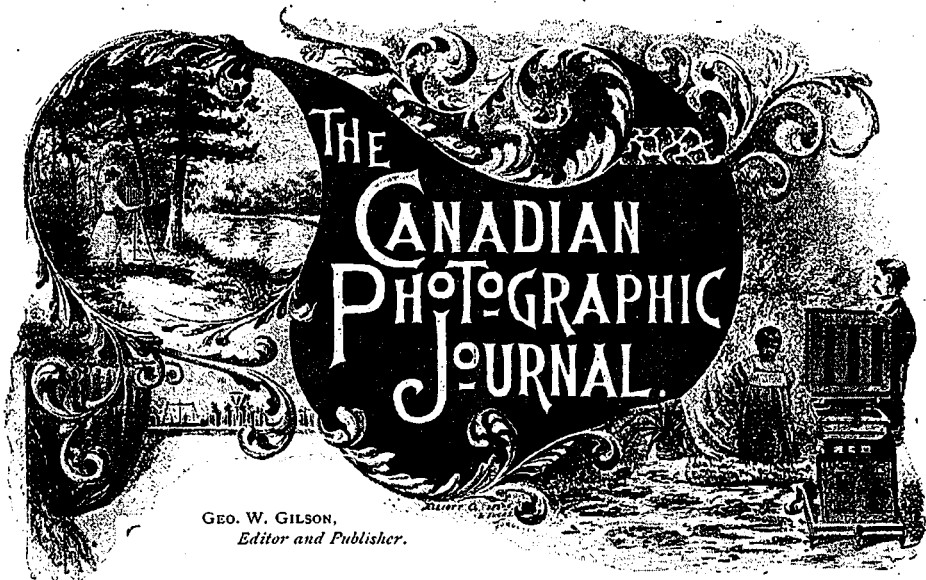




NEGATIVE BY LOUIS ARCHAMBAULT ON LONDON PLATE.

PRINTED ON  
LONDON'S "O.K." ARISTO PAPER.



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**OUR ILLUSTRATION.**

We take much pleasure in giving our readers this month a purely Canadian illustration.

To Canada's enterprising manufacturer, Mr. E. C. Landon, of Montreal, is due the credit for enabling us to do this, for both the plates and paper used are his make.

In the face of many difficulties in the past years, Mr. Landon has, through hard work and perseverance, placed his plates on a level with the best made. Not content with that, he put in an expensive plant and began some months ago the manufacture of Aristotype paper of a very high grade, and the success of his paper which is called "O. K." Aristo, as a reliable and su-

perior printing-out paper, is evidenced by the great demand for it during the short time it has been on the market.

The tones shown by the accompanying print are very pleasing, and will, we are sure, make many friends for "O. K." Aristo.

Mr. Landon certainly deserves all possible success.

The effect of an illustration is always enhanced by the subjects used. Mr. Archambault has been quite fortunate in his selections.

**EDITORIAL CHAT.**

A PAPER on "A Universal Process for Negatives and Positives" is published in a recent number of *Photographic Work*. The article is alleged to be by "Dr. Burton Coxe," of "Hyroxyl-monohydrate" fame, and is a clever resume of the Calotype process.

The January number of the *American Amateur Photographer* sports a cover of new design, which is certainly an improvement over the lady who so industriously worked away at her developing tray.

*The Practical Photographer* is offering seventeen guineas in prizes for designs for signboards, lettering for view albums, posters, show mount, and design for backs of photos and mounts for use by photographers. A prize is also offered for a design for the front cover of THE JOURNAL.

Now is the time to fix up your studios for the spring and summer trade; renovate the old furniture; exchange your old backgrounds for new ones, or for the backgrounds of which a brother photographer is heartily tired. Such exchanges can be readily effected, and the old grounds are easily renovated at very small cost. Fill in the dull days by preparing for a brisk season this year.

THE first number of *The Photogram* is a distinct success, and is full of interesting original matter. In it are published the portraits of the editors (Mr. and Mrs. H. Snowden Ward) and the members of the permanent staff, which includes Messrs. Chas. W. Gamble, W. T. Whitehead, "Schriftfuhrer" (a fancy sketch), and W. Ethelbert Henry. The publication of this number has already reached its ninth thousand, and, owing to increase in weight of the forthcoming numbers, the price has been raised ten cents a year, making the subscription rate a dollar and ten cents.

A GOOD deal of attention is being given to the effect of shearing stress in

decomposing salts of silver and other metals, and obtaining developable images by its action without the aid of light. The *British Journal* quotes at length from an article by Mr. Carey Lea in the *American Journal of Sciences*, and concludes thus: "There will be no difficulty in seeing how any shearing action on the surface of a dry plate should render it liable to decomposition, and, once decomposed in the manner suggested, developing will follow. We apprehend these discoveries will have important application to many photographic problems." In this connection it is interesting to note that Sir Isaac Newton, long before the discovery of photography, had devoted considerable study to the similar effects obtainable by rays of light and shearing stress. So far back as 1820 he said in his *Optics*: "Do not the rays of light in falling upon the bottom of the eye, excite vibrations in the tunica retina? which vibrations, being propagated along the solid fibres of the nerves into the brain, causes the sense of seeing." And, again, "When a man in the dark presses either corner of his eye with his finger, and turns his eye away from his finger, he will see a circle of colors like those in a peacock's tail. Do not these colors arise from such motions excited in the bottom of the eye by the pressure of the finger as at other times are excited there by light for causing vision? And when a man by a stroke upon his eye sees a flash of light, are not the like motions excited in the retina by the stroke?"

IN acknowledging the receipt of a photogram of the members of the House of Commons of Canada, for which the author, Mr. S. J. Jarvis, of Ottawa, received a medal and diploma

at the World's Fair, *The Practical Photographer* says; "It is a fine effort, and reflects great credit on the photographer, but the arrangement by which each head appears on an ivy leaf rather detracts from the general effect." The editor of the *P. J.* is evidently not aware that Mr. Jarvis had a "method in his madness" when he enshrined each head, not in an ivy leaf, but in one of our national emblems, the leaf of our beloved maple.

We are glad to see that the photographers of Great Britain are forming a copyright union for the protection of their works from the wholesale piracy that has been going on for many past years. Members of the union agree to accept a *minimum* fee of half a guinea for the *minimum* reproduction and size of their photograms used by newspapers. Users of the copyright picture will have to pay according to the size of the reproduction, and the use of the block will be confined to the paper for illustrating purposes. This is a desirable step in the right direction, and we congratulate The London Chamber of Commerce for taking the matter in hand.

In connection with the attempted copyright reform in Britain, Mr. Thomas Fall, in a letter to the *Photographic News*, says: "A change in the copyright law is needed more in the interest of the larger number of photographers than the few. How many of the middle class and smaller men get the full benefit of the enlargements from their négatives? From what I gather (and I have many opportunities of doing so) the bulk of this class of work goes to the larger houses and the factory—the latter more especially. An arrangement on these lines

might be affected, viz., let the photographer, say, pay a license (a fixed amount, to be agreed upon) and all photographs bearing the imprint of the license be considered copyright." The suggestion is a good one, and was proposed by us (with more elaboration) in our last August number, page 194.

SOME simpleton, in a long letter to the editor of the *Photographic News*, attacks the proprietors of *The Photogram* on their choice of a title and their consistent use of the noun "photogram" (when writing of a photographic picture) in place of the old, though erroneous, term "photograph." It is quite evident from his letter that the writer knows little or nothing of the Latin derivations of the English language or he surely would never rush into print and so expose his crass ignorance. The proprietors of *The Photogram* are with us; we are not waging war against such words as "photography," "photographer," "photographic," (as the funny man implies in his letter to *The News*), nor, when used as an active verb, "photograph"; we are working in the cause of consistency and common sense, and it will not be many years before the noun "photogram" will be universally adopted by all educated men.

#### PHOTOGRAM vs PHOTOGRAPH.

In a communication to our esteemed contemporary, *The Photographic News*, "An old Photographer" speaks in a way that would be laughable if it were not so silly, of the terrible disrespect shown our native language by the use of the term Photogram instead of Photograph. He also asks in a holy horror sort of way, "What are we coming to

and where are the irrepressible young people leading us to?" This "old Photographer" who undoubtedly often wishes for the return of the "good old days" of wet plates, in speaking of what he calls this "miserable affair" says: "the whether or no as to the use of this awful word was thoroughly thrashed out years ago and the term universally condemned."

We know of a good many people of considerable standing who could not have been of the universe a part at that time, among these being our friend Ward who has so aroused this old gentleman by blazing this obnoxious word upon the title page of his very enterprising journal.

The principal argument used by "An old Photographer" is so logical and shows such deep thought on the part of the said "Old Photographer." He says: "Here is a desecration! Oh, my Amateur and Professional friends, there is now no distinction between you: you are all *photogrammers*. Bid adieu to your much loved Photography; there is nothing but Photogrammy open to you now. We have nothing but Photogrammic processes left to us; or, perhaps, sir, it should be Photogrammatic. What would it feel like to be a Photogrammatic editor?"

He might as well go on and say to our friends of the Electric key, "You are all Telegrammers. There is nothing but Tellegrammy and Tellegrammic or Telegrammatic processes open to you."

We have heard some fairly good arguments against the use of the word, but those given above are simply *tweak*. Of about the same strength is the argument made by "another old one" in a later issue, who tries to back up the first "old one" by saying that "Telegram" rests on a much better basis, as it is a substitute for the very inconveni-

ent phrase, "Telegraphic despatch." Now who ever spoke of receiving a "Telegraphic despatch" or of having a "Photographic picture." The term Telegraph was used until the better one, Telegram took its place.

Photograph is now used, which, in turn, we hope will give way to the infinitely better one, Photogram. We congratulate Mr. Ward on the stand he has taken. We believe it is right. He and hundreds of others believe it right. It is only a matter of time.

#### SOME IRRESPONSIBLE REMARKS BY A MERE DRAUGHTSMAN.

A. H. HOWARD, R.C.A.

Not knowing anything about photography technically, thanks be, I, when called upon to criticize a production of the camera, look for those qualities only which should be found in a black and white drawing—breadth, tone, composition of line, balance of light and shade, etc.—in fact, judge it purely as a picture without reference to the process of manufacture.

Indeed, I have been known to admire a certain sketchy effect in a photograph (I beg your pardon, photogram), with a voluble and gesticulative enthusiasm until extinguished by the ample garment of confusion on the discovery that the "effect" was a serious blemish, due to halation, which no self-respecting amateur would tolerate.

On the other hand, I read in a recent number of the *Buffalo Express* a communication from a correspondent in which he asserts that "one of the first requisites of an artistic photograph is entire absence of sharpness." He might with equal reasonableness insist that one of the first requisites of a handsome man is entire absence of moustache.

I quite agree with his next statement that "Predominant in any work of art is 'effect'"—but I think he might leave it open to individual judgment as to *what* effect, and how obtained.

Some evenings ago I had the pleasure of inspecting at the rooms of the Toronto Camera Club the pictures which had been submitted in competition for the prizes offered by the CANADIAN PHOTOGRAPHIC JOURNAL.

A careful examination of some of the excellent and diversified work I found there, confirmed me in an opinion I had long secretly held, that—well! that there are handsome men *with* moustaches, (I wear one myself), and handsome men without that appendage.

