

PRINTEDON
AMERICAN SARISTOPAPER
NEGATIVE AND PRINTING.
BYPFEIFER \& MULLIGAN BROS.
COLUMBUS, 0
STUDIO WORK,


Devoted to the Interests of the Professional and Amatcur Photographers.
Vol. II. Coronto, 円ecember, 1893 Nos. it-iz.


HRISTMAS is with us again with all its joys, its pleasures, its memories, and its-turkey and plum pudding. It is with great pleasure that we take this opportunity of wishing our readers a merry Christmas and a happy and most prosperous new year. It makes us happy to think that in saying "our readers" we convey our good wishes to nearly every photographer in Canada. It is most gratifying to us, dear reader, to realize, by the grand support you have given us the past year, that our efforts towards making your home journal at least the equal of any published have been appreciated. Our every effort has been put forth to gain your confidence, to deserve your support, to aid you, by giving in the pages of your journal instructive and interesting matter pertaining to your art, and illustrations that would suggest new and helpful ideas in the handling of sitters, light, and accessories. It is with pride that we point you the fact that never have we allowed anything of a scurrilous or unhealthy character in our columns. The pages of an art journal we believe to be no place for spiteful sayings, petty bickering, or constant harping on the doings of the few black sheep of our interesting flock. Our aim is ever the elevation of the art of photography, and we feel that our efforts can only bear fruit through keeping our (your) journal clean, wholesome, and elevating in its tone. Again we wish you all a merry Christmas and a happy new year.

THE EDITORS.

FLASHLIGHT PHOTOGRAPHY AT HOME.

## F. J. harrison.


F. J. HARRISON.

The veriest beginner in photography owns a flash lamp of some kind, and is acquainted with the disappointing results which are the product of the ordinary amateur's flashlight efforts. Flashlight photography is very facinating, and the best results are possible, even with the small hand flash lamps. The prevalance of the idea that the flash must necessarily be fired just above and behind the camera seems to be the main cause of the poor results. The light in the professional's studio does not come from behind the camera, and we do not, or should not if avoidable, photograph any thing with the sun directly behind us. If we have to do this, a flat picture results. Why, then, this position for the flash? It is wrong ; clon't do it. Where shall the flash be fired? Suitably arrange the subject so that the camera may be set up in the hall or in another room, the lens pointing through the open doorway. The flash may now be fired in the room in which is the subject, may be fired in front of the camera and to the right or left of the subject. There is a minimum loss of light, no danger of particles of magnesium powder getting on to the plates by being carried into the holder on the slides, and in the resulting negative there is life and gradation. The direct light of the lamp is, of course, kept from the camera by the wall of the room. A
little practice with reflecting screens will teach their use.

In the development of flashlight negatives, clefects may be somewhat remedied. With the normal developer the high lights will usually become practically opaque before there is sufficient detail in the shadows. It is well then to work for detail first, by using a weak developer containing an excess of the accelerator (carbonate of soda or ammonia), and to use the normal developer only when there is sufficient detail in the shadows. The normal developer will soon give the necessary density. Tentative development will always produce the best possible negative.

When, in spite of all efforts, a really hard negative is obtained, the case is not absolutely hopeless. Some little remedy is still at hand, and may be applied during the printing. The interposition of a piece of matt surface celluloid between the negative and the paper will tone down the hatsh contrasts to a wonderful extent. But prevention is better than cure.

It is a curious fact that animal and vegetable yellows should be so much more permanent than all other colors. The yellow of the petals of flowers is the only color which is not discharged by the fumes of sulphurous acid. If a flower-heart's ease (Viola tricolor), for instance-be exposed to these fumes, the purple tint will immediately disappear, but the yellow will remain unchanged; the yellow of a wall-flower will continue the same, though the brown streak will be discharged. The yellow pigment forms an insoluble compound with fatty matters, and is termed lipochrome. According to the density of this deposit, the color is either a pale yellow or a deep one known as orange.


MERRY CHRISTMAS:

## ANIMATED MOLECULES.

PROF. ELIAS, M.A, M. D.


PROF. ELLIS, M.A., M.D.

When Professor Schlaukopf was appointed to the chair of chemistry in the grand ducal University of Walzburg he found the department at a low ebb. His predecessor, the learned Schlummermacher, had, though a chemist of profound erudition, failed to arouse the enthusiasm or even to awake the interest of the stuclents. Three days a week he had, at the appointed time, emerged from the recesses of his laboratory to lecture to empty benches, and at the expiration of the hour had hastened back to the evilsmelling den whence he came, leaving behind him on the blackboard a trail of weirdly complicated formulæ like the fossil footprints of some extinct nondescript on a slab of old red sandstone-formulæ which no one ever came to see, and which, had they seen, no one would have understood.

His successor had no mind to follow in his footsteps, but he felt that the outlook was not encouraging, and he set himself seriously to consider what could be done to reclothe the dry bones of chemical science, for truly, at Walzburg they were dry indeed.

For several weeks he pondered over this problem, and the quantity of beer and tobacco which he consumed during this period of incubation was something portentous. The result was an idea which for brilliancy and originality was worthy of the energy expencled in
its evolution. What was lacking in the teaching of chemistry was living interest. The data and deductions of the science had been presented in too abstract a fashion to seize and hold the attention of the youthful mind. What was wanted was to present these truths in an attractive form. What, then, was likely to prove most attractive to the ingenuous youth of the University? The question suggested its own answer. Atpresent the students deserted the lecture room for the ballet. He would bring the ballet into the lecture room! He would discard the use of letters of the alphabet as symbols of the chemical elements, and substitute for them beautiful young ladies; and he would represent the motion of the atoms and their arrangement in molecules by the aid of that art which is in itself the poetry of motion.

The idea once formed, the professor lost no time in putting it into practice. He was fortunate enough to gain the ear of the grand duke, and with his powerful assistance difficulties vanished. His, serene highness was a distinguished patron of the Terpsichorean art, and he placed his corps de ballet at the professor's disposal.

The lecture room was remodeled. The table and the blackboard were replaced by a roomy stage. The old benches, where former generations of students had enjoyed those refreshing slumbers that the engagements of the previous night had rendered not unneedful, were swept away, and in their place were set little tables, seated at which the audience could look and listen at their ease while they smoked their cigars and drank draughts of cool Bavarian beer brought them by attendant damsels.

The experiment was a huge success. The chemical lecture room was crowded.

The most promising students of the university vied with each other for the privilege of taking part in the demonstrations. There was a great awakening of interest in chemistry, even outside the academic circle. The officers of the garrison discovered the great value of this science, when properly taught, to a military man. The grand duke himself was a constant attendant. The other professors were at first inclined to be jealous, but the fame of the new method spread far and wide, students from other places flocked to the university in numbers which enormously increased both its renown and its revenues, and the success of the chemical department of Walzburg was assured.

During my last visit to Walzburg it was my privilege to be present at a lecture by Von Schlaukopf (for an appreciative soverign has been graciously pleased to bestow upon him the coveted prefix). The scene was a brilliant one. The great lecture room was crowded to overflowing by an eager audience, among whom many military uniforms were conspicuous.

