to represent. With such criticism possible, it certainly seems to be juggling with words to say that out-of-focus effect must be used, but not to the extent of interfering with structure. The "Marsh Pastoral" is certainly a pleasing picture, but rather, I think, in spite of that out-of-focus characteristic of one side of the picture than in consequence of it. If the sheep to the right of the picture had been in better focus, I believe the picture would be better, and certainly more like paintings such as those of H. M. B. Davis, for instance. Taking the work of painters generally, do not the photographers of Gale, England, and Bedford more nearly resemble them in general definition than do such productions as we are now bidden to look upon as the embodiment of the picturesque? Do they not also enable us to see better what exists in nature? If on both hands the answer is that they do, let us, at all events for general work, not abandon the old models for those now attempted to be set up.

A preference for the representation of the details of nature, as a general rule, does not involve a denial of beauty of its own kind as belonging to such works as those of Mr. G. Davison and the series of large head studies shown by Mr. Lyonel Clark. How far this special kind of beauty is esteemed in comparison with the beauty of the more fully expressed details of nature as seen in a finely focused photograph, must be very much a matter of individual taste, and in any case we may admire the artistic power displayed in the selection and treatment of a subject, even if holding the view that a smaller pinhole would have yielded a result still more gratifying to one's own taste.

Don't use or be misled by catch words. "Pictoral definition" is an expression that has been taken up on the assumption that some sort of definition other than that recognized as being in focus, is entitled exclusively or particularly to the designation pictoral. "Biting sharpness," as applied to photographic lenses, is another catch word. The expression will not bear analysis, but it suggests something unpleasant in connection with fine detail, which may lead

away the judgment of the casual hearer to the idea that unpleasantness is inherent in finely detailed work.

There are subjects and occasions, as has been stated, where a loss of detail may be desirable, but these are, in my view, the exception. With these exceptions, and with the understanding that "sharpness" is used in the photographic sense of fine detail, and not the painter's sense of accentuated outline, I believe that Captain Abney's proposition is thoroughly sound—that photographs should be sharp all over, and that a near object should be as sharp as a far-off one.—*A communication to the London and Provincial Photographic Association, by W. E. Debenham.*

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Aristotype Paper.

In working aristotype paper, the very first thing is *not* to touch the surface with the fingers in handling, as it is sure to leave a spot. Print either in the shade or through tissue paper, and let the printing go much further than is desired in the finished picture, as the print will lighten considerably in passing through the toning and fixing baths.

The following toning bath will give about as good results as any.

1.

Chloride of gold	2 grains.
Water	3 ounce.

2.

Sulpho cyanide of ammonia	30 grains.
Water	3 ounce.
Hyposulphite of soda	1 grain.

For use take equal parts of 1 and 2, remembering to pour *No. 1* into No. 2, to avoid a precipitate forming. The prints will be found to print more evenly if this bath is weakened a little with water, as slow toning gives better results. The right tone can be secured by looking through the print.

Before going into the toning bath, the prints should be well washed. Mr. Wall, author of the Dictionary of Photography, advises a bath of one part of carbonate of soda in ten parts of water for a moment as necessary before being toned, to neutralize the acid in the paper, and it is also well to soak the prints before toning in a bath of

Alum	1 part.
Water	10 parts.

for five minutes, which prevents uneven toning, especially if the toning bath is strong. The mode of procedure is, then, as follows: First, wash well; second, the alum bath; third, the soda bath; fourth, wash again; fifth, toning bath; and sixth, fixing bath; then wash again.

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The fixing bath should be:

Hyposulphite of soda	3 ounce.
Water	1 pint.

On putting the prints into the toning bath, they will at once turn *yellow*, will then gradually pass into a brown, and then a purple.

If the prints should show a tendency to turn a little off-color in the fixing bath, an immersion in the soda bath spoken of, for a few moments between toning and fixing, will probably stop it.

A very simply and easily worked formula, and which is a combined toning and fixing bath, is as follows:

Water	24 ounce.
Sulphocyanide of ammonium	1 "
Hyposulphite of soda	6 "
Acetate of soda	1½ "
Saturated solution of alum	2 "

Put in the bottle with this solution some scraps of paper that have not been fixed—bad prints, cuttings, etc.—either aristotype or albumen, and leave set for a day. This is to ensure a small quantity of free chloride of silver in the bath, otherwise it will not tone properly. This should now be filtered to clean the bath, and then is added:

Water	6 ounce.
Chloride of gold	15 grains.
Chloride of ammonium	30 "

The prints are put in the bath *without washing* and after turning yellow owing to fixation taking place will yield to the toning ingredients and turn to a brown or purple as desired. Then wash fully *two* hours in running water.

This bath will prove very satisfactory and avoids the possibility of the fixing bath destroying the tone after it has been obtained.

In drying, the natural surface of the paper can be kept by simply hanging prints over a line to dry. If a glassy surface is wished for, a ferrotype plate is required, the surface or face of which must be prepared by rubbing the surface of the glass with a flannel dipped in a mixture of

White wax.....3 parts.
Turpentine.....1 part.

and shaken until assimilated. This paste, having been applied, must then be carefully rubbed off, leaving only a trace on the glass, as too much makes the face of print greasy. The print is then placed wet, face downward, on the plate, and squeezed on it, using blotting paper and a rubber roller. It is then left till dry, when it will fall off of its own accord. It must *not* be pulled off.

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Development.