That exquisite finish and microscopic detail can be secured without in the least sacrificing the higher qualities of the picture is sufficiently demonstrated by Mr. Alfred Steiglitz, of New York, who carries off the first prize. Mr. Floyd Vail, of New York, second prize, and Mr. W. B. Post, also of New York, fourth prize. While Mr. W. Braybrooke Bayley, of local celebrity, furnishes us with some beautiful examples of rather broader treatment. His "On the Lake Shore" forms a composition which would do honor to any painter; the group of figures on the shingle has been intelligently posed, with an artful realism in refreshing contrast to the camera struck starers one so frequently sees in a photographed group, but the urchins marching in single file through the water are somewhat too military in bearing, and have too obviously been told *not* to look at the camera.

Mr. Steiglitz's "Murran" is a magnificent composition, full of weird interest, all the more striking from the entire absence of figures. His work has

the effect of highly finished Indian ink drawings, while that of Mr. Post closely resembles fine steel engraving.

Mr. Clarence B. Moore, of Philadelphia, exhibited, along with two very fine specimens of his work, a monstrosity, which appeared to me like an indifferent copy of a very bad Indian ink sketch, the work, it might be, of an amateur who had no conception of composition, and who was uncertain in his washes. Mr. Moore seems, in this instance, to have sacrificed everything to effect—and missed that.

Mr. Harry English had some very excellent work on the walls, his "Giant Willows" being particularly good. He has not been quite happy in the introduction of the figure on the left of the picture, which, besides carrying the eye away from the main interest which should centre in the massive trunks, gives to the feathery sweeping branches an appearance of being anchored down, and steadied for the "exposure."

There were a large number of other pictures in the exhibit, many of them worthy of special mention, but the room was so insufferably hot, and the light so bad that I found myself incapable of taking any more notes, and I can only hope that I may be excused for what I have not done and forgiven what I have.

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#### SPRING CLEANING.

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W. ETHELBERG HENRY.

The choice of title will probably send an icy chill down the spinal column of almost every man who sees it. A spring cleaning in and about the studio is one of the things that receives but scant attention from many photographers; yet it undoubtedly deserves more than passing notice, and a gene-

ral "redding up", as they say in North England, is of immense advantage to all concerned, while the cost is practically nothing at all.

While engaged in studio work, I made a point of utilizing the dull weeks immediately preceding spring by going over every item of the studio, and getting it in good order for the additional trade that is certain to come in with the sunny days. I never regretted the time and labor expended, and I believe many readers would willingly take off their coats and tackle the job if they felt they could do so without too much expense.

I think the best way to go about the business is to first of all have the carpets and floor coverings taken out and well shaken; sweep out the studio thoroughly, and remove all dust and dirt from every nook and corner. Wash all the painted woodwork with "Crystal soap" and warm water; cleanse the skylight, and, finally, have the floors thoroughly scrubbed.

Once having *cleaned* the place, we have some sort of a foundation upon which to work, and, when this stage is once reached, the afterwork will prove a positive pleasure. It is at this point that the value of a photographer's spring cleaning becomes apparent; there is an immense possibility opened up whereby the whole appearance of the place may be altered and improved.

In order to make the renovation complete, I would recommend that all the woodwork have at least one new coat of paint; a very pale blue, or French grey, will look best for this purpose. The old backgrounds that have already done duty for a year or more, may be exchanged for others—an advertisement will produce the desired effect—and the new arrivals may be easily touched up with a mixture of

white lead, turpentine, and Japanese gold size, with sufficient lampblack to give the desired tint. This paint will dry with a dead surface in a very short time, and will give capital results. Accessories that have been long in service should also be exchanged, and the ones received well repaired and repainted before placing in the studio. A similar paint to that recommended for backgrounds may be used, or, if a fawn tint is preferred, it may be attained by modifying the paint by adding yellow ochre and burnt umber according to taste, picking out those parts requiring it by painting with a little deeper shade. The blinds will, of course, require washing to make them look in keeping with the rest of the room, and a drape of some pretty shade of Indian art muslin upon each end of the side light will be a great improvement, and add much to the furnished appearance of the studio. The cameras and polished-wood chairs and tables may be nicely renovated by polishing with a mixture of—

- Linseed oil.....40 parts.
- Spirits of camphor..... 4 "
- Vinegar..... 8 "
- Butter of antimony..... 2 "
- Liquid ammonia and water,  
equal parts of each..... 1 "

This must be applied sparingly by means of a piece of old flannel, and well rubbed off with very soft rags. Plenty of "elbow grease" is the secret of reviving polished woodwork.

The leather bellows are easily cleaned with a mixture of linseed oil and vinegar—about four parts of the former to one of the latter—which must be well rubbed off after application. For the walls, I can advise no better plan than covering them with a pretty, cheap paper. If kalsomine has been used previously, it will be necessary to size the walls with a weak glue, say, two



SPECIMEN OF HALF-TONE.

REFLECTION.

By BOSTON ENG. CO., BOSTON.



ounces of glue to a quart of water, and the paper will stick fast if hung with a flour paste composed of flour and water and a little glue; alum is sometimes added to make the paste work more smoothly, say, about an ounce to two quarts of paste. The paste should be a little thicker than ordinary gruel, and must not be used until it is cold.

Regarding the floor covering, I think it is generally conceded that the best plan is to stain and varnish a liberal margin of about three feet all round, and use a movable square of carpet for the centre. This is easily removed when the space is required for outdoor effects; or rugs may be substituted at a moment's notice.

A good stain may be made by mixing yellow ochre and vandyke brown in a little weak glue size. When dry, one good coat of varnish will be sufficient, as the glue will prevent it from sinking into the floor. In fixing up the studio the object to be aimed at is to make it look as cheerful and as much like a private room as possible.

Avoid a superabundance of accessories, giving a preference to such furniture as would look well in your own home.

Be liberal with paint, paper, and curtains, and hang pleasing pictures upon the walls; have a few comfortable chairs and rugs, and then see if I am not right in maintaining that spring cleaning pays.

### THE CAMERA IN SURGERY.

#### "BEFORE AND AFTER" STUDIES.

Every large hospital has a history book, and in it are carefully recorded the histories of the important cases. In former years this was done exclusively by written descriptions. Recently the mere writing has come to play a

very minor part in the history books. Photography has become a branch of surgery and one which is growing more important every day. A great many photograms are now taken by doctors in private practice. Some of these amateurs have become very expert, and would as soon think of doing without a medicine case as their camera.

Mr. O. G. Mason, the photographer at Bellevue, was recently asked about this branch of his business.

"Do not persons often object to having their ailments and imperfections reduced to paper in this way?"

"Oh, yes, but not as frequently as one might think. It is curious, but I have often noted the phase of human nature which causes the average man or woman to take pleasure in being photographed under almost any circumstances. I have seen women pose before my camera here with the air of professional beauties. Of course many of the patients are beyond feeling in the matter one way or the other. Those who are about to undergo operations which they realize may be fatal, or who are at the point of death, as I often take them, naturally pay very little attention to me and my work, except that in the former case it seems to impress them strongly with the gravity of the situation, and thus enhances their fears."

"Do you give those who have been cured any of the pictures of themselves?"

"Not as a rule, although requests for them are very frequent. It is our aim to keep the pictures out of anything like general circulation, and nobody can obtain them without giving a very good reason, except of course, the medical profession, whose motives we understand."

"What are the most difficult cases to photograph?"

"Those where the interior of the throat is involved. It is necessary to put the lens down into the throat and use a flash-light. The lens is, of course, very small, and one of the difficulties is to get the focus on just the right spot. That is chiefly guesswork and the pic-

tures are unsatisfactory. The locomotor diseases, which make it impossible for the patient to sit still, of course present difficulties. Certain forms of skin disease, too, whose peculiarities lie in discoloration, are hard to take satisfactorily. Particularly is this the case where the color is blue, which makes but little impression on the plates.

"Surgical, and what I may call popular photography have many differences. As an example, the ordinary photographer, as a rule, takes only the head and bust, or the whole figure. I photograph these and also the most minute sections of the human body, the pictures of which must be enlarged. This makes necessary a great many sized lenses.

"One has to be a bit of a doctor in this work," he resumed. "The surgeons do not always explain just what they want brought out in the picture. I have to know that."

At this stage of the conversation a young doctor appeared in the doorway. Behind him were four children, who entered the room in a slow and rather solemn procession. Two nurses brought up the rear.

"We have some work for you this morning, Mr. Mason. Let us see what you can do in the art department with these little patients."

Three-year-old Malachye was the only one of the children who showed no uneasiness; so it was decided to take her picture first. But one wondered why it was necessary to take it at all. Her smiling face and sturdy little figure suggested nothing but the rosiest kind of health, as indeed she has now. The picture was taken to show the great improvement she had made. Six months ago she was brought to the hospital suffering from curvature of the spine, and for a long time her back was kept straight by a plaster cast.

The Arabian mother who left her at the hospital has never come to see her, and has apparently forgotten little Malachye. But she does not lack care. She gets rather a superabundance of it, for her sparkling eyes and little round face are very pretty, and she is everybody's pet.

The morning's work was finished

with a girl of nine years, who was suffering from a case of noma, a rare disease, which is usually fatal within a week after its appearance, if not immediately treated. It is caused by a yet undiscovered germ. The little girl is almost well now, and looked quite bright. This picture was very different from the one taken three weeks ago.

The photograms in the history books of a great hospital like Bellevue, show some strange and gruesome things. But a great many of the life tragedies which they evidence have a happy ending, after all. The pictures taken before and after the operations very often show that there have been complete cures, meaning pain allayed and clouded lives brightened.

And often the drama is in a lighter vein. People come to the hospital suffering only from wounded vanity, caused by an unsightly nose, perhaps, or some other similar defect. The surgeons can very quickly make a becoming nose out of an unbecoming one. They raise the bridge and readjust the member generally to conform to the lines of beauty. The photograms show some remarkable changes in expression brought about by the improvements of the nasal appendage. The picture of one man, taken before the operation, makes him miserably insignificant and mean looking. But you look at the one taken after the work has been done and you see a Napoleon in expression, and all because the surgeons have given him a nose of classic outline.

The lips are subject to the same transformation. When they are abnormally thick, pieces are cut out lengthwise. The lips recede from their undue prominence, and a coarse face becomes a reasonably refined one.

#### PHOTOGRAPHY AS APPLIED TO SURGERY.

A. S. MURRAY.

[Read at the World's Congress of Photographers, Chicago.]

The service which photography is capable of rendering the surgeon covers a wide and important field. By

this means minutely accurate delineations of the work in progress can be secured in a few seconds' time, which will subsequently reproduce all the surface features of the case at a glance, and that, too, more perfectly than an elaborate description.

In surgical cases intended for publication, the photograph is an invaluable adjuvant, either for direct processes of reproduction or as an accurate basis for a careful drawing, which will in this way be enabled to preserve the life and individuality of the subject, often lost in drawings hurriedly made and then finished from memory.

A further and possibly a still more important field for photography in the surgical operating-rooms is one which has been for the first time brought into use in the gynæcological room of the Johns Hopkins Hospital of Baltimore, Maryland. That is, an effort by this means to crystalize a sufficient number of important steps during an operation from the commencement to completion, so that, by producing the photographs in the same order, a fairly accurate conception of the operative procedure may be obtained, and in any event the pictures will afford a basis for a vivid lecture, when given before students for instruction.