The excellent orchestra of the Hof theater furnished the music. The subject of the lecture was "The Chemical Constitution of Photographic Developers," and it was illustrated in the following fashion :

After a lively overture from the musicians, six young ladies in white dresses, the skirts of which were decorated by three bright colored stripes, one red, one green, and one blue, tripped to the footlights and executed a graceful dance. They represented, we were told, six atoms of hydrogen, the colored bands on their dresses imitating the spectrum of that element. They were followed by six negros, each of whom represented an
atom of carboni. They wore evening dress, and upon the shirt front of each blazed a gigantic diamond solitaire. At a given signal, each atom of carbon, with one hand, grasped the hand of an atom of hydrogen, and, with the other, seized one of his fellow carbon atoms by the coat-tails, so as to form a ring. This, we were told, represented a molecule of benzene, $\mathrm{C}_{6} \mathrm{H}_{6}$.

After a spirited dance by the six darkies and their volatile partners in the benzene ring, an atom of oxygen appeared upon the scene. He was
 dressed as a sailor, because oxygen is always in the water. Dancing up to one of the ladies of the benzene molecule, he offered her his hand. She quitted her sable partner and accepted the advances of her nautical wooer, who, with his other hand, grasped the hand of the negro which she had just relinquished, so that, although there were still six hydrogen atoms in the group, one of them was not directly connected with a carbon atom, but only through the intervention of an oxygen atom.

This, we were told, was a molecule of phenol, or carbolic acid, $\mathrm{C}_{6} \mathrm{H}_{5} . \mathrm{OH}$.


Another atom of oxygen, dressed likethe first, as a sailor, now came on the stage and interposed in like manner between the hydrogen atom opposite to his comrade and her partner, thus illustrating the constitution of a
molecule of quinol, or hydroquinone, $\mathrm{C}_{6} \mathrm{H}_{4}(\mathrm{OH})_{5}$.


And now a third sailor danced up to the ring and placed himself between a third darkie and his partner. We recognized with joy our old friend " pyro," or pyrogallol, $\mathrm{C}_{6} \mathrm{H}_{3}(\mathrm{OH})_{3}$.


The pyro molecule now broke up, and its constituent atoms waltzed off the stage and disappeared behind the curtain, where they, no doubt, replaced their dissipated energy with beer.

After a short pause, which was occupied by the professor with an explanation of the chemical properties and behavior of the compounds whose constitution had just been illustrated, and by the audience with laying in a fresh supply of refreshment, the curtain rose on another molecule of phenol, represented, as before, by six negros, six young ladies and one sailor.

Then the band struck up a martial air and a new actor appeared on the stage. He represented an atom of nitrogen, and, because of the important part which that element .plays in explosives of all kinds, he was dressed as a soldier. He had on each arm a young lady dressed like the others, as an atom of hydrogen, and a third hung on to his coat-tails. This combination represented a molecule of ammonia, $\mathrm{NH}_{3}$.

The group danced up to the phenol molecule, and when they came together the lady who was hanging to the coattails of the soldier, let go. At the same moment the young lady opposite the sailor left her partner in the benzene ring, and the two fair nymphs tripped off the stage together. The negro thus deprived of his partner seized the soldier by the coat-tails. The result was a molecule of paramidophenol, $\mathrm{C}_{6} \mathrm{H}_{4} \mathrm{NH}_{2}$. OH .


This body is a constituent of the cleveloper sold under the name of "Rodinal."

The soldier and his two partners then changed their position in the ring, illustrating the constitution of orthoamidophenol, and metamidophenol, thus:

Afterthe molecule of amidophenol had broken up and danced off thestage there was a pause, andall seemed to expect something rather out of the common. We were not disappointed.

First came intwo benzene molecules. After a few preliminary gyrations they approached


 each other, and two girls from each molecule broke away and ran off the stage. Two of the bereaved partners in their turn broke away, andgave chase; but the other two instantly seized their fellows of the opposite molecule, the two rings coalesced into a kind of figure of eight, and, behold! a molecule of naphthalene, $\mathrm{C}_{\text {" }} \mathrm{H}_{8}$.


Then came an oxygen atom, dressed as usual, as a sailor, and insinuated himself between one of the darkies and his partner. The result was, naphthol, $\mathrm{C}_{\mathrm{t},} \mathrm{H}_{7}$. OH.


Now entered a Chinaman in a bright yellow dress, representing an atom of sulphur. Two sailors representing oxygen atoms hung on to his skirts, and two others hung one on each arm. Each of the two latter held a young lady by the hand. The group represented sulphuric acid, $\mathrm{H}_{2} \mathrm{SO}_{4}$.


On approaching the naphthol molecule, one of the sailors, with his girl, broke away from the sulphuric acid molecule, seized a girl in the naphthol group and carried her off, the three constituting a molecule of water, $\mathrm{H}_{2} \mathrm{O}$.

The two residues coalesced as usual, and we had a molecule of naphtholsulphonic acid, $\mathrm{C}_{10} \mathrm{H}_{6} . \mathrm{OH} . \mathrm{SO}_{3} \mathrm{H}$.


Then our old friend, the soldier, representing nitrogen, came on the stage with his three fair friends. One of them ran off with a girl from the naphthol-sulphonic acid, and her partner seized the soldier by the coat-tails. The result was a molecule of amidonaphthol sulphonicacid, $\mathrm{C}_{10} \mathrm{H}_{5} \mathrm{NH}_{2} \mathrm{OH}$ $\mathrm{SO}_{3} \mathrm{H}$.



Then another girl appeared. She was dressed in white, like the others, but, instead of the three stripes of red, green, and blue, she had a single band of bright yellow across her skirt. She represented an atom of sodium. Tripping up to the girl who was attached to the group representing sulphonic acid, she pulled her away from her partner and took her place. The result was a molecule of amidonaphthol sodium sulphonate, $\mathrm{C}_{10} \mathrm{H}_{5} \mathrm{NH}_{2} \mathrm{OH}$ $\mathrm{SO}_{3} \mathrm{Na}$.


Everybody stared at this complicated group in a rather bewildered manner, but the professor reassured us by telling us that this seemingly strange and monstrous congress of atoms was only our old familiar friend, eikonogen!

A: "How are you succeeding as an amateur photographer?"

B: "Capitally. I have taken seventeen plates so far, and only sixteen were failures."

## PORTRAITS AND PICTURES.

## ELIZABETH FLINT WADE.

"Must you have my picture?
You will enjoin me to a strange punishment."


Phœbe Pyncheon, that quaint and original character in Hawthorne's romance, objected to sitting for a picture, and frankly expressed her reason for cleclining.
"Likenesses are so hard and stern," she said, " besides dodging away from the eye, as if trying to escape altogether. They are conscious of looking very unamiable, I suppose, and therefore hate to be seen."

The artist to whom she addressed herself, confessed that most of his likenesses did look unamiable, but the reason, he fancies, is because the originals are unamiable.
"There is a wonderful insight," he affirms, " in heaven's broad sunshine. While we give it credit only for depicting the merest surface, it actually brings out the secret character with a truth that no painter would ever venture upon, even could he cletect it."