WHEN the amateur photographer begins to understand what development really ought to be, the progress of photography towards art will appreciably quicken. The theory of development is no doubt extremely interesting. The reduction of the silver haloids; the vibration of the molecules of the sensitive salt contained in a film of gelatine, commenced by the action of light, and revealed by the action of other salts, has supplied many a clever scientist with a field for investigation. All honor to them! But to the photographer development should not be made a chemical experiment; he should not think of chemistry when developing, any more than the painter thinks of the spectrum when painting; not that the former does do so as a rule. He troubles himself little about chemistry, and he thinks just as little about art. The average amateur (to whom I have been referring more particularly), indeed, thinks not of equations, nor does he trouble himself any the more with the artistic side of development. It must be confessed that he regards it as a kind of automatic machine or else he gives it no more importance than a fixing bath, measures it by rule of thumb, by chance controls it, and not by any exercise of the will. Fancy a painter who valued painting on a level with varnishing! The whole process of photography is from beginning to end looked upon by many as a kind of—well, shall I say gymnastic exercise? —first motion, straddle the tripod; second motion, open the camera; and so on. But even where an intelligent choice is made of a point of view, and thought has been bestowed upon the composition of a picture, and not merely in one case, but where thought and intelligence are habits, even then a plate is not developed in the true sense of the term, but may be said to be "done," like a leg of mutton. Some correspondent of yours the other week recommended a ready-made-up solution with the words, "one lot of the developer will do six plates." Poor plates! It is by an intelligent use of the agents that have been placed in our hands for revealing the latent image, and by a knowledge of the power and meaning of the several constituents of the developer, that an artistic picture is to be made out of what the sun has done for us. And that is not all. Even to those whose ambition does not rise so high, this knowledge is a power working for certainty of results, which must be a commendation to all who wish to limit the number of spoilt plates; I take it, everybody. The ideal developer, broadly speaking, is one which can be controlled, which will give a good negative, remain clean and transparent until its work is done, and which shall be as simple in composition as possible. Simplicity is everything; eschew all complications, and ignore all things, such as glycerine, which are recommended by some people. There are four component parts of a developer such as will most nearly satisfy the conditions named above. They are: (1) Pyrogallic acid; (2) bromide of ammonium (or potassium); (3) sulphite of soda, and (4) liquid ammonia. Of these, Nos. 2 and 4 should be kept in 10 per cent. solutions, dissolving an ounce of bromide in 10 ozs. water, and adding 9 ozs. water to one of ammonia. Of No. 3, it is impossible, as has been

pointed out in these columns, to make a 10 per cent. solution, as 10 ozs. of water becomes saturated with the salt before an ounce of it has been dissolved; we must keep this, then, as a 5 per cent. solution. As for pyro, this should be kept dry. No matter what preserver, so called, may be used, a change commences directly pyro is disolved in water, and goes on steadily working a deteriorating effect upon the main vital essence of the developer, and introducing an element of uncertainty into the same. I have tried pyro with citric acid, sulpho-pyrogallol, pyro with I know not what, but sooner or later would come poor results mysterious in their origin, but which no longer follow on the use of the dry chemical. Many object to the trouble of weighing pyro every time a plate is to be developed, but in practice this is no trouble to speak of, and an accurate idea of what is one, two or more grains is soon arrived at. Bromide of ammonium, or potassium, may be used indifferently, though, if a choice is to be made, use what the maker recommends. Sulphite of soda is a *sine qua non*, for it keeps the solution clear, the fingers clean, the plate free from stain, and helps to produce a negative which cannot be beaten for quality, especially if platinotyye be the printing process adopted. We cannot be too grateful to Mr. H. Berkeley for having first pointed out the use of this salt, though it is unstable. It deteriorates rapidly as a salt, becoming sulphate of soda; and even in solution, used when getting towards the bottom of the bottle, it has sometimes been known to take the power from the developer. It should be mixed therefore in small quantities and not drained to the dregs.

Liquor ammonia still holds its own as an alkali, though the carbonates of soda and potash are making a steady assault on its position. There is no particular reason why we should abandon our old friend. The carbonates may have their advantages, though they get no pull over ammonia though being less volatile, because, as will be explained, it matters not even if the ammonia is losing some strength every day it remains on the shelf, provided the stopper is not left out, or the ammonia of a very feeble kind. A normal developer for ordinary landscape work may be composed in these proportions of the above for constituents :

Pyrogallic acid	2 grs.
Sulphite of soda (5 per cent. sol.)	160 minims. 8 grs.
Brom. ammonia (10 per cent. sol.)	20 minims. 2 grs.
Ammonia (10 per cent sol.) as hereafter stated.	
Water	1 oz.

Add the pyro last. You will then find this to be none of your sherry-coloured solutions, but clear as the water itself, keeping nearly as clear until the end. A fairly accurate simile of the control of the photographic artist over his developer is supplied by the control of the engineer over his engine. The engine is mechanical, it is true, but it may be made to go slowly or quickly, as the guiding hand may decide. In our case, pyro may be said to be the engine and ammonia the steam; for pyro, the moving force, is practically powerless without the infusion of some vitality, which is supplied by the ammonia. Bromide is a safety valve, and keeps the boilers from bursting. But the motto of intelligent development is, keep your finger on the regulator and don't let all the steam in with a rush. Have a safety valve, but don't depend upon it to keep the engine from running away. Add your ammonia by degrees. Begin if you like with half a grain to the ounce, coax out your negative, hang over it with tender care, watching its every phase, quick to add a drop or two of ammonia just when the time comes; but don't put in all the ammonia given in a formula at once, and then, when over-exposure shows itself, panic-stricken dash in half a bottleful of some restrainer. Such a course may save a plate, but it will spoil the quality of the negative. There is no certain quantity of ammonia that can be recommended with a developer, and therefore you can't add it at first. The correct amount is that which will serve to completely and successfully develop the particular plate under treatment; sometimes it may be two grains sometimes three. Neither does it matter if the

ammonia solution has lost some strength or is not of the regulation .880. If it be weaker, then a drop or two more will be wanted to complete the work; if stronger, less. But remember one thing while you are outdoors, and that is always fully expose.