The effect of the photograph is much enhanced when the negative is converted into a positive on glass in the shape of a lantern slide, and the operation reproduced upon a screen of sufficient size, in life-like proportions, by the aid of calcium or electric light as an illuminant. The contrast of lights and shadows and the stereoscopic appearance of this field are superior to the best prints, and leave nothing to be desired in the realistic effect. While photography possesses these manifold advantages and holds for itself a wide

field of utility never before occupied, it does not supplant the more painstaking drawing direct from the specimen or subject. By means of the drawing, always more or less diagrammatic, those features are emphasized to which the surgeon wishes to draw the attention, and the drawing is for this reason more quickly self-explanatory. In addition to this, photography becomes difficult, if not impossible, as soon as the field of operation lies deep in the body, either in the abdomen or vagina. The lack of actinic power in the red blood also often interferes with the success of a negative taken during the progress of an operation, the deep red spots showing as unsightly black blotches in the positive. Moving objects, to be sure, cannot well be photographed, unless the illumination is great enough to allow an instantaneous exposure to be made.

In this way the movements of respiration transmitted to the abdomen and pelvic floor may be a serious disadvantage. Sometimes, however, it is advantageous to photograph the motion of a part. Motion may, for example, be registered in this way: If a patient's chest is heaving during an exposure of several seconds, the outline will be a blurred one, while the other parts are sharp, thus demonstrating the motion. A photograph of the contour of the abdomen from sternum to pubis shows a hazy outline due to the transmitted respiratory movements. If, however, the lower abdomen is filled with a myoma large enough to reach the anterior wall, this part is splinted and remains quiescent on the tumor, showing a sharp outline in the picture, while the rest of the abdomen above has a faint, hazy outline, thus demonstrating the presence of the tumor to the eye.

The conditions necessary for making

a good photograph are but few; a good illumination of the subject and the employment of prepared plates of a sufficient degree of sensitiveness, so as to make an impression quickly, without delaying the operator in his work. None of the pictures thus made in the gynæcological operating-room (and we have made about 850 the past year) delay the work longer than three seconds, and generally less time is consumed.

A good instrument, lens, and shutter are necessities. The camera proper must be arranged with considerable movement, or adjustment of the front carrying the lens, so as to bring properly into the centre of the plate that particular part which is the principal object of interest in the picture. A vertical swing-back is also a desideratum. The camera should be strong and well made and equipped with an abundance of plate-holders. The use of lenses of different focal length is of assistance to the photographic operator, but two lengths are all that are made use of in our work.

The best size of plate is that known as 5x7 in the list of photographic sizes, which is a convenient one for those prints to be mounted in our reference albums. Should a larger size be desired, they can readily be enlarged. With this size a good rectilinear lens of 10 inches back focus should be used, classed in the price lists to cover the next larger size of plate, say,  $6\frac{1}{2} \times 8\frac{1}{2}$ .

This will enable the photographic operator to use his lens without small diaphragms, as the object on the ground-glass will be of sufficient size without moving too near to the subject, thus avoiding distortion and irregularity in the sharpness of the field. The use of small apertures to secure uniformly sharp focus of the image, con-

siderably lengthens the time necessary for exposure of the plate. For photographing specimens, a lens of shorter focal length is necessary, as it will be found that to get an image of the desired size, when the foregoing described lens is employed, that the length of the bellows of the standard camera is insufficient; so I would suggest that one of about 5 or even  $4\frac{1}{2}$  inches back focus be added to the photographic outfit.

As a stand or support for the camera, I urge that the conventional tripod be altogether discarded, because of its liability to slide and slip about in a very erratic way, and a table with such suitable attachments as I will hereafter describe be substituted. This table had better be one rather high in proportion to its size, square on the top, but made strongly, so that there may be no vibration. It should be about 4 feet high, and on the top about 30 x 24 inches square, with a shelf placed about midway between the top and the floor; this will make the same more rigid, and besides give an opportunity of a greater range of adjustment for the attachments as you may want to place them. As a general support for the camera, have two pieces or rather angles, made of boards about 8 inches wide and 1 inch thick, the shape of a letter L; these two are placed one against the other, one having a slot about two-thirds its length, and in the other a nut to work on a thumb-screw, to enable you to slide one on the other, and secure them in any position in which they may be adjusted. You now have the two angles fastened together something in the shape of a very straight up and down letter Z. On the upper horizontal part of this you have placed a second board, same width and length, and hinged to it at one end, while at

the other you place a long wooden screw, so by this means you can elevate and depress that end. On this part the camera is now placed, and it can be tipped to a great angle from a horizontal line, depending upon the length of the screw. The lower part of this is then placed on the table and secured by a screw on which it can revolve. The great advantage of this arrangement is that the camera, when desired, can be placed in a position of being plumb, level, and square.

We find very often that we wish to place the camera in a vertical position—that of pointing down upon a subject. To enable this to be done, have two pieces of board, one about 2 feet 6 inches long and the other about 18 inches, fastened together so as to form a right angle, as before mentioned, only that the shorter part is fastened to the table at its edge, and the other longer part is to have a long slot running almost from the top to the bottom, through which the tripod screw will pass, and allow you to slide the camera up and down in a vertical position, and secure it at any point. Have now a frame of suitable size and capable of holding a sheet of plate glass, supported by slender legs, so as not to obstruct the light, about 10 inches high. On this table we place the specimens to be photographed.

The advantages of this method of photographing specimens are apparent. In the first place, they will lie in any position in which they are placed. Again, the background, being at a distance from the plane of support, gives the specimen the appearance in the picture of hanging in space without visible support and securing thus a stereoscopic effect not otherwise obtainable. In some cases the specimens are placed in a dish of a shallow nature, and float-

ed or submerged in water, then the dish placed on the plate glass stand, and so the photograph is made with the floating out of all the delicate velamentous adhesions. When the flow of blood is such as to interfere with the photographic work, a generous flow of water from the "Irrigator" will not oppose the work of the camera.

A record of all negatives made during the operations, and the nature of the subject, is kept in a book in the operating-room, with date and the patient's hospital number. By referring to the album in which all the prints are mounted in the order taken, the cases are recalled with a definiteness which descriptions and drawings can not attain.

#### "AT HOME" PORTRAITS.

BY MRS. S. FRANCIS CLARK.

Of all the varied fields offered by photography to its votaries that of Home Portraiture seems most fitted to fall within the scope of women workers; for in this particular class of work they are saved the fatigue of carrying the photographic kit over longer or shorter distances; as most of the work must necessarily be done at or near home. I do not propose to touch at all the commercial aspect of women as photographers; that subject I must leave to those having professional experience; these notes are but an amateur's advice to amateurs.

In Home Portraiture there is not any necessity to possess either a glass studio, a conservatory, or even a room that can be used for photographic purposes other than a dark room. I do not, and probably never shall, care to possess one. For myself I work entirely in the open air in a small backyard, surrounded on three sides by high



A CARDINAL

SPECIMEN OF HALF-TONE.

BY BOSTON ENG. CO., BOSTON.

ivy-clad walls offering, for photographic purposes, a workable area of something under fifteen feet square.

In such a limited space there is not much room for accessories. The fewer the better, I think, in portrait work. The necessary accessories consist chiefly of a couple of plain backgrounds; one grey, one dark brown, and a pair or two of curtains with any chair or other piece of furniture the picture may suggest, and the house provide. To control the top light, it is advantageous to stretch some muslin curtains upon cord overhead, they are easily drawn into place when required, and will be found to assist greatly in modifying the lighting, especially in large heads. A special background may occasionally—but only occasionally—be required. Then, it must be either bought, borrowed, or, as I find sometimes necessary to do, painted by oneself for the occasion. Almost any good lens will do. Despite all that has been written to the contrary, I still use chiefly a R.R., and find it satisfy most of my requirements. As to the camera: the make of that is of no special importance, provided it is substantial and fixed upon a rigid stand.

Regarding draperies—and it is here that women workers should score so strongly over their male rivals in Home Portraiture—only cut lengths of suitable material should be used, tacking them together, and draping them upon the sitter as the occasion and the subject of the picture may require. On this overruling of the model's own idea of how to dress "to be taken" most of the ultimate success of the picture depends. If portraits are to be made pictures that shall interest beyond the circle of the sitter's own friends, all the draperies, the accessories and the pose must be shaped

to that end. Chance may give an occasional success, but thorough and consistent results can only come from careful study of all the factors that enter into the picture, and an unswerving determination not to pass anything which is short of the predetermined standard.

As a practical example, let us consider the taking of an old man's head, in itself a commonplace everyday subject enough. Yet what do we really require? If a likeness only is our aim, any old man's head will do; if we desire a picture we must find a typical head, that shall declare itself as such without the aid of an elaborate explanatory title—a head that in the resulting photogram shall display a rugged intellectual strength of character; furrowed with the battle of life, bright with the hale heartiness of advancing years, suggestive of a story, and yielding to the beholder an intrinsic pleasure outside of the individuality of the portrait. Such I set as the standard of Home Portraiture. Whether or not the supplement published with this number realizes that standard, I must leave my readers to judge.

In conclusion I would say, before starting a picture, know exactly what you desire the end to be. Having found your model, study it thoroughly, do not start until you have discovered the mood or expression best suited to the desired end. That knowledge gained, the work becomes a short, pleasant, and almost easy road toward success. Remember always that any amateur wishing to take up this branch of photographic recreation must insist upon choosing her own subjects for portraiture, with full liberty to robe and drape the figure as best suited to the picture, rejecting all those who would restrict this full liberty of choice.

for if success is to be attained, the models must be like clay in the hands of the potter.—*The Photogram.*

### SELLERS' ENAMEL PROCESS.

The essential feature of the *Enamel* process is that it comprises a sensitive coating which can be printed in from 45 seconds to 15 minutes, and yet possesses finer qualities than bitumen printing.

The development is quick and easy, only requiring cold water to effect it, and the etching then proceeds without the "messy" preliminary of rolling up. In fact, the etching of half-tone blocks becomes almost as easy as developing a dry-plate negative. SELLERS' ENAMEL PROCESS is world-wide known, and is used by the leading process workers in America, Canada, France, England, Australia, and other countries, and references can be had of the following well-known photo-engraving houses: Wm. Kurtz, New York; Canadian Photo-Engraving Bureau, Toronto, Canada; F. E. Fubler, Youngstown, O.; Penrose & Co., London, England, and others. Printing with this process is more rapid than any other, the developing and etching also; the etching in being vertical, so that the etching can be made more deep than by any other method, no rolling up or pounding is required. The enamel remains on the plate, which takes and gives ink perfectly.

Since its first introduction several practical improvements in the process have been made, most important of which is one, only discovered within the past few weeks, by which the enamel is prevented from cracking and peeling off the plate, as it was previously apt to do if not worked with care. The heat necessary to fix the

enamel is not now so great as previously, and therefore the temper of the metal is not impaired, so that the process may be used on zinc equally as well as on copper. The solutions keep well, and are easily and cheaply made up anew. Proprietors of large etching works may safely entrust the solution to their workmen, while retaining the secret of the formula without fear of discovery.

It is now working smoothly, and producing splendid results. Everyone who sees it demonstrated is charmed with it. Customers are coming along, and the earliest to adopt this method of producing the best work will reap the fullest advantages. Don't get left. You must have it sooner or later.

Terms for instruction are most moderate in comparison with the advantages to be derived from it. No appliances beyond what is to be found in any ordinary process studio are required.

In addition to the above, this well-known house of Alfred Sellers & Co. supplies all the wants of the photo-engravers. Orders are promptly filled, and correspondence carefully attended to.

### P. O. P. MATT SURFACE.

At a recent meeting of the Central Photographic Club, London, England, Mr. John Howson, of the Britannia Works Co., gave a demonstration of the working of the new matt-surface now being issued by his firm.

Mr. Howson said that ever since the introduction of printing-out papers the Ilford Company had under consideration the placing of a matt-surface gelatine paper upon the market.