The sun is an impartial Rembrandt, and loves, not only to track out all the lines of the face and reproduce them with unerring precision, but seems even to reveal the secret sentiments and passions of the heart. A close observer may trace in the sun-picture the virtues, the weakness, the force, even the content or discontent of the sitter, so that one maly often learn more from the photographic portrait than from the study of the face of one's dearest friend.

The delightful truthfulness of a pho-
tograph gives it a value which cannot be obtained by any artistic production, for the honest sunbeam " is Nature's sternest painter, yet the best."

Since the advent of photography, the " indignities of Nature" are no longer augmented by the painter's brush, yet, after all, there was a certain comfort to be derived from a painted portrait, which one fails to find in the photograph that has escaped the pencil of the skilful retoucher. The blemishes of the painted portrait could be shifted to the shoulders of the unfortunate painter, but who can say the photographer is at fault, who " holds the mirror up to nature " simply?

It is true that he "holds the mirror up to nature," but for that particular moment only. No matter how often one sits for a picture, there is a certain subtle difference in each portrait, for the same person is capable of an indefinite variety of moods, and, consequently, of an indefinite variety of expression. The success or failure of a portrait depends, in a great degree, on the habits and character of the sitter. An easy-going, unimpressive or reserved person, obtains a much more satisfactory likeness than one who passes rapidly from onephase of thought to another, or one who is easily affected by outward circumstances. Then, too,-
" A picture is the past. Even ere its frame Be gilt, who sate for it has ceased to be the same."
The average sitter looks upon the photographic stuclio as a sort of hospital, where the presiding genius is expected to remedy in some marvelous way every personal blemish and physical infirmity. There are few Oliver Cromwells at the present day, who insist on having every wart appear in the picture. Like Alexander one desires an
artist who possesses the genius of Apelles, and knows how to ennoble a likeness. The truth is, we all have an ideal of ourselves which we hope and expect to see developed and brought out in our portraits.

A few months spent in a photographer's studio, is a liberal education in the faults and foibles of human nature. If one has a bit of smouldering vanity, it is sure to kindle into flame when he comes to sit for his picture. What a volume of epigrammatic sayings might not Boswell have preserved for us, on this subject alone, if photographic studios had flourished in Dr. Johnson's day? The "anfractuosities of the human mind" on which he was so fond of dwelling, find their fullest expression in the sky-lighted parlor of the photographer.
" With what a compelled face a woman sits While she is being drawn. I have noted divers, Either to feign smiles, or to suck in the lips To have a little mouth; ruffle the cheeks To have the dimple seen, and so disorder The face with affectation, at next sitting It has not been the same. I have known others
Have lost the entire fashion of their face In half an hour's sitting."

Thus wrote that shrewd old observer of human nature, John Webster, nearly five centuries ago. History repeats itself and so does human nature. The same faults and follies that characterized the men and women of long past ages, reappear in their descendants. The watchword of the photographer is, " Be natural," but we are not. We so disorder the face with affectation that the result is direful in the extreme. We assume a half-smile perhaps, which we beguile ourselves into thinking is the embodiment of archness, and it appears in the proof as a self-satisfied smirk; or the air of dignity with which we thought ourselves invested, instead of
meeting with the pictorial success which our strenuous efforts led us to hope for, gives us the appearance of having braced ourselves for a visit to the dentist ; then instead of blaming ourselves, the failure of the picture is laid at the door of the helpless photographer.

There has been a great evolution in photographic methods and in picture making within the last few years. The old-time photographic ambulance managed by a Procrustes in chemicals, who fitted every sitter to his limited appliances, regardless of the results, has been superseded by charming apartments fitted up with harmonious and often luxurious appointments, the proprietor of which is often not only an artist, but a shrewd judge of human nature as well.

A photographic artist-at least a successful one-possesses, it seems to me, most of the cardinal virtues. Though he must meet all sorts and conditions of men, each individual is treated with equal courtesy and consideration. His mental activity is so rapid that he readily adapts himself to the different temperaments with which he comes in contact. He is able to determine, almost at a glance, the peculiarities of his patrons, and has the tact to adapt himself to them. As a result, we have photographic portraits which are as much a production of art as those emanating from the painter's brush. Indeed, one might say more, for while the painter has the opportunity of contiuued social intercourse with his patron, the photographer is limited to a few moments. In this brief period, he must distinguish from the different expressions of his subject, the one which best represents his individuality, and endeavor to call up that expression at the critical moment. Added to this, hemusthave his mind on the appliances
of his art, and at the instant be able to handle them with the utmost practicable dispatch.

In looking over a collection of photographs in a studio, one cannot fail to notice the great variety of poses, and to be impressed with the fact that each pose is intended to express the most agreeable aspect of which the original is capable. This is clue to the fact that the true artist is always studying faces both in and out of his studio, and constantly on the lookout for the "best" in everyone he meets. He loves his work.
"'Tis rare delight; he would not change his skill,
To be the Emperor with bungling hands, And lose his work, which comes as natural As self at waking."

One could draw a great moral lesson on the photographer's method of making the best of people. Nature herself aims ever at the highest degree of perfection, though her processes are often thwarted or intercepted, and thus fall short of the perfect form which she strives to attain. In looking at a picture, we often say, "Yes, it is a good likeness, but it flatters the original." Now in striving to ameliorate or rectify these blemishes for which nature is not responsible, does not the artist endeavor to suggest the ideal which nature intended, had her design been allowed to come to full fruition? All honor then to the photographer who makes a picture of our portrait, who takes us at our best, and gives us cause to " bless the art that can immortalize."

A Glasgow paper devotes a corner to the portraits and biographies of "Men who have made history." Last month one of the "men" thus described was "Catherine Booth, mother of the Salvation Army."

## THE CAMERIST IN CALIFORNIA.

JOE S. ANDERSON, OAKLAND, CAL., U.S.A.


JOE S. ANDERSON.

While in the Queen City of Canada some weeks ago, I promisedin an unguarded moment to contribute an article for the Christmas number of this excellent publication.
Now, being a novice, from an editorial standpoint, and comparatively a recent addition to the ranks of the army of camera fiends, my effort can hardly prove worthy of being accepted as representative of the art of photography in this (God's own) country.

Plate manufacturers say that San Francisco and vicinity beats the world for amateur photo-kodak-cranks, and though I am not able to verify or deny the accusation, the statement recalls to my mind an article that appeared in the San Francisco Examiner some weeks ago, which claimed that " at the ceremony of breaking ground on the site of the Midwinter Fair in Golden Gate park so many cameras were on the ground that many to gain a point of vantage took to the trees, which became so loaded that limbs were broken off, resulting in a score of smashed cameras and many dislocated limbs and scratched artists." This may be a somewhat elastic statement, but I believe it pretty near the truth. San Francisco has a very large camera club, who demonstrate the greater amount of activity in all things apertaining to "snap shots"; they frequently charter a fast tug boat
in order to get grood negatives of a yacht race, and are ready to go to any extreme to gain a point. Their work is unexcelled, and speaks for itself. From inquiries made during my stay in your city I would infer that Canada, though perhaps not quite so demonstrative as her American cousins, is fully up to the mark in amateur photography.