Hydroquinone is a developer which is rapidly gaining ground in this country, and certainly where plates are under or instantaneously exposed it seems to supply a reducing agent of great energy. In such cases as mentioned, then, it may profitably be employed, but for ordinary purposes it is too mechanical. It need not be altogether so, any more than ferrous-oxalate. This seems to enjoy favour by fits and starts. There was a series of articles by Mr. S. Bottone in the *Photographic News* some years ago, in which it was strongly championed, and certainly by his efforts it was raised from out of the position of a mechanical developer pure and simple. It was pointed out that an extremely strong developer might be made by dissolving crystals of ferrous-sulphate in oxalate of potash, and that the bromides would restrain to a great extent; in fact, the author went so far as to place it before pyro in convenience. But whether it be owing to the dirty character of the ferrous-oxalate developer or the demand for one which shall be more capable of modification, whatever may be the reason, it is now seldom spoken of or written about. No, neither hydroquinone nor ferrous-oxalate will entirely supplant in general use the pyro-ammonia developer, if only the last named is properly used in conjunction with a full exposure of the plate. When a plate is under-exposed, pyro-ammonia supplies a developer which, properly constituted, has only been surpassed in a testimonial as yet, although I am not wishing to under-rate the evidence. Even in cases such as we are now considering, is there any necessity to add a large quantity of ammonia all at once? Reduce the bromide to a minimum, go on adding the ammonia by degrees, and the result will be a negative much fuller in detail and richer in gradation than one developed slap-dash. It is just in these qualities of manifold detail and richness of gradation that a gradually developed plate peculiarly excels. There are no great leaps and bounds between the tones, but a gradual sliding along the scale, and yet there is more contrast. The highest light is brighter and the deepest shadow is darker than in a quickly developed plate, and yet there is no hardness- But if you do want, for a particular reason, to lessen the gradation, here then is your power—put on more steam. If more contrast be wanted, or if you have to deal with a plate notoriously over-exposed, go as tenderly as a driver taking his engine over some dangerous points at a great junction. Bromide increased is another help in cases of over-exposure, and so is pyro, for pyro gives density and restraint. The knowledge of the density-giving power of pyro ought to stand the photographic artist in good stead in his different treatment of different subjects. There are some views which, even on the ground glass, are so full of beautifully balanced contrasts, that instinctively it is felt that, barring accidents, a good negative must result. For instance: Here are some stepping stones leading across a stream to a path up to some thatched and whitewashed cottages on the left, backed by some of those tall poplars which so delightfully help in composition. In the right foreground is a belt of rushes. The afternoon's sun's oblique light gives every stone, every blade of grass, a shadow and a distinctiveness, and by shining upon the side of the grey church tower, just peeping above the belt of trees up at the back, gives us a consciousness —and nothing more—that there is a church there. Now, when you get the plate exposed upon such a view into your dark room, use your normal developer, and use it with care, and the resulting negative should be "a thing of beauty and a joy for ever." But perhaps on a summers holiday, when objects of interest rather than pictures are the desiderata, and when things have to be taken as they are found, or not at all, a street view has to be obtained. A blazing hot sun lights up one side of the street, some of the houses in which

may be whitewashed; the other side is in shadow, only relieved by reflection from the whitewash. use only half the pyro in such a case; bring up all the details to what is considered their true intensity ratio,, and then, if there be a general lack of vigor (without fog) all over the plate, add the rest of the pyro. A general intensification will take place and will proceed at the proper rate of speed for each tone of light in the view, if the original development has been started at the proper rate. Again, a photograph has to be obtained of a grey old ruin on a cloudy day. A knowledge of the density-giving power of pyro would lead us to increase the quantity of it in the developer; but this should be accompanied by an additional quantity of bromide, and the principal idea of development in this case should be to make a distinct interval between the tones of light intensity reflected from the subject: for if they merge into one another the result is flatness; on the other hand, if too great intervals elapse between the tones the result is hardness. The power of taking advantage of the lighting of one subject, or of making up of the difference (either through too much or too little light) of another will lead the photographic artist to more advanced ideas. He will seek to create more original effects of his own, and much already has been done in creating the idea of atmosphere, for example. The impressionist school seek atmosphere in fuzziness of focus, and although this idea is not to be scoffed at, still it seems more true to seek to place a veil over the distant parts of the photograph, than to slur them over. The painter who scrumbled his distance with a faint bluish mist would be truer to nature, surely, than he who painted it with the the same tones as the other parts of his picture, but in a more sketchy manner? And this seems to be the difference between fuzziness of focus in the distant parts of a photograph and the production of atmosphere by skilful use and control of the developer. Upon that developer, simplicity in constitution will give a tighter grasp, knowledge of the parts will give a power over the whole, and the vital essence of that whole is pyrogallic acid. Do not depend upon retarders after development has commenced. Use a retarder, but seek rather to render after-correction a thing unnecessary by control over the moving force, ammonia.

H. E. MURCHISON.

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Pictures We Have Received

We have on our desk some excellent specimens of the good work that is being done by the majority of our photograpers. We want particularly to mention a child's head which does Mr. Sproule, of Peterboro', great credit. An exceedingly odd bit of posing is a finely finished picture of a Scotch lassie, engaged in writing "Scotland" upon the glossy aristo background upon which her shadow is also shown. This comes from the studio of R. & M. J. Dukelow, Brockville. Mr. Robson, of Toronto Junction, sends two cute babies. Another is from Mr. Murray, Brockville, and is, besides being beautifully finished, an artistic bit of posing. S. J. Jarvis, Ottawa, sends us two portraits of a good-looking little girl. From P. H. Green, Peterboro', we have a nicely executed portrait of a child, and from Mr. A. G. Pittaway of Ottawa, we have two very artistic portraits of one of Ottawa's handsome girls. They are snow effects, and are the new Paris panel size. The atractive size and stlye of these pictures will certainly increase business in Mr. Pittaway's gallery.

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A Lover's Eyes.

Fond Lover—"What do you mean, sir, by snapping your camera every time that young lady passes?"

Cheeky Amateur—"I'm not taking her picture."

"Oh, you're not, eh! Then what are you doing?"

"I'm closing the shutters so her looks won't break the lens." — *New York Weekly.*

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A New Scheme.

Another new scheme by which the photographer is to suffer is in process of formation in Toronto, and probably other parts of the Dominion. The scheme, which is supposed to be the "off-spring of the fertile brain" of a Syracuse native, is as follows, and is to be worked on a large scale: The worker of the scheme begins operations by calling on all the photographers in turn that he thinks will serve his purpose. From each one he gets a figure for 500 or 1,000 negatives, to be made as wanted, of subjects sent by him and delivered to him retouched. He has regular printed forms for the photographer to sign, and which are drawn up in the "cast-iron" form. Having succeeded in getting all the photographers possible to do this commercial(?) work for him, he next visits the grocer, the dry goods man, the butcher, the clothier, etc., and, with all he can get into the scheme, he arranges to get five per cent. on all customers sent by himself, and leaves with merchants so arranged with printed credit tickets, to be given to buyers who present his card. These tickets show amount of purchase and read: "Good for five per cent. of amount on face, in payment of *photographs*, if presented to the Free Photo Co." or whatever name is adopted. He and his agents then canvass from house to house, simply telling the people that, by trading with the merchants whose names are on the back of the cards they leave, they can get all their pictures for nothing, by bringing checks so obtained to their office, and will be given the selection of the photographer they wish from the list under contract. The photographer selected makes the negative, which becomes the property of the "Free Photo Co." and they then do the printing themselves.

The *modus operandi* of the scheme is probably apparent to our readers by this time. The five per cent. credit checks taken as payment for a dozen photos represent the amount charged regularly by the artist who makes the negative. The five per cents. are then taken to the different merchants and exchanged for hard cash, as they represent his five per cent. commission. The summary of each transaction would appear about as follows:

Received for 1 doz. photos, say ...	$4 00
Cost of negative, printing and advertising, say	1 00
Profit	3 00
Also all re-orders.	