During the last twenty years matt-surface papers of one sort and another



have been sold; but hitherto they have been a failure in some way or another. In these days it is necessary that paper should keep good indefinitely, otherwise the photographic public will not use it. Plain salted paper does not show the fine detail of the negative, and lacks gradation.

The keeping qualities of printing-out papers, which are admitted on all hands, are embodied in the new paper. The detail and gradation of the negative are truly rendered, as would be seen from an inspection of the specimens in the room.

The tones obtainable are warm blacks, restful to the eyes; photographic purples, warm browns, and sepia, so that we have a point on the artistic side—surface and color.

The practical aspects of the question are anything but small. The matt-surface paper, according to his experience, is suitable for a wider range and class of negatives than the glassy. Both matt-surface and glossy prints can be printed, toned, and fixed together. Prints are of better value to the public generally, and the professionals should, in these hard times, take advantage of this, and not cut prices.

Printing is done in the usual way, and requires no special precautions to be taken. Too much stress cannot be laid on the thorough washing before toning. There is no tendency of the paper to curl. Although the paper is thin, it is exceedingly tough. It is one especially made for the purpose. There is no liability to frill or blister. After washing, prints are put into the alum bath and then washed. The use of the alum bath enables spotting to be done with greater ease. Toning proceeds so rapidly in a bath freshly made up that the prints must be kept moving. A good plan is to keep the sulphocyan-

ide of ammonium in solution of a known strength, and add water to it.

The toning bath is composed of

Water . . . . . 32 oz.  
Sulphocyanide of ammonia 60 grs.  
Chloride of gold . . . . . 4 grs.

As soon as the redness caused by adding the gold disappears, the bath is ready for use. Tone the darkest prints first. Sepia brown tones are produced by short toning in a bath strong in gold. Warm browns by long toning in a bath weak in gold, or one which has been used two or three times. Black prints are obtained from strong negatives, and by toning them in a bath strong in gold. Toning is stopped by placing the prints in water. Always use fresh hypo for fixing; it is "abominably cheap," so the dealers say. Prolonged fixation reduces over-printed prints. The color of the prints when they are withdrawn from the toning bath will be the color they will be when completed. In the fixing bath they be comewarmer in color. Another advantage is the ease with which it could be mounted. Starch paste could be used, and the prints rubbed down with the hand or handkerchief. By the use of platinum toning bath rich browns and sepias can be obtained.

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#### NEW OFFICES OF THE ARISTOTYPE COMPANY.

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We note that the steadily increasing business of the "N. Y." Aristo Co. have necessitated the opening of further offices, the firm now having depots in the following cities: 3 E. 14th Street, New York; 21 Quincy Street, Chicago; 143 Crocker Building, San Francisco.

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SEND direct to your stock dealers for the Becker Photo. Holder and Mailer, \$1.00 per 100.



"THE VOICE OF SILENCE."

SHAPOOR N. BHEDWAR,

BOMBAY, INDIA.

From photograph kindly furnished by the author, illustrating his interesting Oriental Legend on opposite page.



SHAPOOR N. BHEDWAR.

#### A NOTED PHOTOGRAPHER.

Shapoor N. Bhedwar to whom we are indebted for the very interesting and to the highest degree artistic picture, The "Voice of Silence," and the descriptive Oriental legend which accompanies it, is a man whose name is known around the world. As a photographer he ranks among the first of those who make of their profession an art. Although living at Bombay, India, Mr. Bhedwar is a frequent exhibitor at the exhibitions of England, where his work has won many medals and much praise. Before sending us his latest masterpiece, "The voice of Silence," it was exhibited by him at the Photographic salon, Dudley Gallery, and spoken very highly of.

Mr. Bhedwar is official photographer to H.R.H. The Duke of Edinburgh and H.R.H. Prince Christian and family. A good picture of Mr. Bhedwar is given above.

#### "THE VOICE OF SILENCE," OR "LIGHT IN DARKNESS."

AN ORIENTAL LEGEND BY  
SHAPOOR N. BHEDWAR.

In the above-named picture the artist has very cleverly managed to blend the ethical state of his mind with the relation that art bears to religion. The oft-discussed question of how far could religion go to help art has been well represented and exemplified with success in this production. This picture illustrates how a blind fakir or yogi—a recluse—can instruct his young disciple in the doctrines of his faith. Early in his prime the deprivation of sight and the cup of life having been made bitter to the brim by the loss of his dearly-beloved wife, thus suffering the greatest miseries the flesh is heir to, this man retires from, and renounces the world, and adopts the life of a yogi or fakir. In India, a true fakir was a man who, through the entire subjugation of the matter of his corporeal system has attained to that state of purification at which the spirit becomes nearly freed from its prison, and can produce wonders. His will, nay, a simple desire of his has become a creative force, and he can command the elements and powers of nature. This yogi, living in a hut far away from the bustle and hum of busy life in a "vast wilderness," passes the remainder of his days in search of those spiritual comforts which teach him to realize the grand lesson of humanity "to suffer and be strong." He acknowledges as a tenet of his wisdom religion that "the only amaranthine flower on earth is virtue; the only lasting treasure, truth." In his seclusion he tends devotedly his only daughter, his solace, and his sole surviving link; instructing her in paths of virtue and divine wisdom. Although the fakir is

physically blind, yet his mind's, or, say, his mental eyes are full of light and holy learning. In this sense, though he is cut off by this physical defect from enjoying a sight of this terrestrial world, his mind is in constant communion with that Supreme Power in whom he has bound his faith. The Messiah-like uplifted face of the fakir, full of resignation and piety, seems to cry out under a divine afflatus, and utters these words of wisdom to his disciple, who listens most attentively to every golden precept that falls from his lips :—

FAKIR,—“This Earth, O ignorant disciple, is but the dismal entrance leading to the twilight that precedes the valley of true light—that light which no wind can extinguish ; that light which burns without a wick or fuel.

“In order to become the knower of *all self*, thou hast first of self to be the knower.

“Strive with thy thoughts unclean before they overpower thee. Use them as they will thee ; for if thou sparest them and they take root and grow, know well, these thoughts will overpower and kill thee. Beware, disciple, suffer not, e'en though it be their shadow, to approach. For it will grow, increase in size and power, and then this thing of darkness will absorb thy being before thou hast well realized the black, foul monster's presence. Let not the fierce sun dry one tear of pain before thyself hast wiped it from the sufferer's eye.

“There is but one road to the Path ; at its very end alone the ‘Voice of Silence’ can be heard. The ladder by which the candidate ascends is formed of rungs of suffering and pain ; these can be silenced only by the voice of virtue.”

With great fervor and holy love does he cherish his only daughter, who is

the only light in his darksome and dreary existence upon this earth. Withal his piety of soul and heart-felt devotion so visible in his face clearly indicate his high mission of life and a “chaste heart uninfluenced by the power of outward change, where blooms a deathless flower, that breathes on earth the air of Paradise.”

The devoted and resigned look of his fair daughter, sparkling with innocence and inquiry, seems to cry—

“Father thou must lead ;  
Do thou then breathe those thoughts into my  
mind  
By which such virtue in me be bred,  
That in thy holy footsteps I may learn to  
to tread.”

#### A HAPPY WEDDING.

On January 24th Mr. G. F. Chapman, a well known photographer of Mount Forest, was married to Miss Minnie Poole, only daughter of Mr. M. C. Poole. The marriage ceremony was performed at 1 p.m. at the residence of the bride's father. Rev. Rural Dean Bevan officiating. Miss Bella Bedford was bridesmaid, while the duties of best man were performed by the groom's brother, Mr. F. W. Chapman, of Cannington. The bride was attired in her travelling dress of brown trimmed with green, the bridesmaid's dress being all green. A large number of invited guests were present, and after the splendid dinner had been partaken of Mr. Chapman and his bride left for a trip to Toronto and other points. Among the many beautiful presents was a handsome silver tea set from the Methodist church choir, of which the bride is a member. Mr. and Mrs. Chapman on returning from their trip found their residence open and supper and a number of friends awaiting them. We take pleasure in wishing Mr. and Mrs. Chapman many years of happiness and prosperity.

## HOW TO ADJUST THE CONSTITUENTS OF THE DEVELOPER:

The question is too often asked by beginners, "How can I modify my developer?" The questioners do not apparently trouble to look up the matter in their text book, or if they have read up this part of the procedure they do not use their judgment. A few remarks on the subject may therefore be useful.

The developers usually known and used consist of three principal ingredients for the most part.

*First.*—The developer proper (or reducer,) such as pyro or hydroquinone.

*Second.*—The accelerator, such as soda or ammonia.

*Third.*—The restrainer, such as the bromide of potassium or ammonium.

The influence that the variations of the quantities of each of these constituents has, may be shortly summed up as follows:

(a) Increased proportion of No. 1 (pyro) gives increase of contrast.

(b) Reduction of the proportion gives reduced contrast, and slows development.

(c) Reduction of the accelerator slows development and increases contrast.

(d) Increase of quantity of accelerator gives less contrast and increases the speed of development.

(e) Increase of bromide retards development, and tends to increase the contrast.

(f) Reduction of bromide quickens development, and induces fog, with, of course, a resulting lack of contrast.

In actual working these factors should be borne in mind, and applied somewhat as follows:

Where contrasts are lacking in the subject, and the plate correctly exposed, use more pyro.

Do the same in cases of over-exposure, and at the same time reduce the accelerator.

Where contrasts are already strong in the subject and in portraiture, reduce the pyro by one-half, and where under-exposure is known, reduce the pyro solution, adding water to make up equal bulk.

Additional bromide may be used in cases of over-exposure, as well as additional pyro and reduced accelerator. It is unwise, however, to use less than the prescribed bromide.

In compounding developers, it must be borne in mind that, though the action of potassium and ammonium bromides are similar, and their strength very nearly alike, we must only use the latter with an ammonia developer; potassium bromide must be used with all other accelerators.

It is evident that in a large proportion of cases we cannot know whether our negatives are under or over-exposed, and in such cases it is best to use what is known as tentative development. This consists in using only half the accelerator, and being guided by results as to the addition of the remainder. If the image does not come up within about a minute and a half, pour back the developer off the plate into the measure, and add the remainder of the accelerator. If the image still comes up slowly with lack of detail in the half-tones and shadows, dilute the developer with an equal bulk of water, pour it over the plate, and allow the plate to remain until all possible detail is out, keeping the dish well rocked and protected from the light.

If the image rushes up quickly, indicating over-exposure, turn off the developer at once, and pour on some pyro solution alone, leaving this on the plate until the image is well out. If the con-

trast becomes too strong, add the original developer, and continue as long as necessary. Development is not a matter of form, but must be worked out with thought and a due proportion of brains.—*Photographic Scraps.*

### STILL AT THE FRONT.

The Eastman Kodak Company's goods have again scored a success in The Express' amateur photographic contest. Readers of *The Express* will remember that last year several of the prize pictures were either printed on the Eastman Paper, made with a Kodak, or in some way connected with the goods of the famous Rochester house. In the contest just closed every first prize picture was printed on an Eastman paper.

In the first class—Figure Studies—the winning picture was printed on Eastman's Standard Bromide paper, and in the second class—Landscape—the prize photograph was on Eastman's Solio paper, from a negative on Eastman's Transparent film. Mr. H. Bucher, Jr., the winner of this prize, ranks high among the amateur photographers, having received the Honorary Diploma from the International Exhibition of Amateur Photographers held in Hamburg, Germany, last year. Mr. Bucher uses chiefly Eastman's film for out-of-door work. In the first prize in the third class—Small work—the Eastman goods again loom up, the winning print being on Solio paper. The third prize picture in this class was also printed on Solio paper, and was made with the "C Daylight" kodak.—*Buffalo Express.*

SEND to Chas. T. Bainbridge & Sons, 12 Cumberland St., Brooklyn, N.Y., for a sample Photo. Holder and Mailer.