Those of my readers who have been fortunate enough to have traveled the Golden West have most probably had their minds favorably impressed from a scenic standpoint; but allow me to advise those who have not yet been so fortunate, to load up their apparatus, take advantage of the favorable Midwinter Fair rates, and visit us this winter. Our amateurs are looking forward to an unusual influx of their brethern, and I am confident all will be cordially welcomed, and while we boast of being able to give them excellent summer scenes in the valleys, they need not miss winter ones, for the mountain districts traversed in entering California will afford snow and ice to their hearts' content.
"This photograph doesn't look a bit like me," said Snarley to the photographer. "I know it," said the photographer. "I was afraid to make it exactly like you for fear you wouldn't take it."
"I now offer you a Rubens," said an auctioneer-" a perfect gem of genius -perhaps the finest painting that came from that master hand."

There was no bid. The auctioneer passed the Rubens, and, taking up another picture, said, "Very well, gentlemen. I now offer you a Rembrandt by the same artist."


A GOOD STORX.
Half-tone ctching by The - Gill iEngravingı Co., New York.

BEER IN YE OLDEN TIME.

RICHARD KEENE.
In complying

michard kelene. with the request of one of the editors of this journal, to write something suitable for the festive season in which the present number appears, I feel some diffidence. He suggests my old favorite beer plates and some of the experiences I had in my travels in search of the picturesque. Beer, then, let it be, for, though it is Christmas time, you shall not have the Elder whine! Yes, I am an Elder truly, and have seen some great changes come over our art, greater facilities in working it, and great advancement. Did I not behold, a few days ago, at our meeting at the Society of Arts, the marvelous and lively photographs in natural colors by $M$. Lumiere, of Lyons-the greatest wonder in photography yet achieved? Look at the impetus given to photography by the introduction and use of gelatine plates, and what possibilities they have brought; what an army of ameteurs they have put in the field; never was better or worse work done, or more plates wasted than now. Let plate makers be thankful. But my paper was not to treat on the present state of photography-I must be retrospective and recall some memories of the good old days, when the sweat of your brow dropped on your plate during development in a stifling tent reeking with the fumes of chemicals and tobacco (of course you smoked) in the hot summer days; or, a little later on, when
you had to thaw your bottle of glacial acetic acid in your breeches pocket; and in winter, when the water froze on your plates after washing. These pleasures, added to the dirty-looking fingers and silver-stained garments, were amongst the delights of photography which I did not fully appreciate, so I turned my attention to dry plates and thus got rid of many nuisances in outdoor work at the cost of increased exposure. But I was very happy; what matter, if I had to give from three or four minutes to as long as you like over some of the exposures? Nothing-I calmly sat down on the leeside of my camera and smoked a pipe. Well, I tried collodio-albumen and worked it a considerable number of years; then coffee, morphia, tannin and other preservatives, and finally settled on beeras the best, simplest, and most reliable in its keeping qualities of the lot-so I stuck to my beer. All hail, beneficent beer!

The beer process was very simple and gave good results ; a plate coated with iodized collodion was sensitized in a nitrate of silver bath in the usual way, then washed under the tap, drained, and floated over with beer, to which was added pyro, one or two grains to the ounce; it was then reared cornerwise in a cupboard to dry, and the trick was done. You did this in a good light from an ordinary gas jet, shielded in front with a sheet of thin yellow paper. No fumbling in the dark then, either in making the plates or developing them. It was a real pleasure to see the image appearing on the application of the plain pyro, and when out enough, strengthening with a few drops of silver. For two years after the advent of gelatine plates I stuck to my old process, but-well, we have to move on in this fast age.

There is one advantage I have not mentioned in the making of beer plates, It is this : You have sent for a pint of beer preparatory to your evening's plate-making ; you will probably use two or three ounces and drink the rest. I know of no other process with so little waste accruing. I remember, some quarter of a century ago, going into Yorkshire to give a young lady lessons in photography, including the manufacture of beer plates. We made a few every evening cluring my stay and exposed them the days following. They were teetotallers in that house, but some bottled beer was got in. We never mixed more than two ounces of beer with pyro, yet this hypocrite required a fresh bottle each evening, (though stale beer would have been better) and the remainder was not put down the sink. Yes, beer is a fine preservative! So much for beer plates.

Now, let me tell you of one of my Derbyshire experiences when rambling in search of food for the camera. On this occasion there were three of us. We were working with whole plate up to 15 x 12 size. We had a two-wheeled specially constructed iron hand-cart on good springs. One of the three, our man, had to wheel this vehicle, the others helped him up the steep hills; a brake was provided for use downhill. One end of the huge box which held our plates and apparatus had affixed to it a waterproof bag or sort of portmanteau to hold our change of under-garments; at the other end swung a small keg of beer-we called it our developer! Such was the outfit of two enthusiastic photographers, half-professional and half-amateur, some thirty odd years ago. We were strong and healthy, and it was rare fun to go on the tramp for a week at a time in all sorts of out-of-the-way places,
not knowing where we should lay our heads at night.

The Peak of Derbyshire is a happy hunting-ground for the photographer, abounding as it does in the most charming scenery-hill and dale, wood and water, gray old churches and ruins, pretty cottages and fine historical mansions. It was in one of these Peak rambles, after we had been out a day or two, and had just finished some heavy work in Dovedale, that we set out from the Peveril of the Peak hotel, hiring a lad and donkey to help us on the way. The donkey was fastened to the front of the cart with long rope traces ; I rode on his back, and our man steered behind. We tried to buy the animal, but found he was priceless, as he had recently beaten all his competitors at the Tutbury races. We happy Bohemians, on the tramp amid shady lanes, or resting beneath some old tree whilst refreshing from our wallets and keg of beer, the donkey gently grazing the grassy banks close by, would have made some tempting bit for the hand-camera man had he then existed. We intended sleeping at a Peak village on our way, but found the wakes or village feast in full swing when we got there in the evening. Trying the first inn we came to for sleeping accommodation, we found it was quite full. We had prefaced our enquiry by ordering in some beer, for our keg had been empty some hours. $O$, what filthy stuff that thick beer was, yet the Peakrals would probably get drunk on it! As there were four inns, such as they were, in that outlandish place, we tried them all, and we tried their beer to ingratiate ourselves and get a footing-all of no use; we left most of the beer, it was not fit even to make dry plates of, though I have found plenty of latitude is allowed by the col-
lodion film, from Bass' thin pale ale to the thickest and strongest of Scotch. The little we had taken served not as a preservative, but as a developer of uneasy symptoms in ourepigastric regions. $O$, for a good square meal and a bed! It was nearly dark and we could go no farther on our journey. After many enquiries we at last found a cottage inhabited by an old blacksmith, his wife and son, where we were informed pedlars and such like slept. They took us in, having one room with two beds at our service. Hurrah! We forthwith ordered a good supply of mutton chops and brandy, the latter as a retarder to slow the development of the villainous beer. Fancy, if you can, we three hungry fellows sitting in the house-place with our host and hostess, waiting for the chops and watching the ruddy light on the rafters and other Rembrandt effects of strong lights and deep shadows. The sticks crackle and blaze, and the frying-pan is ready-here comes the lad, and soon the chops are hissing and spitting with a most appetizing sound. Ah! that old hag !-why she is spitting too, right over the pan to the back of the fire, as she turns the coveted chops. This is a fact, and it took the edge off our appetites considerably, increased our squeamishness and the consumption of the retarder ; we picked bits of lean off the bones very daintily and left off only half satisfied, finishing the brancly to keep the mutton down. We got what solace we could from our pipes, and were soon ready for bed. The sleeping arrangements were peculiar, for we had to traverse the old couple's bedroom to get to our own desolate dormitorv. I will not attempt to describe it-we fastened our rickety cloor with our garters tied from the latch to one of the bedposts to keep intruders out. I shall
never forget that bed where my friend and I slept soundly if not sweetly, and were, I hope, thankful. In the morning we were up betimes and found we could see through the flooring, innocent of carpets, between the planks down into a donkey's stable! Our ablutions were performed outside, in the front of the cottage, in a pancheon placed on a low wall. Our man cooked the bacon for breakfast to our great content, and after enjoying it thoroughly, followed by a matutinal pipe, we hired the blacksmith's boy and donkey and set off once more " over the hills and far away," to sleep there nevermore.