It also means increased custom and a good advertisement for the merchant. The photographer, who probably thought he was getting a good thing to "fill in" with, finds that he has practically cut his own throat, for to offset the possible fifteen per cent. he makes above actual cost on the bare negative, he loses two-thirds of the work he does, which would probably have come to him at regular prices.

A number of galleries have already been approached. Look deeply into any contract offered you for doing work at *wholesale*.

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Moving Uptown.

A few of the best artists of the United States have given up their down-town studios and located in the fashionable part of their respective cities. Mr. H. E. Simpson, of this city, has made the first departure of this kind in Canada, and is now moving his gallery from his old well-known stand on King Street East to 143 College Street.

Mr. Simpson has bought the grounds and residence at that number, and has made alterations and additions until he has now what will probably be one of the finest studios in Canada, having a ground space of 100 ft. by 25 ft., and seven dressing and reception rooms on the first floor. The office and operating rooms will be on the ground floor. The house and grounds and the interior furnishings, together with the new accessories necessitated by the move, will represent an outlay of nearly thirty thousand dollars.

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Para-amidophenol, the new developer in the pure crystalline form, can be supplied by S. H. Smith & Co., 80 Bay St., Toronto.

What They Say of Us.

"Wish you every success."—E. C. LANDON, Landon Dry Plate Co.

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"THE CANADIAN PHOTOGRAPHIC JOURNAL fills a long-felt want, and each and every person connected with photography should become a subscriber at once. Canada for Canadians."—T. S. HILL, St. Catharines.

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"We liked it very much and wish you every success."—R. & M. J. DUKELOW, Brockville.

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"The care and taste displayed in the initial number indicate that the new arrival is in good hands."—*Toronto Globe.*

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"It is neat and bright. We wish you every success."—U. S. PHOTOGRAPHIC SUPPLY CO.

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"Allow me to congratulate you on your success. The paper seems to have about the right *tone* to it. Go on with the good work. You have our good wishes as well as support, for we are for Canadian industries."—GEORGE KNOWLTON, Stanley Dry Plate Co.

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"I enclose subscription, and I trust you will meet with success in your efforts to issue a good Canadian journal."—CAPT. ERNEST F. WURTELE, Quebec.

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The Amateur's Influence in Photography.

IT may be well to understand at the outset what is meant by an "amateur," as there are widespread and erroneous ideas abroad, that he is only a dabbler in the art, and produces a quantity of indifferent work; or, that every tyro who possesses a camera is an amateur because his work is bad. This may be true of some beginners, but not of the majority.

Then it is often said of a clever unprofessional photographer who produces good work that he is no longer an amateur because his work is superior to that of many view or portrait artists who obtain their living by these means.

The literal meaning of the word amateur, "for the love of it," is a good definition, but does not altogether cover the ground, as many professionals are more devoted to their art than those who make it a pastime. The amateur in photography is one who studies and works in that branch of art and science for pleasure and real profit, but not for any monetary consideration.

It is impossible for one who has no pretensions as an artist, to be a camera user long, not to be educated, perhaps unconsciously, in the principles of art, so that, apart from the pleasant amusement obtained, the eye becomes educated, the judgment trained and the artistic preceptions quickened. The amateur becomes conscious of the beautiful in what to him was the commonplace; there is now a beauty of form, a contrast of light and shade in nature, of which he was ignorant. He sees what a difference there is in the same subject in various lights, how the point of view makes or unmakes the picture.

He understands many things, since he has had his camera, that imperceptibly have given him a knowledge of the broad principles of art.

Every year hundreds of camera users are added to the already large number who "press the button" or use the more deliberate and satisfactory tripod and focussing cloth.

Many of these become enthusiastic amateurs, and after surmounting the technical difficulties are small centres of artistic influence. Those who are absorbed by the technical part and delight in experiments are impelled to master many of the mysteries of chemistry, and eventually rise into prominence as scientific photographers and original investigators in this branch of physics. The art and science of photography cannot but receive incalculable impetus from these amateurs. The standard of excellence is raised by their cultured criticism and a more intelligent appreciation of the true and beautiful is fostered

by their growing influence. The intelligent professionals and other artists welcome the advent of this army of camera users and the popularization of art which the introduction of the dry plate, and the consequent improvement of apparatus, has made possible. The rapid strides made by reproduction processes make it possible, as never before, for the good work that is being done to extend its influence.

The whole tendency is toward better things, higher standards of excellence in every department of the photographic world, and the amateur is a very important and necessary factor in this advancement. DRY PYRO.

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The Toronto Camera Club.

DURING the month of February there has been a more than lively time at the club rooms. Demonstration on marking lantern slides was given by Mr. Ramsey, Mr. Moss showed how to work the enlarging apparatus, while later in the month Dr. N. A. Powell gave a most interesting lecture on flash-light photography and apparatus. The following week Dr. Ellis explained the construction of the sensitive film and the effects of different developers and exposures.

The committee have added to the club apparatus a valuable 8 x 10 portrait camera with stand, which is highly appreciated by the members.

A number of chairs have also been added to accomodate the increasing membership of the club. During the past month several members have joined the club.

Mr. Walsh offered a valuable prize for the best lantern slide shown on March 7th, regular club night.

The committee have decided to hold an exhibition in the latter part of March, and prizes will be awarded in the different classes.

The following official circular has been sent out by the Toronto Camera Club:

"The committee have decided to hold an exhibition of photographs in the latter part of March. This exhibition is open to members of the club in good standing only, on payment of 50 cents entrance fee. Further particulars of classes, and prizes to be awarded, will be mailed later. The committee hope that every member will take part, and assist in making a good display.

"Arrangements have been made with the *Globe* for the publication of one or more pictures weekly. Any members, therefore, having such for insertion will please send them to or leave them with the secretary.

"It is proposed to start a library in connection. The secretary will be pleased to receive either books or promises of books; also frames of photos for the decoration of the rooms.

"Club Night.—Every member is requested to be on hand on Monday, 7th prox. Mr. Neilson will operate the lantern, and the usual monthly competition in slides will take place. The prize on this occassion—several boxes of plates—is offered by our ever-generous vice-president.

"During the past month several entertaining and instructive lectures and demonstrations have been given, and nine new names have been placed on the books. The committee earnestly request each member to assist in adding new names. The advantages offered by the club are such that no amateur can afford to ignore them.

"Demonstrations on the following subjects, will take place during March:

"Second Monday—Enlarging, and How to Do It; E. H. Walsh.

"Third Monday—Intensifying; F. D. Manchee.