### RELATIVE PERMANENCY OF PRINTS.

The editor of the *British Journal of Photography* has been rumaging among some old photographs and the result is an intelligent discussion of the "Relative Permanency of Prints." Just at this time when the gelatine papers—notably Solio—are making such strides in popular favor, the result of his researches is especially interesting. His experience with the gelatino-chloride prints has been most satisfactory, and in speaking of them he says :

"In no instance is there any sign of deterioration of the image itself, or of loss of the finer details by fading or sulphuration, in the earliest samples we possess of gelatino-chloride prints, although necessarily these do not date as far back as the others mentioned (Bromide, etc.) Many of these are upwards of seven or eight years old, and, except for the wear and tear of handling, show no signs of deterioration. The oldest print by this process is one which the indorsement on the back tells us was sent to us in an untuned condition, as an example of what could be done with gelatino-chloride emulsion. This was, we believe, in 1883 or 1884, long before gelatino-chloride paper was an established article of commerce, and the print was toned by ourselves and put away as a curiosity."

The wise conclusion which he reaches is that before condemning any process for lack of permanency much care should be devoted to the manipulations and other usually neglected details. He found among his albumen prints, carbon prints and platinotypes, and even among the bromides, a number which showed discoloration, but far from condemning these processes because of individual instances of deterioration he endeavors in each case to locate the cause of discoloration.

As he reports no deterioration among the gelatino-chloride prints although they were from seven to ten years old, one is forced to conclude that they are equal, if not superior in permanency to those of the other processes.

**BLUE TRANSPARENCIES.**

For the decoration of the home, says Anthony's Bulletin, there are few things more charming than transparencies. Handsome effects may be obtained by a printing out process similar to the old blue-print method, affording also a means of utilizing otherwise useless plates. Old or presumably fogged plates are soaked in a bath made of equal parts of the following solutions, until the gelatine is perfectly clear:—

## NO. 1.

Red prussiate of potassium.... 1 oz.  
Water.....16 oz.

## NO. 2.

Hyposulphite of soda..... 1 oz.  
Water.....16 oz.

Thoroughly wash, and while wet place in a clean tray and flow over a solution of

Citrate of iron and ammonia..  $\frac{1}{4}$  oz.  
Water.....1 oz.

and allow it to remain about one minute; dry in the dark.

Print in contact with the negative by exposure to daylight, until the shadows are slightly browned. Remove from the frame, and flow over a solution of—

Red prussiate of potassium..... 2 oz.  
Water.....8 oz.

When development is complete, wash in clean water until high lights are clear. Allow to dry, and frame as desired. Any dry plate can be used, the silver salts being, of course, first removed by hypo. These transparencies are very suitable for lamp shades and door panels, being more striking than those made in the ordinary manner.

Not a photographer can well afford to be without the Becker Photo. Holder and Mailer.

**OUR BABY COMPETITION.**

We have received a few very good entries in our Baby Competition. As we have received several letters asking to have the date of closing extended, a number saying the time allowed was too short, we have decided to hold this competition open until March 31st.

Those who have been awarded certificates in our competition examinations will receive their certificates in a few days. A number of entries in the different classes are now in the hands of the judges, and will be reported on in our March number.

In answer to the numerous enquiries sent in as to the length of time this series of examinations will be open, we desire to say that it is intended to make this a permanent thing, if sufficient interest be taken in it to warrant it.

**TOOK THE WRONG "POISON."**

A commercial traveller named Walling, from Boston, Mass., walked into Juke's drug store, St. Catharines, on the morning of the 7th inst., looking very sick, and feeling quite as bad as he looked. He enquired for the physician in charge of the hospital, and stated that a night or so ago he was in a photographer's and having a quiet "smile." In some way the glass he was drinking out of was put close to another glass containing blue vitriol, and he drank from the wrong glass. Since then he has been deathly sick and his flesh seems to be fairly burning away. In consequence he desired to go to the hospital for treatment. He was directed to Dr. McCoy as physician in charge. He has every symptom of poisoning.

### REWARDS FOR MERITORIOUS DISCOVERIES AND INVENTIONS.

The attention of ingenious men and women is hereby directed to the fact that the Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanic Arts may grant, or recommend the grant of, certain medals for meritorious discoveries and inventions which contribute to the promotion of the arts and manufactures.

The character and conditions of these awards are briefly stated in the following:—

The Elliott Cresson Medal, founded in 1848 by the gift of the late Elliott Cresson. This medal is of gold, and by the terms of the deed of trust may be granted for some discovery in the arts and sciences, or for the invention or improvement of some useful machine, or for some new process or combination of materials in manufactures, or for ingenuity, skill, or perfection in workmanship.

The John Scott Legacy Premium and Medal (twenty dollars and a medal of bronze, awarded by the City of Philadelphia. This medal was founded in 1816 by John Scott, a merchant of Edinburgh, Scotland, who bequeathed to the City of Philadelphia a considerable sum of money, the interest of which should be devoted to rewarding ingenious men and women who make useful inventions. The premium is not to exceed twenty dollars, and the medal is to be of copper, and inscribed "To the most deserving."

The control of the Scott Legacy Premium and Medal (by Act of the Ordinance of Councils in 1869) passed to the Board of Directors of City Trusts, and has been referred by the Board to its Committee on Minor Trusts as

worthy to receive the Scott Legacy Premium and Medal.

The Edward Longstreath Medal of Merit, founded in 1889, by Edward Longstreath, machinist, and late member of the Baldwin Locomotive Works. This medal is of silver, and may be awarded for useful invention, important discovery, and meritorious work in, or contributions to, science or the industrial arts.

Full directions as to the manner and form in which applications for the investigation of inventions and discoveries should be properly made will be sent to interested parties on application to William H. Wahl, Secretary Franklin Institute, Philadelphia, Pa., U.S.A.

### COLD VARNISHES.

The following interesting formulæ for cold varnishes have recently been given out by Dr. Valenta:

"Most amateurs find the operation of heating the plate before varnishing too troublesome, and prefer, therefore, the so-called 'cold varnishes,' which are sold a good deal to-day, and mostly under names of no meaning, but simply intended to sound well and to mystify the purchaser."

These cold varnishes answer the purpose more or less well. Their composition varies, as shown by an investigation made by me of a number of them, both as regards the quantity as well as quality of their several components.

In the journals we find a very few reliable remarks about cold varnishes, as the manufacturing of the same is only of recent date, and the article has just commenced to become popular. This, and the circumstance that a good many professionals made inquiry about their



composition was the reason for those investigations whose results are published in this article. After mentioning all the high-sounding names he distinguishes :

“(a) *Alcoholic Cold Varnishes*.—This kind of cold varnishes are mostly solutions of gum sandarac in alcohol ; but as such a solution of sandarac in alcohol will give only a mat surface, these varnishes contain certain other additions. Such additions are of oil of lavender, oil of citron, etc., and I give in the following a formula for the production of such a varnish, which I have found and tested in my own investigations :

Gum sandarac.....18 grammes.  
Alcohol.....100 c. c.  
Oil of lavender..... 1 “

“This varnish dries pretty slowly, but gives a solid and only slightly sticky film, excellently suited for retouching. In this regard it is to be preferred to many other products, which, even after hours of drying will leave impressions if touched with the hand.

“(b) *Cold Varnishes containing Ammonia*.—Such a varnish is, for instance, the ‘crystal varnish,’ of Durkes. Such varnishes are easily recognized, even if no great excess of ammonia should be present or if they are perumed, as when heated, they will always emit fumes of the ammonia easily discernable by its odor and the alkaline reaction of the gas. These varnishes are an imitation of ammonia-shellac varnishes used in crayon and lichtdruck, and contain mostly shellac as the varnish substance. This gum dissolved in pure alcohol does not give a clear film if the plate has not been heated before, while an addition of ammonia will result in the formation of clear films even upon cold plates.

The ammonia is added mostly after the solution of the shellac in alcohol has taken place.

“The spirits of wine varnishes dry pretty slowly in the cold, but give solid films, which adhere well and form a fine surface for retouching.

“For the production of such varnishes a solution of ammonia gas in alcohol is, according to my experiments, the most suitable ; in this the shellac will only swell in the cold, but will dissolve easily to a clear, yellow liquid when slightly heated.

“In the following I give a formula for the production of such a varnish :

Ammonia alcohol.....100 c. c.  
Shellac..... 8 grammes.

“If the varnish is desired thicker, the quantity of the shellac can be increased up to 14 per cent. The product on the market is made, as mentioned, by dissolving the shellac in alcohol and subsequent mixing with ammonia in aqueous solution.

“(c) *Cold Varnishes containing Ether and Acetone*.—These varnishes contain either sandarac or some other hard gums, copal, amber, etc., in which latter case they excel in quickness of drying and great hardness, while the cold varnishes of this kind containing sandarac are generally somewhat sticky for three to five minutes after flowing. In the following I give a formula for the production of a very good, rapidly drying, and very hard cold varnish : 30 grammes angola copal and 5 grammes amber are powdered and mixed with—

Ether.....300 c.c.  
Acetone.....200 “  
Chloroform..... 10 “

“These gums are brought to a partial solution by prolonged standing in the solution and shaking from time to time, or, what is simpler and quicker,

the mixture is digested from one to two hours with the dissolving medium. A part of the gum will dissolve quickly, and a clear yellow liquid will form, which poured upon glass forms a quickly hardening, clear, and solid film which is very good for pencil retouching.

“(d) *Benzole Cold Varnishes*.—The principal ingredient of this kind of cold varnish is sandarac and gum damar. Varnishes prepared with the latter gum are always softer than the former. As these gums dissolve only with difficulty in benzole, artificial means must be employed, by treating first with alcohol, and then adding the necessary quantity of benzole. If proceeded with in this manner, clear varnishes are obtained, which furnish a solid, but, by employing gum damar, a slowly hardening clear film.

“A good formula of this kind is the following :

Benzole.....	90 c. c.
Alcohol.....	10 “
Gum damar.....	8 grammes.

“This gum can also be applied to papers, and, for this purpose, a corresponding dilution is necessary. In such a varnish I have been able to trace a small addition of gutta-percha.

“(e) *Collodion Cold Varnish*.—Varnishes of this kind sold in market (crystoline, brassoline, Zapon-varnish) mostly all contain amyl-acetate. They consist of collodion, which has been dissolved in amyl-acetate and acetone with or without the addition of benzole, and sometimes camphor.

“The quantity of amyl-acetate in these varnishes makes the use of the same, under certain circumstances, very disagreeable ; but they form very solid and well-adhering films.

“Such a varnish can easily be produced by pouring 1,000 c.c. acetone

upon 150 grammes collodion wool (soluble cotton), and then adding a mixture of 2,000 c.c. amyl-acetate and 2,000 c.c. benzole. The so-obtained solution still contains small fibres of undissolved pyroxyline, and is, therefore, somewhat cloudy, but is cleared the same way as collodion by filtering and precipitation.

“Finally, I will mention a varnish which I do not find in the market, but consider the same an improvement on the ordinary benzole varnish (group d).