Lest any of my readers should think we were unduly fond of beer or other forbidden drinks, let me here inform him or them that amongst our effects we carried a tin of oatmeal and a cup; when we got to a clear spring in the heat of the day, we found a mixture of meal and water very refreshing-this beverage I can strongly recommend to all who tramp long distances.

Our next night was spent at one of the comfortable hotels at Matlock Bath, where we had a sumptuous dinner and felt as though we had got into Paradise.

## MEN ARE FOUR.

1. He who knows not, and knows not he knows not :
He is a fool; shun him.
2. He who knows not, and knows he knows not :
He is simple; teach him.
3. He who knows, and knows not he knows :
He is asleep; wake him.
4.- He who knows, and knows he knows:
He is wise ; follow him.
-Arabic Proverb.

## WITH THE SAVAGES IN THE FAR WEST.

w. HANSON BOORNE.

w. HANSON BOORNE.

The difficulty of photographing in the Far West arises, not so much from a dearth of subjects, as in making a selection which would be likely to prove interesting to your Eastern as well as Western readers. A landscape photographer who covers this enormous Western country of ours in the course of a few years, is likely to see not only very different varieties of country, from the flat and rolling prairies to the noble, towering Rockies, but to meet with many incidents and scenes which are totally different from anything to be found in more densely populated districts. For instance, the Indians with which our neighborhood abounds-although not exactly up to the standard of the "noble red man" of Fenimore Cooper-are very interesting, and a few years ago, when they were not so mercenary as they are to-day, the encampments on their reserves were well worth a visit from any knight of the camera who did not mind putting up with a few inconveniences for the sake of some negatives. I well remember a visit paid to the Blackfoot Reserve just after the Rebellion in ' 85 , when the famous chief, Crowfoot, was alive, for the purpose of securing, or rather trying to secure, some photographs of the great annual "sun-dance." I was particularly anxious to get a shot at the "torture," which I was informed had never been actually photographed,
and it was not photographed then, as you will see, although I managed it next year, when I knew the Indians better. I must digress a little here, to explain that the Indians are the most superstitious of people, and in those days it was a very difficult matter indeed to get one to allow a photograph to be taken, even with the offer of money. They were beginning to know the sight of a camera, and understood what it was for, but what they could not comprehend was how a "spirit picture," as they called it, could be taken of them, reithout taking something azvay from them; in short, they believed, as many do even now, that the act of photographing them would shorten their lives, by robbing them of a part of themselves. I knew something of this, but I did not know the Indians as well as I do to-day, and thought that if I sailed boldly into the " medicine lodye" and set up my camera, a few plugs of tobacco, etc., that I had with me, would make it all right. I marched in and the first part of my programme went off all right,-and then I sailed out, and quickly too. The Indians were at first somewhat taken by surprise at what they no doubt considered an instance of the white man's sublime cheek, but no sooner was the camera in position-before I could focus, or even get my head under the cloth,--the racket began. They crowded around me, threw a blanket over the camera, yelled, shouted, danced, and actually fired guns off over my head to scare me. I zoas scared all right, and only too anxious to see the outside of that lodge; and in quicker time than it takes to tell, I saw the outside, camera and all, assisted by three or four lusty young "bucks" in gaudy paint and feathers. Even then they were
not satisfied, for they wanted to hustle me off the reserve altogether, but some of the older men interfered, and old Crowfoot--peace to his memory!-ordered them to be quiet; and they obeyed him like lambs. I was thankful at not having my apparatus smashed, but took the nearest approach to a revenge that I could, for I succeeded in getting a snap shot at the outside of the medicine lodge, assembled crowd and all, before leaving.

Next year, I determined to try different tactics, and a different tribe, and going south to the reserve of the Bloods, camped on the outskirts of the immense Indian camp, about three weeks before the actual dance beganfor they take several weeks preparing for it-and spent every day in walking about amongst the 1,200 or so tepees assembled in the bottom, familiarizing myself with them, and they with me and my camera. Next, I secured the services of an Indian interpreter, who had worked for the N. W. Mounted Police, and promising him a small bonus for every successful view I secured, left him to make all neccessary arrangements. In this way I managed to get a very fair collection, and when the grand day arrived the Indians were accustomed to seeing me and my camera, and only occasionally amused themselves by setting a few of their thousand and one dogs at my heels. The night before the great clance, I was called to a pow-wow in the head chief's (Red-Crow's) tent, and there found seven other minor chiefs assembled. My interpreter ("Wolf-Shoe" by name) had arranged everything, and it was decicled that I should make each of the minor chiefs a present of two dollars, and Red-Crow three dollars. This I thought it expedient to do, and we became very friendly.

They went on with a special ceremony in connection with the coming dance, and a medicine man, dressed in feathers and paint and nothing else, came in, and " made medicine" and a horrible noise. This done, he disappeared, and the pipe of peace went round, which I did not feel called upon to join, preferring my own; so, as we were all such dear friends and had shaken hands so many times, and I had given them each two dollars and promised tobacco on the morrow, this was overlooked, and they gave me formal leave to enter the sacred medicine lodge and do my worst. And here I may say that this promise was faithfully kept in spite of very loud and angry expostulations on the part of some young bucks and all the old squaws. I distributed some tea and tobacco in the lodge, and a little more backsneesh to two of their braves who were undergoing the torture, and secured some very good negatives of the preparation of the braves for the torture, and of the torture-itself. Every now and again a firey young blood would jump up and hold a blanket in front of the camera, but Red-Crow kept faith with me well, and shut him up at once. Nine braves were tortured that day, and this I believe was the last genuine "sun-dance" held by the Indians in the North West. All the old customs are gradually dying out, and to-day the happy photographer and possessor of the omnipresent "kodak" can easily overcome the scruples of the majority of the noble red men with the almighty dollar.