"Fourth Monday—Carbon Printing; D. J. Howell.

"Yours truly,

"R. G. MUNTZ, Secy.

"Club Rooms, Feb. 27th, 1892."

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We are now open for suggestions, from clubs or individuals, regarding the prize competition we are arranging to give, the particulars of which we expect to be able to place before our readers next month, if we find that enough interest will be taken in such an undertaking by Canadian amateurs to warrant our going to the expense—which will be considerable—of getting it up. There is no doubt but that a competition of this kind would be a good thing as an incentive to better work, and would awaken a renewed interest in amateur photography. Send along your suggestions, either as a club or as an amateur.

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The publishers of this journal desire to do all in their power to advance photography in Canada, both in the profession and among the amateurs.

It is to be hoped that the different clubs will realize the interest that will be created in them and their doings, and in photography, by enabling us to have descriptions in THE JOURNAL of what is being done of an interesting nature in the clubs, and will see that we get a summary of the club's doings regularly each month.

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We have received a number of pictures, probably sent in for criticism. We are pleased to receive pictures from our out-of-town friends, and are glad to find such generally good work being done, but as to our giving criticism on work done by the many good artists of the Dominion, we must respectfully decline for the time being, as we feel it would be better for us to wait until our journal is better known and has more caste before venturing criticism.

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Personal Mention

We have received from Mr. S. J. Jarvis, of Ottawa, a very unique invitation to the tenth anniversity of the occupancy of his studio, which took place on the 18th ult. The invitation is very appropriately gotten up entirely by photography, the wording being in the centre and embellished on each side by photographs in miniature of himself and wife and the entire staff. We regret that business matters prevented our attending.

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Mr. W. J. Grant, the Hamilton representative of the C. P. R., and an enthusiastic amateur, was in town last week. We are glad to hear from him that the Hamilton Camera Club have decided to reorganize. We hope very soon to hear good news of the progress of the new club.

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Mr. J. C. Walker, who for several days was a victim of that very popular malady, la grippe, is now, we are glad to state, entirely recovered.

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Mr. Sproule, of Peterboro', was in town on the 24th, on a brief business visit, and reports business as being better than it has been for a long time.

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Mr. Joseph Senior, of Exeter, was in the city for a few days lately. Mr. Senior is making a tour of Ontario, visiting friends, and is also on the look-out for anything new.

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Mr. Charles J. Neil has been compelled, by increasing business, to move into more spacious quarters.

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Anyone intending using "printing-out" paper should get a copy of *Photographic Scraps* of January 1st. The diagrams showing methods of cutting into various sized sheets will be found very convenient.

Off to the Old Country.

Mr. Ramsay left on Wednesday, the 18th ult., for a six or eight weeks' trip to the Old Country. Mr. Ramsay goes principally to visit his old home, near Dublin, but will combine business with pleasure, and intends visiting London, Paris and the principal cities on the lookout for anything new in the photograph line. Mr. Gavin Dykes accompanies him. Some good things in views may be looked for.

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Hard Luck.

I called to see my lady love
Against her stern behest;
So she just pressed the button—
The footman did the rest.

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Orthographical Difficulties.

If an S and an I and an O and a U,
And an X at the end spells Su;
And an E and a Y and an E spell I,
Pray, what is a speller to do?
Then, if also an S and an I and a G,
And an H E D spell cide,
There's nothing much left for a speller to do
But to go and commit siouxeyesighed.

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The Czar of Russia has a great aversion to having his picture taken, and is said to have been greatly enraged recently by the attempt of a travelling photographer to take a snap shot at him. In this respect he greatly differs from the Emperor of Germany.

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It is related of a prominent clergyman in Boston that, as he was walking down street one day, he saw a little fellow undertaking to ring a door bell. In the kindness of his heart he stepped up to the boy and, saying a kind word to him, assisted in ringing the bell. The little fellow looked up to the reverend doctor and said, "Mister, it is time for us to scoot."

Proving His Smartness.

Photographer—But why do you wish to be taken with your watch in one hand and your pocket-book in the other?

Mr. Bascomb—I'm a goin' to send this picter to my wife, young man; when I left home she said she'd bet I'd be buncoed out o 'everythin I had before I'd be'n in the city two hours.

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Electricity, which can do about everything from executing a criminal to conveying the news that baby weighs eight pounds and is doing well, has been applied to a new use with interesting if not altogether successful results. Photographs may now be sent by wire by much the same principle on which the telephone is based, use being made of varying degrees of light, instead of sound, as in the telephone.

In order to send a picture over a wire it is first photographed on what photographers call a stripping film, composed of gelatine and bichromate of potash. After the picture is transferred to this film the film is washed with lukewarm water, by which all but the lines of the picture are removed, leaving the photograph in relief.

The point of a tracing apparatus when drawn across the film from side to side rises and falls as it strikes each line of the picture. This wave-like motion of the tracer is made use of to produce similar motion in another tracing apparatus at the other end of the line, by means of complicated electrical mechanism, and each depression and elevation in the picture is reproduced in a waxen cylinder on the receiving instrument. To accomplish this it is necessary to go entirely over the picture that is being transmitted, tracing lines across the surface. A single line conveys no idea of the picture, but as they follow each other they gradually outline the object.

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The World's Fair.

SOME INTERESTING FIGURES AS TO THE MONEY WHICH WILL BE SPENT.

THE Department of Publicity of the World's Fair has issued a statement showing the scope of the work in hand. It reveals the following facts: Thirty-nine nations and twenty-four colonies have officially proposed appropriations for their exhibits, amounting in the aggregate to $4,004,565, and the indications are that, at a low estimate, this will be increased to $5,000,000. The states and territories of the United States have appropriated $2,695,000, which will be largely increased. In nine states where, for constitutional reasons, no appropriations have been made, organizations of citizens are raising $1,030,000. The aggregate of the states is expected to reach $5,000,000. The United States Government has appropriated $1,500,000. The exposition company has raised $5,721,230. Chicago has given a $5,000,000 loan, and the Government will be asked to increase its appropriation an equal amount.

The cost to the exposition company of constructing and holding the exposition is estimated at $18,000,000, of which $8,000,000 is to be put into the general department buildings alone, exclusive of the national and state buildings of all sorts. To meet this it is figured that the company has $23,750,000 of prospective resources, including the addition to sums already given, and exclusive of the proposed sum from the Government, $10,000,000 from gate receipts and $3,000,000 from the sale of privileges and from salvage.

The company has paid out to date $2,779,707, and the current expenditures are about $1,000,000 per month.