“This varnish can be obtained by mixing :

Sandarac.....	100 grammes.
Benzole.....	400 c. c.
Acetone.....	400 “
Alcohol.....	200 “

and, after solution, filtering the same through paper. The varnish can be produced quickly, particularly if heated carefully in the water bath, clears well, and gives clear, quickly-drying films, which are harder than those which are furnished by the ordinary benzole cold varnishes which frequently contain damar. As the most serviceable of the varnishes mentioned here, I consider the very hard etheric copal varnish whose formula I have given under c, but which, on account of its containing ether, may be of some inconvenience in application and keeping ; otherwise, the last-mentioned sandarac cold varnish, which corresponds to all the average requirements which are expected from varnish for dry plates, and, besides this, can easily be produced.

#### ENAMELLED TABLETS FOR CERAMIC PHOTOGRAPHS.

BY W. H. HARRISON.

At a meeting of the London and Provincial Photographic Association, Mr. A. Haddon gave a demonstration in

relation to the preparation of supports for ceramic photographs.

Mr. Haddon stated that he was but an amateur in the preparation of enamelled tablets, and only spoke upon the subject because others did not come to the front to do so. He hoped to prove that evening that plaque-making is not the formidable task which it is usually supposed to be, and thought that he could tell them how to make plaques for themselves as good as and much cheaper than those in the market. Of all photographic productions a good vitrified enamel is more permanent than almost anything else, and contains details so fine as to bear a large amount of magnification. The art had made small progress, firstly, because many amateurs had never heard of vitrified images; secondly, because some of those who had heard of them thought that the power to produce them of passable quality required the study of a lifetime; others again had been told that the use of the wet process was necessary to produce enamels, and those who went to balls and places of fashionable resort did not care to appear with stained fingers. No good book in the English language has yet been written upon the subject. Ordinarily the process is expensive. Professional photographers are not likely to go into such work after their day's duties are over, or if they do so are not likely to publish the details, to put competitors on a level with themselves.

He would try that evening to give them the first chapter of a book on enamels; the second chapter Mr. Debenham had already given as to the production of images by the wet collodion process. In enamelling, a muffle is necessary, and that is the most expensive part of the apparatus, but any

one could make a small furnace of fire-brick for himself; the bricks cost about threepence each. Enamel was well known to the ancients, and some of their specimens had been analyzed by the late Dr. Percy, who found the chief ingredient to be peroxide of tin, better known as "putty powder"; it also contained silica and oxide of lead; in fact, it was a kind of glass, and oxides of the metals were used to give any desired color thereto. The most objectionable feature of this glass is that it is soft, and the softer it is to heat, the more oxide of lead does it contain. Colored enamels were outside his subject that evening, and the white enamel with which he had to deal could be cheaply bought; it cost sevenpence a pound if bought by the single pound, and in larger quantities was cheaper; the enamel powder he intended to use that evening had been given to him by Mr. Bolas, who had induced him to begin experimenting upon the subject. He (Mr. Haddon) had found by weighing the enamel upon an oval plaque, measuring  $1\frac{3}{4} \times 1\frac{2}{5}$  in., that it amounted to 45 grains, if that be put at 43 grains for the sake of simplicity, 150 plaques can be made with one ounce of enamel, or 160 plaques with one pound. Assume the number to be 150. The two items of copper and enamel for that number will amount to three shillings in cost, whereas if enamelled plaques be bought at the moderate price of one shilling each, the 150 will cost £7 10s. A plaque costs less than has to be paid for a piece of gelatino-chloride of silver paper of quarter-plate size.

Enamel is sometimes sold in thin slabs cast on sand; these cakes then have to be broken up and powdered with a steel pestle in a wooden mortar, then sifted, then powdered again, until

it all passes through the sieve. In the case of the bought powder, it first has to be soaked during from three to twelve hours in a twenty-five per cent. mixture nitric acid and water to dissolve all metallic particles, and to carry off organic matter; the weak acid is then poured off and tap water poured on. The coarser particles of enamel are separated from the finer particles by means of suspension in water, just as the glass-grinder separates his emery powder into different degrees of fineness, except that in the separation of purchased enamel it is wanted but in two degrees. An ounce of the enamel powder may be stirred up in a large tumbler of water, allowed to stand for one or two seconds, and then the milky liquid containing the finer particles in suspension be poured off into another glass. The coarser particles which sank to the bottom in the first glass may then be stirred up with more water, to separate more of the finer particles for pouring off, and so on four or five times in succession. At the end of these washing operations the coarser particles are at the bottom of one glass, and the finer particles of different sizes are partly in suspension and partly at the bottom of the other glass of water, which has to be left at rest for a few hours until most of the fine enamel has settled down. It should then be washed again a few times to get rid of all acid.

The powder must be supported on some rigid material to form a plaque, and copper is found to be the best, as the enamel holds on to it better than to most other metals, gold perhaps excepted. Pure or Swiss copper, recently rolled, has been recommended for the purpose, but he had not found that the age made much difference, for the copper he used was in some cases more

than a year old, but not pitted by oxidation. The thickness of the copper used must depend upon the size of the plaque; he had found the following thicknesses to be suitable:

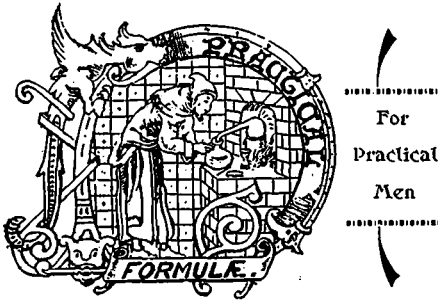
Size of plaque.	Thickness of copper.
0.75 × 0.63.....	4/1000 of an inch.
1.50 × 1.25.....	6/1000 " "
1.82 × 1.52.....	7/1000 " "
Carte-de-visite size.....	12/1000 " "

(To be Continued)

#### MR. LOWELL'S FUNDAMENTAL PRINCIPLES OF ART.

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In its art-creating activity the imagination, according to Mr. Lowell, has a two-fold office. In the higher form "it is the faculty that shapes, gives unity of design and balanced gravitation of parts." Throughout his critical essays Mr. Lowell gives with more detail his idea concerning this higher action of the imagination. The poet or artist "with a real eye in his head does not give us everything, but only the *best* of everything. He selects, he combines, or else gives what is characteristic only." "It is only where it (the imagination) combines and organizes, where it eludes observation in particulars to give the rarer delight of perfection as a whole, that it belongs to art. Then it is truly ideal." The true artistic imagination, he affirms, is always "subject to those laws of grace, of proportion, of design, in whose free service, and in that alone, it can become an art." In these sentences Mr. Lowell mentions the principal characteristics that mark the truly imaginative grasp of a subject. In other words, he specifies the fundamental principles of all art, viz., unity, proportion, grace, character, form.—From "Mr. Lowell's Art-Principles," by FERRIS LOCKWOOD, in the February *Scribner*.



### PRACTICAL FORMULA FOR TONING PLATINOTYPES.

A. Lainer gives the following method: To obtain red tones, the well washed prints should be put while moist into the following bath :

Uranium Nitrate.....	10	grammes.
Potassium ferricyanide ..	2	"
Glacial Acetic Acid .....	60	"
Water.....	1000	"

The pictures acquire a brown and finally a reddish tone. When the desired tint is obtained they should be washed for about ten minutes in water slightly acidified with acetic acid and then rinsed in pure water for a few minutes. The tone is injured by prolonged washing. To produce green tones, this reddish picture is immersed in a very dilute solution of chloride of iron, when it assumes first a grey, then an olive, and finally an intense green. It should then be washed as above.

### CLEARING GELATINE LANTERN SLIDES.

W. B. BOLTON.

ALTHOUGH the lantern slides of the present day upon gelatine plates are immeasurably superior to the run of those turned out ten years ago, it is still by no means an uncommon occurrence to meet with specimens which, without being absolutely bad, yet convey the impression that all is not quite as it should be.

Color, gradation, and density may be all right—these are, in fact, the points that are absolutely necessary to be considered before the slide will pass at all ; but there is an almost indescribable want of "tone" and brilliancy that entirely robs the picture of its quality. In ninety-nine cases out of a hundred this arises from the presence of an almost imperceptible veil, which prevades the whole picture, and deprives it of that clearness which is so essential to the beauty of a really good transparency.

The veil may, and does, arise from a variety of causes ; it may be of the nature of fog, both chemical and from light, or it may be the result of over-exposure or over-development, and in very many instances it lies in the gelatine film itself, the latter being impregnated with salt of lime. Whatever may be the cause, the result is practically the same—the slide is flat and unsatisfactory, instead of being clear and brilliant.

In such cases the use of a clearing solution will, in the majority of instances, effect a complete cure, and, though it adds one additional operation to those involved in the production of the slide, it seems to me to be worth adoption. In the production of collodion slides it is the almost invariable practice to employ a clearing solution, and gelatine plates stand in greater need of such treatment than collodion.

For this purpose, such clearing solutions as alum and citric or other acids are only partly serviceable, that is, when the veil partakes rather of the character of a stain than of a deposit of silver or lime, and this is scarcely the sort of effect that I am alluding to. Where the fog consists of insoluble matter, it requires the application of an agent that will dissolve it, and the

choice of that agent will, of course, depend upon what constitutes the fog. If it be lime, then hydrochloric acid will prove a cure; but if, on the other hand, deposited silver be the cause, that remedy is not available, but nitric acid must be used.

But neither of these acids alone appears to exercise much useful action, unless employed of such a strength as to endanger the safety of the gelatine film; but, if used in combination, they act much more powerfully, even in weaker solution, and the mixture is equally effective for every kind of veil. In the case of lime deposits, or mere development stains, the application of the clearing solution alone is effective, but when silver forms the deposit it is, of course, converted into chloride, and necessitates a reimmersion in the hypo bath. It is noteworthy that the mixture of acids or *aqua regia* effects a conversion of the veil into chloride, where hydrochloric acid alone would fail to do so unless applied of much greater strength.

Better, however, than the mixed acids I find a solution of common salt in strong nitric acid, which, probably, amounts to much the same thing. If a quantity of salt be placed in a bottle with some nitric acid, and left to dissolve, it will form a solution which only requires diluting to the proper strength for use, and which will act far more uniformly and gently, and at a greater degree of dilution, than either of the acids named alone.—*B. J. of P.*

### RETOUCHING.

BY E. C. MORGAN.

I AM given to understand that you expect of me something more than a lecture and will not be content with less than a demonstration. You prefer to

see things done rather than talked about, and I will try to make my paper as practical as the nature of the subject admits. It must, however, be remembered that retouching is emphatically not a demonstrative art. Good retouching is essentially modest and retiring. Its very existence is unsuspected by many who admire the results produced by it. It is the Cinderella of the photographic arts, and its lot is generally to work without recognition or acknowledgment. I do not suppose I can act the fairy prince and raise it, by anything I can say to-night, to honor and esteem among amateur photographers, but I should be glad if I could at least cause you to consider whether a very useful and, in portraiture, I might almost say an indispensable art is not neglected more than it deserves to be. My own experience give me grounds for assuming that it is neglected by amateurs because, although I have met with amateur photographers excelling in many branches of photography, I have never met with an even passably good amateur retoucher. The professional photographer, on the other hand, is fairly alive to its advantages and is generally supposed to love it "not wisely, but too well." How is this neglect to be accounted for? Are amateurs deterred by the apparent difficulty of the work, or do they look askance at retouching as an illegitimate tampering with the truth of a photographer?