A large firm of paper-makers have established a "best on record" by making a single sheet of paper seventytwo inches wide and seven and threequarter miles long.

## HOW TO TREAT A CUSTOMER.

J. C. WALKER, Ex-Pres. Ploto Association, Canada.

J. C. WALkER.

Without pretending to be a literary man, I think a few words under the above heading may possibly prove of interest, although I don't know that I can say anything very new. I hear many voices saying, "We are not bothered so much with how to treat customers, as with the problem of how to get them." To this I must answer, "Take good care of those you have and you will not need to bother about how to get more, for a customer well pleased and well treated is a walking advertisement and is worth more than a whole column of advertising, and, by the way, is much cheaper." You are not necessarily a successful business man if you are able to, and do, turn out good work. Many a good workman tails to make a success in business, because he does not well understand the art of treating a customer. It requires a great deal of natural intuition, good judgment and a certain knowledge of phrenology or character reading, and it is astonishing what can be done in that direction by a little careful study. No one has a better opportunity to read his customer than a photographer, and no one requires to have a knowledge of their peculiarities more than a photographer. If you have some knowledge of this, then you will know how to treat the person with whom you are dealing. The following few rules may be safely
followed: Treat every customer alike, show the same courtesy and consideration to all, no matter how small and trifling their order; it will surely pay.

But the manner in which you handle your patron should vary with every customer according to temperament, and that is where the art of handling customers comes in. If your subject is a talkative man, talk with him; if he is familiar, show yourself very friendly and make him feel at home; in other words, put your customers at ease, as upon this depends, in a great measure, the resulting photogram. Make some customers feel that you are greatly indebted to them ; make others feel that you are master of your business, and they will both respect you. Don't allow your customer to teach you the business, but don't get angry if they attempt it, or you will be kept busy. Carefully receive suggestions, and act upon them, if, by so doing, you can gain a point. Try and make your subjects think that you are working according to their instructions, although you may be doing exactly opposite. If you happen upon one of that persistent kind, that zoill be taken full-figure standing (although they may be 6 ft .2 in . high), don't irritate them and yourself, trying to argue the point, but quietly make the negative as requested, and then suggest that you would like to make one another way, and will show them a proof of each. Youwill thus have your subject under your own control and can do as you like with him. If your subject is fussy, take plenty of time, and make a spread. Take great pains with details, try different poses, show yourself very much interested, and you will please him every time-although you may only make one negative. If on the other hand, you are clealing with a nervous, retiring disposition, one that


never feels natural (and you are convinced he does not look so) you must make every move count. Spend very little time, talk on some foreign subject, keep the mind off the photo, and before they think you are half ready, say: "There, that will do, thank you !" and the echo will answer back, "You didn't take it, did you? oh, I wasn't holf ready." That picture will be natural.

There is another class : the businesslike, who place themselves in your hands and take it for granted that you are master of the situation ; with such customers don't fail to make a successful negative; try them different ways and do your best; they will be sure to order if your part is well done, they are not the kind that sit to just " see how it would look." They will think far more of you as an artist if they are not required to sit again, re-sitting annoys such people. Children's photos depend almost entirely upon your own feelings toward them. If you dislike children in general, you will not make a success of their photos. You may have a pleasant face, and speak nicely to them, but if you feel like throwing them down stairs they will not trust you. You may be able to deceive their parents by plausible talk and pleasant looks, but you cannot deceive the children. Try and educate yourself to love children, whether they are attractive or not, and if you reach their hearts, their mothers will be your friends for ever. Now, how shall you proceed to make a child's photo? First, clear theoperatingroom of cousins, aunts, uncles and great-grandmothers, then spend a few moments in making the child acquainted with the place. Have the mother very close at hand, praise up the nice new boots, or that lovely red dress with the brass buttons. Ask "Are
they real gold ?" and add, " My! they will look nice in a picture," and "Isn't this a nice place?" " Look at the pretty flowers" (or pictures, or anything at hand), and before you know it your little subject has lost all fear and is perfectly natural, and you will have a successful picture in half the time it would take the mother to quiet her child. She, of course, will tell hei friends that you are " an azeful nice man," and you " make such lovely pictures of children, and never looked cross once "; and then you will smile, and the world will look brighter, and you will come to the conclusion that, after all, photography is not such a bad business, nor has it lost its charm.

## A FAITHFUL FRIEND.

Photography is like magician's charmWe nurse the absent, in affection warm. Present the distant, and retain the dead;
Shadows remaining, but the substance fled.
For faces vanish like the dreams of night,
But live in portraits drawn by beams of light.

Mr. Lenz (photographer): "I have not for a long time had so good a sitter as you. The expression is exactly right. How do you gain such control over the facial muscles? Are you an actor?"

Mr. Rhodster: "No, sir."
Mr. Lenz: "Well, well! Perhaps you are a bicyclist?"

Mr. Rhodster: "Yes, I am."
Mr. Lenz: "Ah, that explains it. It comes from riding the machine on cobble-stones, and trying to look as if you enjoyed it."

## DOIN' THE FAIR.

UNCLE JASON.


UNCLE JASON.