The aggregate amount to be spent on the fair by the exposition company, the various states and foreign nations and the Federal Government is approximately $30,000,000.

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At the coming World's Fair there will probably be an exhibit of amateur work which will show far better than words what is being done by the camerists. As yet what representation will be made has not been decided upon. If the facilities at the fair are not sufficient, the Chicago camera clubs will see that at their rooms visiting photographers find a fine collection.

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A convention will be held in 1893 in Chicago, and their is every reason to predict that it will be a success. Notwithstanding the small amount in the treasury the officers will go ahead and try and give the members of the P. A. of A. one of the most successful conventions that have been held. There will be many difficulties to contend with, but we have every reason to think that our present energetic officers will eventually overcome all of them. A liberal list of prizes will be offered.

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The World's Fair Convention of the Photographers' Association of America will be held about the third week in July 1893, at one of the finest armories in Chicago. The Poem selected by the executive committee is that of Lucille by Owen Meredith, which is full of good subjects for those who wish to contend for the grand prize which will be something worth having, as it will be a valuable jewel that the lucky winner will be able to wear attached to his watch chain.

.....

Very excellent quarters for the holding of the World's Fair Convention of the Photographers' Association of America, to be held in 1893, have been selected by the executive, as they have contracted for the 2nd Regiment Armory, on Washington Boulevard, on the west side. It will be one of the finest halls they have had.

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As only a limited amount of space will be allotted to photographers at the Columbian World's Exposition, and probably prizes will not be numerous, photograpers will be glad to avail themselves of a chance to make an exhibit and carry home a prize from the World's Fair City in 1893.

Some of the leading photographers of Germany propose to make a grand display at the World's Columbian Exposition, some even talk of coming themselves, therefore we shall hope to see some of the leading photographers of Europe attend the Congress to be held in Chicago next year, under the auspices of the World's Fair Auxiliary.

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Dr. R. L. Maddox

In 1871 Dr. Maddox invented and gave to the public the gelatine dry plate, which has brought wealth to many dry plate manufacturers and made possible the following of the interesting and delightful art of photography to the multitude of amateurs.

The doctor's discovery was the result of experiments by him intended to improve on the collodion process, which was expensive and complicated and the continued use of which was very injurious to the health of the user. The doctor's own family, too, complained of the oppressive and disagreeable odor which permeated every part of the house.

Dr. Maddox is now seventy years of age, and in very straightened circumstances, owing chiefly to a breach of trust by a trustee of his, and has besides been the victim of a serious disease for years past.

Though ill-health and advanced age have prevented Dr. Maddox from being identified with the latest triumphs in photography, he is recognized as the leader and inventor of a great art. Being now infirm and in needy circumstances, photographers throughout the world are contributing liberally to a fund for the relief of the inventor, who has not reaped the fruits of his genius and the merited reward of his services to mankind.

The following article from the *Photographic Times* will describe what is being done. It is to be hoped Canada will be on the list:

"A Worthy Cause.—In view of this being the twenty-first year of the gelatine dry plate process, it is proposed in England to make some kind of acknowledgement to Dr. R. L. Maddox, the practical inventor of the process. This gentlemen is now over seventy years of age and in circumstances by no means comfortable, chiefly on account of a breach of trust by a trustee of his, now deceased. Moreover, the labors of Dr. Maddox have for over forty years been carried on in great pain, due to a serious disease, and of late another malady has been added to his others.

"A large sum of money has already been raised in England, the dry plate manufacturers especially coming forward with some liberal donations. The Ilford Company, for instance, made almost the first contribution of £100 (about $500) without any solicitation on the part of those promoting the cause. Other gifts have followed by professionals and amateurs of five guineas (about $25), as well as larger sums. People interested in photography in the Mother Country seem to be coming forward spontaneously in this matter. Mr. J. Traill Taylor, editor of the *British Journal of Photography*, is taking a leading part in the movement, and Andrew Pringle is acting as temporary secretary. Dr. Clifford Mercer, the well-known American amateur and photo-micrographist, of Syracuse, who is at present in England, is one of the English committee. No circulars have as yet appeared, though they are expected to be issued in the course of a few days.

"It is believed that Americans, always so ready to assist unfortunate ones, especially those who have some claim on the prosperity of others, will come forward in this matter and make liberal contributions to the fund. The *Photographic Times* will gladly take charge of all contributions sent to it, acknowledging promptly in its columns and forwarding the amounts from time to time to the English committee having the matter in charge. It is hoped that the dry plate manufacturers, especially, who have been most benefited by the invention of Dr. Maddox, will contribute generously to this fund. Undoubtedly many professional and amateur photographers have also interest enough in the inventor of the gelatine dry plate process to assist liberally in the movement. We cordially invite all to contribute."

A New Lens.

A GREAT many are anxiously awaiting the advent of the new lens Mr. Dallmeyer is constructing. An exchange says of it:

"A new lens is about to be introduced by Mr. Dallmeyer, of London, different from anything hitherto constructed, in so far that it will give a magnified image with the object at a much greater distance from the lens than that between the lens and the screen. The lens is a double combination, and while the minimum size of the object may be obtained with the screen almost close to the lens, any size may be got by simply moving it farther and farther away. For example, an object about ten feet from the lens may be magnified to twice its size with the screen only two feet from the lens."

There is a considerable need for an apparatus that shall give enlarged images and shall be compact enough for easy manipulation, and Mr. Dallmeyer at the Camera Club, London, on December 10th last, showed how this was possible. He had constructed a lens that will give a picture of a horse, that is about a quarter of a mile away, of such a size as to form a very conspicious object upon an ordinary lantern slide. To illustrate the powers of the lens, he showed negatives taken with ordinary long-focus lenses in which a building was shown as a small detail that had to be looked for, and negatives —taken from the same standpoint with the new lens, showing the building as the principal object—almost the only object—in the view.

The new lens is constructed with a positive or image-forming achromatic lens in front, and a negative or diverging lens at the back, the separation between the two being greater than we are accustomed to in ordinary doublet lens, such, for example, as are used for portraiture. The front lens is preferably of short focus and large aperture, in order to gain rapidity, for if the image is enlarged the light is spread out, and no ingenuity on the part of the optician or anyone else can spread a given amount of light over a larger surface without lessening its intensity. Therefore, a high initial intensity is desirable to allow of the enlargement, and still leave rapidity enough for the purposes that such lenses will be chiefly used for. Mr. Dallmeyer proposes to take advantage of the rapidity of portrait lenses, and is preparing negative lenses mounted so that those who have good portrait lenses can combine the two, and have a photo-telescopic objective by merely adjusting the extra combination.