If you examine carefully the work of a really competent retoucher on a head that has required clever treatment, it is quite possible that you may feel a little discouraged at the evidence it shows of a high degree of skill which it is perfectly evident must be difficult to acquire. It must seem to the average amateur photographer that the

time and patience necessary to attain such great proficiency would not be worth the while, and that he would do better to confine himself to landscape and subjects where want of retouching is not so apparent. But after all the proper study of mankind is man, and I suppose there was never an amateur, however unambitious, but who cast longing eyes on portraiture. Luckily, retouching is an art that pays good returns for small investment of time and thought spent upon it.

A very little skill if supplemented by intelligence can be made of great use, and I feel perfectly sure that the most casual amateur would not find that any time given to learning the rudiments of the art was spent without result. If you are careful and resolute not to put any work on to a negative you do not know will be an improvement, however little work you are at first able to do will be of advantage to your picture, even if it is confined to removing obstructive defects or blemishes on the skin, or mending up neatly mechanical defects in the negative. Even such humble work as this will often make a negative satisfactory that could not be acceptable without it. If you learn how to get a suitable surface on your negative to work upon and a properly pointed pencil to work with, you can get thus far without much difficulty, and I hope to-night to be able to teach so much to everybody here who cares to learn. As soon after as sufficient delicacy of touch is acquired to, if necessary, work on the negative so finely that the touches do not show when printed, further progress can be made towards retouching a head more completely.

I have, besides, heard of conscientious photographers being deterred from practicing retouching by an ex-

aggerated respect for the truth of a photograph. But the inviolable truthfulness of a photograph is an inconsidered idea, an average photograph is, in fact, one mass of inaccuracies, and its irregularities are only too apparent to anyone examining it with the slightest care.

In comparing a photograph with the object represented by it, the most noticeable variation of the photograph from the object as seen by the eye, is generally its failure to render color.

This we are, of course, prepared for, and I am sorry to say even retouching cannot make good the omission, and for this reason we are not concerned with it to-night.

There are, however, other particulars in which photography seriously falls short of an ideal expression of the object photographed, and in most of these retouching can render every material assistance.

Take, for instance, the modification of tone by color, and this, in itself, is sufficient to prove the utility of retouching. Color exercises a seriously disturbing influence in the rendering of tone by a photographic plate, and no object in which there is a great diversity of colors can be rendered in a photograph in its proper relation of tones.

In a photograph reds and yellows will be represented much too dark, while the color of the other end of the spectrum, the blues and violets, will be lighter than they should be.

The introduction of isochromatic plates has lessened this fault, but the correction has only been partial and incomplete.

An engraver rendering an oil painting, or an etcher working from nature is able to put aside color altogether, and to express his subject by the

proper relation of its tone to one another. If he gets a red and blue together it makes no difference to him; he expresses them simply as tone values and according to their depth or intensity as seen by the eye. In a photograph everything is distorted by the influence of color, a red and a blue together send their relative tones flying wide apart, so exaggerated and untrue that the merest novice in retouching could see the inaccuracy, and to some extent correct it.

Consider for a moment the effect of the coloring of the human face on a photograph.

Here we have an object with such varied color and tone that it is almost impossible to get a passably truthful representation on a photographic plate. Take a fair subject with a high color and a freckled skin, and if you want to make a bitter and implacable enemy for life show your subject the result untouched. Every freckle and imperfections in the skin that in life are not noticeable, and in the reduced size of a cabinet or carte photograph could not be seen at all, stand out harshly and obtrusively, and the unfortunate subject looks as if a charge from a shot had been distributed over their face. The glowing color in the cheeks again, which in life would be a charm is rendered in the photograph as a shadow, and gives an unnatural hollowness to the face; the hair, again, being a warm tone, is sure to be rendered darker than it should be, while the eyes, if blue or cold gray are lighter. The effect in extreme cases is horrifying and in all cases inaccurate. A photograph is often described as "justice without mercy," but this should only be when it is retouched; in its untouched state it is generally "justice without mercy," with the justice left out.

Of course, I have put here an extreme case. Some of us may be fortunate enough to keep through life the bloom of youth on our complexions, and preserve a skin unsullied by freckle or blotch, but we should then feel all the more keenly the fragrant injustice of representing the face blotched and uneven by the variations of color in the skin unseen by the eye. An interesting illustration on the effect of color on the skin was reported in the photographic press some months ago, when the photographs of a sitter in the earliest stages of fever revealed indications of the disease on his face long before they could be detected by the eye.

But even if there was no color to deal with, although the tonality of photographs most subjects would be very much improved, it would be very far from perfect. It may be possible to make a negative from a subject in monochrome in which the tones shall have true value, but it is extremely difficult, and depends on the exposure being timed with great accuracy, and the development being carried on with greatest skill. If it is under-exposed the tone will be hopelessly extended and grades lost at both ends of the scale, some being smothered in the shadows and others lost in the lights.

Again, take the form of an object in its simplest expression as shown by its outline. Here we have no color to confuse the form, and the shape does not depend on gradations of tone; but even under these simpler conditions we are not sure of getting an accurate representation by photography.

There is the distortion of the lens to be taken into account, and in an object having much depth the front or part nearest the lens will be of an exaggerated size compared with the parts more



remote, especially when the lens used has not much depth of focus.

I have reminded you in this way of some of the shortcomings of a photograph, because unless it is clearly seen how imperfect a photograph must necessarily be, there is no excuse for meddling with it.

(To be Continued.)

#### BOOKS AND PICTURES RECEIVED.

We have received the very interesting supplementary lists of optical lantern slides from Alfred Underhill, of Surrey, England, which have been added to the larger catalogue already in our hands.

Numbers 1 and 2 of the *Journal of the Society of Amateur Photographers*, of New York, have been received, and contain interesting reading matter relative to the doings of the Club. All papers read by members will now be published in the society's journal.

Harper's for January contains a wealth of interesting reading matter aptly illustrated. Under the heading of Vignettes of Manhattan is found a thrilling story. Many other strong features go to make up a very strong number, even for Harper's.

*The Photographic News* issue of January 5th, contains as a supplement an excellent reproduction of a most artistic view of Loughrigg Tarn, Ambleside, from a negative by the editor, J. C. Hepworth, F. C. S. Mr. Hepworth is certainly a skillful photographer as well as a talented writer.

Another most interesting and likewise promising addition to the now large list of Photographic journals is the "Photogram," published by H. Snowden Ward, and Catherine Weed Ward, at London, England, the first copy of which is now before us.

"The Photogram" is run upon en-

tirely new lines and we venture to predict that it will reach success almost at a bound, and easily distance several of the old timers.

The new journal will be much more profusely illustrated than the other English journals and will devote a considerable space to photo-mechanical and process work. The staff is unusually strong.

The Canadian price will be \$1.10 per year, post free.

"The American Blue book of Amateur Photographers," Beach Bluff, Mass., Walter Sprange. Paper, \$1.00; cloth, \$1.25. This is a complete directory of all photographic societies in the United States and Canada. With name and address of members, and is a companion book to the one published some months since by Mr. Sprange in England. Besides being an invaluable ready reference guide to all places in America in which there are Photographic Societies, the book contains a Guide to all places in Great Britain in which there are Photographic Societies, and a directory of the secretaries of them. Also a list of the European, Continental, and all Foreign and Colonial Societies, besides much other information of Photographic interest, formulas, tables, and numerous interesting illustrations. The "Blue Book" can be ordered through this office.

Scribner's Magazine for February opens with one of the richest articles it has ever printed—a charming study of the work of Edward Burne-Jones, by Cosmo Monkhouse, the distinguished English critic. Twenty of Mr. Burne-Jones' most striking designs and pictures are reproduced by his permission and that of their owners. A number of sketches are here reproduced for the first time, and the whole series, with the accompanying text, gives an interpretation of the exquisite quality of this imaginative artist such as has never been published in a popular article.

An article illustrated in a unique manner is W. A. Stiles' description of "Orchids."

The fiction includes a second instalment of Geo. W. Cable's strong novel, "John March, Southerner"; and short stories by Mary Tappan Wright, Robert Howard Russell, and George I. Putnam (author of "In Blue Uniform"). There are poems by Mrs. Fields, Arthur Sherburne Hardy, M. L. van Vorst, and a short essay by Ferris Lockwood.

Just before going to press, we received the February number of *The Photogram* which well bears out the promise made in the first issue.

In this number is commenced what will undoubtedly prove of the greatest service to studio workers. We refer to the series of "Formulæ for Lighting," illustrated with diagrams, which will make the study of *chiosauro*, under any form of skylight, a matter of absolute ease.

There also appears a reprint from our Christmas Number of part of Dr. Ellis' paper on "Animated Molecules," as well as many valuable contributions relating to the photo-mechanical processes, etc. There is a handsome supplement print in Woodburytype from a negative by Mr. Thos. Fall. The first edition runs into eight thousand.

THE foremost post officials of all countries indorse and compliment the Becker Mailing device as the safest and most practical passing through the mails.

#### OUR NOTICE BOARD

Tar soap will be found a splendid thing to use after developing or handling chemicals. Keep a cake in the dark room.

We have had so many inquiries for the new P.O.P. Matt Surface Paper since noticing it last month, that we sincerely hope some of the stock houses will kindly lay in a supply.

"O. K." Aristo paper, manufactured by E. C. Landon, Montreal. We have lately tested some of this paper, and

find it most satisfactory in every way. It prints quickly with ordinary negatives, and takes easily a wide range of tones. Give "O. K." a trial at any rate.

We have had a number of inquiries regarding the Becker Mailer advertised on another page. We have given out all the samples we had to those wishing samples of this very ingenious mailer. We would say, write direct to the firm. They will gladly send you sample and prices.

We would call the attention of our readers to the advertisement of the Manhattan Optical Co. on another page of this JOURNAL. The firm are very strong, and the goods manufactured by them are of a very high grade. It will pay you to make inquiries regarding anything in their line you may need before buying. Write them.

A correspondent from the wilds of the Northwest asks us to settle for him the question as to whether he should buy a Paso or a Dallineyer 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.

Some negatives were shown us a few days ago, retouched by Harry's Electric Retoucher. The work was extremely well done, and considering the fact that two cabinets and an 8 x 10 head were retouched *perfectly* inside of an hour by a man who had used the device but a short time, spoke volumes in favor of the machine.

We notice that Messrs. Watson & Sons, London, England, have lately added a number of medals to the already large number which have been awarded their very high-class goods at the principal exhibitions of the world. This firm issue a very complete catalogue, which is sent free on application. Those who intend making photographic purchases should certainly have one for reference.



We wish to have this department as complete as possible, and invite Secretaries of Clubs to send us their 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.)

**FIXTURES.**

- MONDAY, FEB. 5TH—Club Night. (1) Lecture by Mr. T. Langton, Q.C., on "Six Months in Foreign Parts," illustrated by limelight views. (2) Exhibition of miscellaneous slides by members.
- MONDAY, FEB. 12TH—(1) Special General meeting. (2) Demonstration by Hon. A. M. Ross on "Bromide Printing and Development."
- MONDAY, FEB. 19TH—Opening of Third Annual Exhibition; to be open each afternoon and evening until Feb. 24th inclusive.
- MONDAY, FEB. 26TH—Judging by limelight of lantern slides sent in for competition at Exhibition.

**ANNOUNCEMENTS.**

The various lantern competitions held during January were well attended and proved very interesting. The euchre party on the 29th ult. was much enjoyed by those present. It is to be regretted that the weather prevented a larger number from attending.

The Club has been presented with a subscription to the new English monthly, *The Photogram*, and the first number is now on the table.

Sprange's "Blue Book of Amateur Photographers," a Directory to all America and Canadian Camera Clubs, has been placed on the shelves.

Every member is requested to send in prints for the exhibition, and thus ensure its success. Entries close Feb. 15th.