Just about the beginnin' of August, as Maria an' me an' the childer were a-sittin' by our own hearthstone, me a-readin' of the latest thing in the developin'line, Maria a-makin' of sum fancy things for a sister of her'n what's goin' to be married this fall, an' the young uns a-studyin' for the morrow's school-in'-not a sound broke the stillness of that hot summer night, until Maria speaks up, quite sudden like, as if somethin' mighty was impellin' her to it, an' says she: "Jason, you an' me has got to see the great Fair at Chicago afore it closes. Mary Jane, that's her as what's married to your own sister's brother-in-law, was just a-tellin' me, only this afternoon, as we was a-takin' tea down to Aunt Betsy's, as how every one ought to go, even it they lived on taters an' salt to scare up the money to take 'em, an' then she begins a-tellin' me of all the wonderful things as is on show there-the likes a' what has never been afore gathered together from all over the great globe ; so sayin', with many stories of the grand sights, she entertained me an' a lot more who were present; an' now, Jason, it's got to bean' then, think of the fine pictures ye'd get with your kodak, which, of course, we'd take with us." Says I: "Maria, I knew you'd be takin' the notion if you went to. Betsy's the day ; for Tom, that's Mary Ann's man, was tellin' me how fine a time they'd had of it, and so, maybe, if Jason can manage it,
we'll-seein' as how it'll soon be the anniversary of your takin' Jason for your wedded husband, I was a-thinkin' we might have a weddin' tower over again an' see the show atween us." Then Maria, she jumps up and gives me a great hug, right there, an' says she: "You're the same Jason as ever was, an' we'll do the Fair togrether, as you say." That's how we took the notion of goin', an' now I'll try an' tell you how we fared at the Fair, an' on the way. Believin' in an' bein' a lover of everything that's Canadian, an', besides, Callaway, the ticket man, bein' a friend of mine, we got our tickets from him, an' one mornin', bright an' early, Maria and me got on to the C.P.R. train at the Union station, an' away we went with a lot more folks, all havin' on their best clothes an' lookin' as spry an' fine as a young bee on a June mornin'. Maria she was quite nervouslike 'bout travelin' on the cars, for says she: "The papers has jest been full of accidents an' sich like lately, an' didn't I dream of goin' to a weddin' the other night, an' that's always a bad sign." However, we reached Chicago all right, early next day, an' went right off to our boardin'-house, for Maria she will have it that it's cosier an' more home-like to be in a house than a hotel ; so we got a place out near the show grounds, so as 'twould be handy to run out an' in as often as we liked. After performin' our respects to the folks at the house there, an'gittin' our things stowed away an' a good dinner stowed away into us, says I : "Now, Maria, when ye's ready, we'll look intil an' see the Fair, what they got to show us that we hain't seen afore." We'd hear'd an' read a good deal of the doin's at the Midway Plaisance, an' I wanted to see that first thing, but Maria she said that, 'cordin' to all reports, 'tweren't a place for
any dacent people to go to. Howsomeever, I persuaded her to come along an' see the Irish Village, which " Kit," in The Mail at home, said was so "foine intirely." Well, d'ye believe it, as we came near we heard the greatest schremin' of bagpipes ye ever listened to, an' says I : "Ain't we gettin' intil the wrong shop? This must be a Highlan' laddies' place." But we'd no sooner got inside, than here was a broth of a boy, gottin up in full Irish regimentals, a-playin' on the pipes an' walkin' up an' down, an' when he wasn't playin' he was a-twirlin' of his shillelah an' a-singin' an' a-shoutin' about the foine sights o' the Blarney Castle an' the gossoons beyant the sae. When he wasn't lookin', Jason made a photo of him, all but the gift o' the gab, which, by my life, I'd a-liked to had too, intil the bargain. Well, Maria an' I kissed the blarney stone, an' she had hard work to keep me from kissin' a fine Irish lassie with bright rosy cheeks an' lips that would 'a been a temptation to St. Peter himself, had he been me that afternoon. Then we see'd the Moors an' the Egyptians an' a lot more strange critters from other places, an' heard fine music an' sich like, an' Maria says as she gazed on the buildings an' the scenery, overtopped by the egreat Ferris wheel, towering away up like intil the stars: "Jason, the half hasn't been told us o' what we're goin' to see right here, if my health keeps well an' I ain't troubled with sea-sickness, an' sich like, as nearly always comes over me when. I gets in a crowd, as ye know." Well, then, by way of gettin' her used like to the place, I said that, bein' as the afternoon was fine, we'd just take a turn around the "big wheel," an' then, if Maria got over the sensation, we'd go around the grounds a bit in one o' those big chairs that I see'd the
chap in uniform a-standin' by as we came along. After we'd 'rived at the Revolver, with its three dozen loads in the shape of big street cars a-hangin' on to the edge of it, as if they'd might 'a been flies on the wheel, like the Grits to home were called during Old Tomorrow's (the Tory chieftain's) time, as you may have heard-well, after much cogitation an' a-sinkin' of spirits, likewise of innards, we (an' I'm sure everybody else 'd say the same), after we'd been twice around that great air ship an' surveyed the beauties o' natur, likewise of art an' progression, spread out before our telescopic vision, an' within the focus of our comprehension that the likes $o^{\prime}$ that beat the airth; but as Maria (who has a leanin' to the Yanks, seein' as how a great-grandfather of her'n fit along with the Father of his country agin the Government) says, what the Yankees don't know ain't more'n a little bit. Leavin' the rest $o$ ' the wonders of the Plaisance until another time, we wandered into the grounds an', seated in a big chair, with the attendant a-wheelin' of her, Maria an' me enjoyed the charming beauty of the landscape gardening an' the grandeur of the marble palaces, while makin' picturs all the while with my kodak, until, comin' in view of the great fountain, we see'd a sight we'll never forget, neither of us, till our dyin' day-our artistic naturs risin' right up within us to do justice to the beauty of the vision. The great orb of day was declining in a golden sea of sunset splendor, 'gainst which the Palace of Adminstration stood in chastened shadow, charmed as if 'twere by the music of Columbia's masterpiece, as from its many open mouths the crystal waters ran in joyous madness; an' as we looked in wonder at the scene, the sun's rays faded, an' far an' near, o'er height
of dome an' shaded walks, as by a fairy touch, the crystal lamps were lighted, an' enchanted like we turned aside an' with the poet said, "Here let us steal a while away from each perplexin' care." Evening we spent amid the living lines $o^{\prime}$ light as seen reflected from the water, or viewing the picturs on the clouds by the mighty search lights, o' which we'd hear'd so much, as bein' used at sea in war time, but now we see'd a-throwin' things on clouds like as which no camera, or magic lantern either, could 'a done. Then, aweried, Maria an' me, goin' home to our boardin'-place, mused long and deep upon the sights we've mentioned an' many more of which Jason hasn't time to say. Bein' early risers at our place to home, an' next day bein' fine, we were up betimes an' intil the grounds soon as they'd put out the latch string, so to speak, an', havin' promised Maria l'd give her a ride on the camel, by way of testin' her seafarin' abilities, as soon as we got to the place, I pays the little chap a Yankee half-dollar, an' he makes the animal a-neel down, as after much strainin' an' liftin' Maria gets between the humps, an', mercy me! say, I couldn't resist the temptation o' takin' a shot o' the lot o' them as they moved off to slow music. I'll let ye into a secret. She didn't go far afore she had a risin' sort $o$ feelin' in her anatomy-Maria, I mean-an' she hollers to let her out, an' I had to resort till a liberal use o' hartshorn, which I always keeps by me for accidents like, before I brought her back to normal again. While in the midst o' my fixin' over Maria, I didn't fail to notice how an old Turk, with a visage like to boiled squash, an' a suit a clothes, or blanket, or whatever ye like to call 'em, as what had never been cleaned, was a-lookin' our way, as if
he'd a like to 'a given me some help, an' although I ain't jelous a' no Turk, or an other white man, I just a reminded him that, if he didn't want to be took, he better make himself scarce, an', levelin' my kodak, he skipped under a table, an' the way he threw those old legs $o^{\prime}$ his'n around to keep me from gettin' his phiz, an' yelled in foreign talk, has been ticklin' me an' her what was the cause of it ever since. After this divarshon we see'd the great pictur gallery, an' Maria an' me were dumb as oysters afore the work of those men of master minds who, with the brush an' a little paint, could make such speakin' likenesses of men an' things an' natur. Here a feller collared my little box an' put it away till I got through lookin' at the miles o' can-vasses-maybe he thought I might a stole one o' the big picturs intil it, for a camera's a powerful machine at times. Among the hefty an' soul-stirrin' subjects afore us, we didn't fail in noticin' that our Canadians had some right smart things; and Maria was moved almost to tears at seein' again those great pieces called "Waited in Vain" an' "Foreclosin' the Mortgage," in which so much of the sorry side of life is depicted by our artist sons. Then we got on board one of those foreign boats -gondolas, as they was called-in which a right smart chap, all rigged out in purple an' fine linen, a-holdin' of a big handled oar, seemed just to push the pretty thing over the water, while we, a-layin' back among the soft cushions, were enjoyin' the fruits of his labors, likewise the scenery, an' gettin' our money's worth at one an' the same time. Stoppin' off at one of those fancy meal houses, you orter seen us tryin' to get enough to satiate the nawin' o' our stomacks, for it was past high noon long since, an' we'd a' had