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A Good Use for Our Lantern Slides.

The English journals some months ago were advocating the giving of free lantern slide exhibitions for the poor during the winter. The idea is good, and, if some charitable institution would take up the matter here in the large cities of Canada, they would, no doubt, find ready and willing helpers in the amateur clubs and the profession. With the myriad of slides made in Canada every year, enough could be got hold of to give, at least, two exhibitions a month from November to March, and, with a society for entertaining the poor in this manner in several of our cities, slides could be exchanged, and thus prevent running short in case of home plates giving out. In this way an interesting and very instructive entertainment could be furnished at a cost merely nominal. Can someone suggest a practical way of carrying out this suggestion?

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Stock houses, studios, hotels or anyone having a dark room for the use of touring camerists should send in their names, which will be printed under our "Dark Rooms." A good dark room for the free use of travellers or resident knights of the camera will generally be found to be a "paying institution."

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The late Duke of Clarence was an amateur photographer of no mean ability, and had, besides the numerous pictures taken and finished by himself, a very fine collection of photos of noted people.

Photography Proved It.

DURING 1864 a forgery of ten thousand dollars, represented in two cheques, was discovered in the assistant treasury in New York, and came to be a question of the assistant treasurer, who accepted the cheques, or the auditor, whose name was signed to them, standing the loss.

The assistant treasurer testified that the signatures of the auditor to the two cheques were genuine and refused to admit a possibility of forgery, and claimed to be able, through his experience, to tell to an absolute certainty whether a signature he was at all familiar with was genuine or forged. The assistant treasurer at New York was, at that time, a very important personage, coming in importance directly after members of the Cabinet, and the friends of the auditor, who had perfect confidence in his integrity, awakened to the fact that they must find evidence of an unmistakable and fully convincing nature at once in order to clear their man.

The means they adopted as a last resort, and which proved successful, was photography. Enlarged photographs of the two forged cheques in question were made, which showed, so conclusively and clearly that none could doubt, the false, traced letters of the names over which the letters in ink had been written. The tracings had then been cleverly erased so as not to be visible to the eye, but were brought out in startling clearness by the camera.

The auditor was cleared of all responsibility and the assistant treasurer, besides standing the loss, was so mortified at the evidence of his cleverness(?) in detecting forgery of a signature that he had seen thousands of times that he immediately resigned his office.

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The rapid strides that "Microbe Killer" has made in public favor since the Canadian branch was opened about a year ago speaks volumes for its efficiency as a disease exterminator. It is infallible for croup, diphtheria, grippe and most ills that flesh is heir to.

Photographs in Business.

"There is no source of annoyance so great to a travelling man," remarked one of the fraternity the other evening, "as the necessity to which we are frequently put of securing men to identify us when we desire to cash drafts or money orders. We are all of us annoyed and embarrassed at such times, and I never saw any scheme to do away with the difficulty until one day last week in Des Moines, Ia.

"After dinner, a friend of mine said to me: 'Come down to the bank a minute, I want to show you something.'

"We went to the bank, and he remarked to the paying teller:

"'Draft here for me?'

"'Yes, sir,' responded the teller.

"'Photograph accompanying it?'

"'Yes, sir.'

"'Please look at it, and see if I am the right man?'

"The clerk did so. He was the man, and a moment later he had the money, and had been subject to no trouble or mortification at all.

"He told me as we went out that he immediately returns the photograph to his house. They always enclose it with drafts. It is the cleverest scheme I ever saw."—*Grocer and Manufacturer.*

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Only Two Dollars.

Two dollars a year will keep you in touch with the trade.

Two dollars a year will show you plenty of business opportunities.

Two dollars a year will give you all the photographic news of the world.

Provided

You invest in a year's subscription to THE CANADIAN PHOTOGRAPHIC JOURNAL.

Could $2 be better invested?

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Photographing human hair is the latest use for the camera. It is claimed that human hair has a marked individuality, and that with a microscope and camera a photograph was gained which led to the discovery of a murderer in Germany. The individuality of hairs alone brought about his conviction.

God-Fearing Lynchers

PHOTOGRAPH OF A NEGRO CORPSE AND THE GENTLEMEN WHO SWUNG IT OFF.

From the Memphis Appeal-Avalanche.

There is on exhibition a photograph of a scene which was recently enacted in one of the counties of Mississippi, which, for the novelty of the subject, outdoes anything ever recorded in the annals of photography.

It was a *bona-fide* picture of a lynching scene, exhibiting all its startling details in naked reality.

There is, of course, nothing unusual in the mere circumstance of a party of outraged citizens meting out just punishment to the perpetrator of a vile crime. But that the men so concerned should conceive the audacious design of having themselves photographed in such an act, and should coolly take along their own artist and all necessary equipments for the purpose, is a feature which is not generally down on the programme of such performances.

The lynching took place under the following circumstances:

A negro fiend had by brute force committed a crime against the honor of woman. His victim was a white lady. Tidings of the crime passed rapidly from mouth to mouth, and soon a silent band of resolute men gathered in pursuit of the dastard.

Day and night they hunted him with bloodhounds, and finally on the ninth day captured him and took him back to the scene of his diabolical deed.

The photograph shows six men, including the principal actor in the tragedy, and gives a most perfect and easily recognized likeness of them.

The lynching party is ranged under a clump of trees, and directly in the foreground hangs the lifeless body, suspended from a limb, some two or three feet from the ground, the knot under his right ear and his head bent to the left. His arms are tightly pinioned with three coils of rope and on his breast is pinned a placard, the writing of which is illegible.

He is a young negro, seemingly not over eighteen years of age, and evidently must have passed away without much struggling, as the expression of his face denotes perfect peace and rest.

To the left of the hanging negro stands a young man, probably twenty-five years of age, with a pistol in one hand, while the other holds the negro's left leg, apparently to steady him for the artist. On the other side is a man some three or four years older, with a rifle, while back in the rear are three others.

There is nothing of fear or reproach in the faces of these men. They are intelligent-looking, and have the air of men who are discharging a duty, and have nothing to fear from God or man.

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An Artist.

"Where have you been, Frank?"
"Down at St. Louis."
"What were you doing there?"
"I ran a photograph galley."
"Did you get anything to do?"
"Well, I should say I did. I put out a sign, 'Babies taken here,' and next morning there were four of them left on the door-step."

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The Cod bank of Newfoundland is 600 miles long.

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A woman is like a cigar, you cannot judge the filling by the wrapper.