All members who have not yet paid their fees are requested to remit the same with as little delay as possible.

Any information as to Club matters will gladly be furnished by the undersigned at any time.

ERNEST M. LAKE,  
*Sec.-Treasurer.*

The euchre party, held on January 29th, was a pleasant change, and was much enjoyed by those present. The play was keen and exciting. The first prize, consisting of a handsome photo-album, was won by Mr. Hugh Neilson; second prize went to Mr. A. Eclely; and the third prize to Mr. Hugh White. The booby prize was captured by Mr. Jos. Cameron. A tempting repast was served at the end of the game, and was not the least enjoyable part of the proceedings.

On February 5th there was a large turnout of members and a number of ladies were present. Mr. Langton's

lecture on "Six Months in Foreign Parts" was very interesting, and was illustrated by over 150 slides made from the lecturer's own negatives. The trip included glimpses in London and Paris, the Riviera, Naples, Rome, Sicily, and Capri, then on to Venice, and back through Switzerland to England. A hearty vote of thanks was tendered to Mr. Langton at the close of the lecture. A number of miscellaneous slides by different members were then shown.

#### SNAP SHOTS.

The following gentlemen have recently been elected members: John Gouinlock, J. C. Cockburn and W. Mackie.

Messrs. W. C. Noxon and W. Varley have been doing a lot of excellent portrait work lately.

Entries are coming in rapidly for the Exhibition opening February 19th. Among the American experts who will exhibit are Clarence B. Moore, of Philadelphia, and Alfred Stieglitz, of New York.

Mr. H. English, one of the Club experts, is confined to the house with a serious illness. His speedy convalescence is hoped for.

On Monday, February 15th, Hon. A. M. Ross gave a very interesting demonstration of the printing and developing of bromide paper to a large number of members. The demonstration was very instructive and amply repaid those who braved the severe storm to witness it. After Mr. Ross had concluded, a general business meeting was held to consider the matter of allowing any member the exclusive use of the rooms for a stated length of time on application to the secretary for card; said card to bear name of party using rooms and exact time he has been granted

their use. Card to be fastened on outside of door. The measure as suggested, after some debate, was carried almost unanimously. This is a good move and will do away with the annoyances suffered by members who are interested in portraiture and should give an incentive to this class of work.

(Notes from the Secretary's desk.)

### THE SOCIETY OF AMATEUR PHOTOGRAPHERS OF NEW YORK.

New York, February 1, 1894.

#### FIXTURES.

February 12.—Monday, 8 p.m.—Regular meeting of the Board of Directors.

February 13.—Tuesday, 8 p.m.—Regular meeting of the Society. The subject of the evening will be entitled "A Lantern Talk on Medical Photography" by Dr. Edward Leaming.

February 15.—Thursday, 8 p.m.—Fourth annual auction sale of photographic material consigned by the members. This sale is open to friends of the members. The material will be placed on exhibition on and after February 10th.

February 26.—Monday, 8 p.m.—Regular meeting of the Board of Directors.

February 30.—Friday, 8 p.m.—Lantern Slide Exhibition. Views by the Syracuse and Detroit Camera Clubs, and by our own members.

#### SUBSCRIBING.

After several experiments, the Lantern Slide Committee have adopted Prof. Laudy's electric lamp for the lantern. It has proved so far very satisfactory, and admits of the current being reduced to the strength of the oxygen-hydrogen light. This will meet the objections of those who have opposed the innovation, because their slides would have been too dense otherwise for the Interchange screens.

Our annual auction sale of photographic material consigned by the members will be held on Thursday evening, February 15th. These sales have proved very successful since they were inaugurated three years ago. The gross sales for the past three auctions has amounted to \$2,500. A ten per cent. commission nets a considerable sum for the treasury.

The Joint Exhibition Committee notes with pleasure the active interest taken in the coming exhibition, and welcomes the advice, criticisms, and suggestions offered in the various magazines. The committee, however, draws the line at anonymous postal cards, etc., and suggests that the writers sign their names just once. Entry forms are received daily from foreign exhibitors, and we may look forward to a fine display of foreign work.

The publication of the Journal of the proceedings of *The Society of Amateur Photographers of New York* is resumed after an interval of several years. It is felt that it is due to the gentlemen who take the trouble of preparing papers for presentation to the Society that

those papers should be published and a record of them should be preserved, and that it is only just to the members of the Society who are not able to attend the meetings that they should be kept informed of what is done at the meetings. It is intended to publish the Journal monthly if matter of sufficient interest to warrant the publication is available.

### HAMILTON CAMERA CLUB.

At a special meeting held in January '94 it was decided to hold semi-monthly meetings of the Photo. Section on the 2nd and 4th Tuesday. The second Tuesday to be a meeting for general discussion in things Photographic. The fourth Tuesday the General Business meeting takes place. On Tuesday evening, 13th February, Mr. J. P. Noyes has been asked to give a talk on lantern slide work. On Tuesday evening, 27th February, a contest takes place for two prizes kindly donated by Mr. Eastwood for the 1st and 2nd set of three slides made from negatives taken during the year '93 by members.

The boys have again got the "slide-making fever," and hope in a week or two to give to their friends an evening with the optical lantern.

### CALIFORNIA CAMERA CLUB.

This very lively organization has had another good time. The notice sent us reads as follows:

WEDNESDAY, JAN. 31, 1894—HY-JON-E-KIN.

THE LADIES HAVE PERSUADED US.

On Wednesday next, January 31st, at 8 p.m., in the Club Rooms, we are going to hold one of our semi-occasional Hy-jon-e-kins, to which the ladies are especially invited, and at which they are expected to be present—with their friends of course.

All the regular features of the California Camera Club Hy-jon-e-kin will be presented, in each and every particular just as repeatedly given before hundreds of Swelled Heads. And we say this with a full assurance that the Governor will not interfere.

The rumor that the militia will be called out to prevent this affair is false and without the slightest foundation. We have assurances to this effect from Major Geo. W. Reed (Retired. "My commission hangs in my office"), LIEUTENANT E. P. Grey (who used to belong to the Hussars), CAPTAIN (and Adjutant) H. B. Hosmer, CAPTAIN Jas. W. Duffy (According to the Rules and Regulations of the National Guard and Civil Code of California), CAPTAIN E. G. Eisen (sometimes Captain and sometimes Doctor), CAPTAIN George Helm (of the Sappho), CAPTAIN W. G. Leale (Caroline), and from many others of greater importance.

You need have no doubt about it. We will bring this event off on the day set; inform your friends."

CHAS. ALBERT ADAMS,  
C. F. CORMACK,  
H. C. OWENS,

House Committee

Order Patrol Wagon for 11. 45 p.m.

JAS. W. DUFFY,  
Secretary.

THE quickest saleable article on the market to-day is the Becker Photo. Holder and Mailer.

### THE PHOTOGRAPHIC SOCIETY OF JAPAN.

(By courtesy of W. K. Burton.)

An ordinary meeting of the above mentioned Society was held at the Geographical Society (Chiguku-Kyokai) Nishi Konyacho, Tokyo, on January 12th, at five p.m., the President, Viscount Enomoto, in the chair.

The minutes of the last meeting having been read and approved, the following gentlemen were duly proposed, seconded, and balloted for. They were unanimously elected:

Professor Detrich and Messrs. T. Hoshino, N. Kanda, and T. V. Pineyro.

Viscount Enomoto having to leave the chair, his place was taken by Professor John Milne, Vice-President.

An enormous lens by Steinheil, of Munich, which had been acquired by the Imperial Arsenal, was shown by Mr. K. Ogura. The focus is two meters and the diameter 150 mm. The lens is of enormous weight, being apparently nearly solid glass.

Mr. Ogura also showed some fine enlargements from quarter-plates exposed in the hand camera. The size of the enlargements 18 by 12 inches.

Mr. Tanaka showed a fine collotype from his own negative.

Mr. W. K. Burton and Mr. K. Arito showed the results of comparative exposures on an ordinary plate, a Sandell non-halation plate, and a Seed non-halation plate. A very difficult subject had been selected. The two non-halation plates showed about the same results—merely a trace of halation—and then both immensely better than the result with the ordinary plate.

Several members testified to their successful work with the tabloids by Messrs. Burrough, Welcome & Co. which had been distributed at the last meeting.

A letter addressed to the President of the Photographic Society of Japan, asking him to join a committee which is taking steps to erect a monument to Daguerre, was received from *Societe Francaise de Photographie*

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

### PERSONAL MENTION.

MR. AITKEN, of Sudbury, has been in Toronto for a few days.

MR. C. A. SMITH, 640 Yonge Street, Toronto, has found business slow, and given up his gallery.

THE JOURNAL extends hearty congratulations to Mr. Alfred Sellers, of New York City, on his recent marriage. Mr. Sellers is one of the best known dealers in photo. engraving and half-tone supplies in the country.

THE guests of the Richardson House, Toronto, have an annual "guests night." Some 100 guests assembled the other night and enjoyed a good programme of musical and other attractions. The most enjoyable feature of the evening was a lime-light exhibition given by Mr. W. H. Moss. Over 250 of Mr. Moss' choice slides were shown, embracing World's Fair views and local scenes. Mr. Moss is a past master in the art of slide making.

OUR readers who are interested in "Bikes" will be pleased to learn that Marshall Wells has opened a bicycle emporium at 6 and 8 Adelaide Street West, Toronto. The star wheel of Mr. Wells' stock will, of course, be the "Raleigh," on which he has so often won victories. In addition, however, there will be found several other makes, and a most complete repair shop in charge of a competent workman.

### ANSWERS TO CORRESPONDENTS.

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

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

*All communications for this column to be addressed to*

P. O. DRAWER 2602.

FRED. DAVID—If you mean to take portraits in a tent, it will be well to have one provided with a rolling skylight cover and a simple system of blinds; but if you only intend to use the tent for printing, etc., then an ordinary one of heavy duck will be most suitable. Portable darkrooms are made in two styles—one of the light tight fabric, and the other of boards so arranged as to pack flat for travelling—we prefer the latter kind. Any of the stock dealers advertising in our pages will quote you reasonable prices for such tents and all necessary fittings.

T. GEDDES.—It will not do; try the advertising department

T. E. H.—We give the information this month in "Practical formulae."

HOWE—You have no remedy. You should register the copyright of so valuable a subject before publication you could then sue for damages and penalties.

ENQUIRER.—The powder you send is as useless for flash-light work as pulverized china. You must procure the powdered metallic aluminum.

KITTIE.—If you first give the zinc a preparatory coating, you will not be troubled by having the paint chip off it. The best treatment is as follows: Dissolve one part each of chloride of copper, nitrate of copper, and sal ammoniac in sixty four parts of water, and add one part of hydrochloric acid. Brush the zinc with this mixture which will give it a deep black color, after drying for a day any oil paint will adhere to it permanently.

TRAVELLER.—We understand there is no charge to Amateurs for Photography at the California Mid-winter Exposition. Hand cameras up to size of 5x7 may be used, but no tripods. Anyone wishing to take photographs in the grounds may do so by signing agreement not to sell any pictures.

WILL J.—(1) We should say the picture you send would stand a very good chance for a medal in the competition you speak of. Send it in by all means. (2) Yes, you will certainly receive fair treatment.

### 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 later examination.

RULE 8.—The subjects shall be as under:

RETOUCHING. Heads, cabinet size only, mounted on regular size cabinet cards. Three prints from different 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.

RULE 10.—The decision of the judges shall be final and all photographs will become the property of THE CANADIAN PHOTOGRAPHIC JOURNAL.