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One reason a man's stockings do not cost so much as his wife's is that they do not come so high.

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Our readers will please notice the change of address of the U. S. Photographic Supply Co., as explained in the following notice received from them:

TO PHOTOGRAPHIC MERCHANTS:

New York, Feb. 1st, 1892.—We have removed to our new store, No. 57 East 9th Street, N. Y., where with increased room, and better shipping facilities, we trust to receive your order for our importations. Yours truly, U. S. PHOTO SUPPLY CO., New York, 57 East 9th Street.

Owing to sickness of several members of the Executive Committee of the Photographers' Association of Canada, they were unable to meet last month as intended. A meeting will be held on March 11th, at Toronto, full particulars of which will appear in our next issue.

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A Baby's Diary

First Week.—As near as I am able to judge from appearances, my arrival has kicked up quite an excitement in the household. I have been weighed and the figures were given at eight pounds. I have also been carefully inspected and have been pronounced sound in wind and limb. It's a go as far as I am concerned. My young dad seems to be tickled half to death and his breath smells of beer. When he heard I was a boy he went out back of the house and jumped on his hat for joy. If I don't make him jump for some other cause before I get over this redness of complexion then you may play marbles on my bald head!

Second Week.—Nurse is here yet and I'm on my good behavior. She looks to me like a woman who wouldn't take much sass of a youngster and I don't want a row until my muscle works up a little more. Several parties in to see me and I had to listen to the usual congratulations. Some talk of bringing me up on a bottle, but I'll have something to say about that later on. I'm laying low and taking things easy. Dad is still walking around with a grin on his face and there was a smell of gin cocktail in the room last night. When he remarked that I was just the quietest and most good-natured baby in all New York I came near giving myself dead away. There's a surprise in store for that hayseed and it'll hit him like a load of brick.

Third Week.—Everything so-so. Nurse goes Saturday night. She brags about what a little darling I am, but she's talking for wages. I'm quite sure she mistrusts me. People keep coming in to paw me over and look at my feet. The general verdict is (ahem!) that I'm ust the cutest, handsomest young'un ever born. That's all bosh, however, and I'm not at all stuck on my shape.

They allowed dad to carry me around a few minutes last evening and you'd a-thought he owned the earth. He said he could walk with me for a week and I just gurgled. He'll drop to something before he is a week older. I haven't said much thus far, but I've done a heap o' thinking just the same. I don't propose to take advantage of the baby act much longer. Had a row with the nurse and had to give in. Beaten but not conquered.

Fourth Week.—I told you I'd do it and I did! The night after the nurse left I took up that unfinished business with dad and along about two o'clock in the morning he was the sickest man you ever saw. I didn't want to kill him in one night and so saved some of him over for the next. Colic, you know. All babies have it and I wasn't going to be left out. Kicks, squirms, wriggles, yells, with dad trotting up and down until he finally shook his fist under my nose and hoped I'd die.

Then I let up a little, but I've got a lot more colic saved up. The happy grin has quite vanished from his face and they say he has lost five pounds. That's all right. I propose to take a hand in from this time on. If the old man gets out to lodge or a checker party again this winter, you just ask me how it happened. I'm keeping the run of things under the proper dates and now and then I'll dish you up half a column or so, and let you know who's running the house. Dad may go any day next week, but as for me I've come to stay.

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Impurities of Alcohol.

Pure alcohol is desirable for various operations in photography, and Dr. E. Walker, in the journal of the American Chemical Society, has pointed out a hitherto unsuspected source of impurity. He finds that, if it be kept for some time in tin cans, it slowly reacts in the tin, giving, after a while, a white cloud of oxide of tin, so fine that it can not be filtered out. Vessels of stoneware or glass should therefore be employed for storing alcohol.

Useful Formulas

Starch for mounting should always be cold and should be strained through fine muslin before using, to rid it of all grit.

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A one-solution lantern slide developer:

Hydroquinone	30 grains.
Sodium sulphite	2 ounce.
Potass. carbonate	2 "
Sodium " (crystals)	4 "
Potass. bromide	40 grains.
Water	20 ounce.

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For a thoroughly good, easy-to-work toning solution, the following one-solution formula will give very satisfactory results:

Warm water	10 ounce.
Acetate of soda	2 drams.
Sulphocyanide of ammonium	2 "
Hyposulphite of soda	20 "

When cold add 5 grains chloride of gold dissolved in 1 dram distilled water. Tone to desired shade, and wash thoroughly.

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Developers for Instantaneous Work.

1.

Pyrogallic acid	1 ounce.
Citric acid	60 grains.
Sodic sulphite	2½ ounce.
Water, to make	20 ounce.

2.

Liquor ammonia, (.880)	1 ounce.
Potassium, bromide	½ "
Water, to make	20 "

For studio work use one part each Nos. 1 and 2 to ten parts water.

For out-door work, double the quantity of bromide of potassium and begin with smaller portion of No. 2.

HYDROQUINONE.

Carbonate of soda	7½ grammes.
Hot water	60 "

When dissolved, add

Hydroquinone	1 gramme.

Then dissolve 15 grammes sulphite of soda, in 120 grammes of hot water, add No. 1 to No. 2, and when cold the developer is ready for use.

EIKONOGEN.

1.

Sodium sulphite	440 grains.
Eikonogen cystals	110 "
Water to	10 ounce.

2.

Sal-soda crystals	320 grains.
Water to	10 ounce.

Use equal parts of 1 and 2, or if over exposed, use less of No. 2.

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White Ink for Marking Lantern Slides.

Iodide of potassium	10 parts.
Water	30 "
Iodine	1 "
Gum arabic	1 "

Use ordinary pen writing on dark portion of film. The solution converst the silver into silver iodide, thus producing white letters on a dark ground.

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To Reduce Silver Prints.

If it is found, after toning and fixing, that some of the prints are too dark or heavy, they can be brought to the desired tone by immersing them in the following bath:

Cyanide of potassium	5 grains.
Ammonia	5 drops.
Water	1 pint.

If bath works too quickly, add more water. Take out just before the desired point is reached and wash thoroughly.

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Blisters.

Speaking of those "trials" lately, a Toronto photographer said: "The most fruitful source of that very troublesome complaint I find to be a too strong fixing bath. Since I have used my present solution, I have never seen a blister.

"A twenty-five-minute immersion of the prints in a hypo bath of 24 ounces of hypo to a gallon of water will thoroughly fix any print and never yield a blister."

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Let us have a good Canadian journal. Encourage us with your subscription, and we will make ours the best of its kind.