Half-tone engraved on copper by The Canadian Photo. Eng. Bureau, 16 Adelaide St. West., Toronto.
an early mornin', as bein' our custom ; howsomever, we got suthin', but says I: "Maria, if there's to be any more payin' o' such charges as those'n for next to nothin', we'll be after havin' to see our uncle afore we gets through our week of it." It was in the Woman's Buildin', which we was next a-doin', that we made the acquaintance of Lady Palmer, as Maria will have it she's known by, an' after tellin' her as to our genealogy an' our close relation to several way-up people to home, she just invited us to see everything in her department free of expense till us, and she, herself, showed us many o' the novel an' interestin' things a-made by women's handiwork the world all over. This bein' the evenin' we'd a-laid out to go down town a-purpose to see the great play, "America," we journeyed that way, an' I tried to get the tickets to the offis, an' the man told us he hadn't any o' them, as they was all takin up days an' days in front $o^{\prime}$ that night. Well, when we'd comed all the way till see it, we was considerable flustered at this information, an' while we was a-stanclin' by a-discussin' of it, a well-dressed gentleman, a-wearin' of a silk hat an' an eyeglass, comes to me, an' says he: "Did you wish to go io the show this evening? 'Cause,"says he, "I've two good seats-the very best in the house-which, as the lady who was to accompany me is ill abed an' can't go, I'll give you at just what they a-cost me-two dollars." "Well," says I, "I'm obliged for yer kind offer, an' so is her as is with me, but I didn't want to pay more'n one dollar for the two of us when we came. However, to make a long story a short one, pityin' the trouble he seemed to be in with his sick lady an' what not, I paid him two $o^{\prime}$ my good silver dollars for the bit a' pasteboard, an' after we'd a' had our
tea we made our way over, an' with the great crowd that was a-goin' in had presented the tickets we'd bought a little while afore---would ye a believed it?--we'd been a-takin in for green uns, an' no mistake, for what we'd paid a dollar for was only seats in the very top place, an' the feller was just one o' those speculatin' chaps, an' hadn't had no lady sick, nor nothin' else. Well, it's a mighty good thing for him he wasn't around when the curtain came down an' the lights a-turned out, 'cause he'd a' had a taste of Jason's stick as would 'a made him sick. We enjoyed the fine marchin' an' the dancin', to say nothin' of the beautiful music, till the full, an' when it comed till the scene at Yorktown as was so realistic, a-showin' how the Britishers 'as beaten--a-given up their swords an' sich like--I had to resort till main force to keep her as is my better half from cheerin' an' yellin' like the mob in the gallery. Says I, at last : "Maria, I ain't a-goin to stand no such fool-behavin' on your part, for if ye has all Yankee blood in ye, ye're a-married to a full-blooded Britisher, an' should have more respect for your partner than till act that way right here afore everybody." Then says I, out loud-like, by way of givin' vent to my ill-used feelin's: "That's the only time ye's ever did do it, anyway, an' let's see a bit a' Lundy's Lane and Queenston's Heights for a change." An' then wasn't there a row! I'm sure, if it hadn't been that Maria was along with me, some o' them audience would 'a done me grievus hurt and harm. Next mornin' was a regular blower of a day, with the rain a-comin' down in sheets, so to speak, but we wasn't goin' till let a little thing like that stop our perambulations; so, puttin' on our mackintoshers, an' gettin' our umbrellas, we got in early till the great build-
in' o' them all, an' bein' as there was no much of a crowd, we had a fine sight of all therein, between what we see'd from the floor a-movin' round among them an' what we looked at with our specs from the balconies, which were all around, while all the time the ragin' storm without tried to get in at us, an' roared an' roared, an' ever an' anon, above its noise, sweet music of the chimin' of the bells from the centre dome came wafted to us, makin' it so cosy-like all the while. We'd hear'd tell a good deal of our Canadian show, an' we was more'n pleased with the right smart look she had along with her mother, old England, in this great buildin', an' we both of us was proud to say we was from the best city in the best part o' Canada. We could write a hull book about the great an' wonderful sights we see'd that day we spent in the greatest buildin' on airth (the guide book said), but we ain't a-goin' to do it, not jest now. We'd only calculated to stay a week away from the childer, so Maria, she says: "As we've only one day more, we must just take a flyin' look at what we ain't seen, an' if we misses any, it'll be 'cause we ain't seen it." That last mornin' was a glorious one-clear an' bright as one $o^{\prime}$. them new silver pieces the 'Merican Government's a-turnin' out so quick jest now-an' we was intil the Midway as the sun was first a-kissin' it. We see'd the circus, with the man drivin' of the big lions all harnessed till a chariot, an' the other marvels, an', enterin' the grounds once more, bought tickets for the ride around the Park on the Intra-mural railway, an' what a ride that was !-in an' out an' around among the snowy palaces, all a-glistenin' in the summer sunshine after the rain that was the day afore. Then in we goes till pay our respects till Canada in her own
house, an'havin'met Mr. Larke, the head man, till home, he was kinder nice till us, an'we gave him till understand that sofar as we'd a-see'd, we Canucks didn't need much coachin' from anybody. Then we goes away to see the big cheese, an' I was a-gazin onits mammoth proportions with amaizin' in my eye, when Maria speaks up, an' says she : " Wouldn't our Josh's mouth water if he see'd that, for he's mos' powerful fond o' cheese." 'Twas over to thecliff dwellers that we see'd the strange ways $o^{\prime}$ the strange men who'd lived hundreds ' $o$ ' years ago, an' then goin' from that to the Electrical Buildin', we, as 'twere, come from the depths of ignorance to the heights o' wisdom, an 'twas an' amazin' difference. In one end of the buildin' we see'd the little chicks a-peepin' out $o^{\prime}$ their shells brought to life by electricity, an' in another place the victuals a-cookin' without any fire, an' hundreds o' wonderful an' marvelus inventions for the benefit o' man, an' woman, too. Then as the sun went down beyond the big buildin's for the last time, for us, we, while sad at the partin', was more'n glad we'd comed to the big White City ; an', after seein' the lights lit an' the 'lectrical fountain's beautiful an' charmin' color picturs playin' magiclike athwart the night, we turned our backs upon it, an' next day took the train for home, enlivenin' the way with talks an' incidents of our week among the Fair till night an' sleep an' dreams came till us as we traveled; an', then, waking, 'twas not long until we see'd the city, an' 'rivin' to our house, we found all well, an'Jerusha, that's our youngest, had gotten a new tooth, while Tabitha, the cat, was the happy mother of a large family. After some time, someun prevailed on us to write about our tower, an' if in doin' so we've pleased you even a little bit, we are rewarded.

## GUILTY OR NOT GUILTY.



george mason.

The turning point of a question of "guilty or not guilty" is brought to a successful termination in favor of the prisonerby the aid of photography. The story is simple enough. Mr. Arthur Mees and Mr. Selborne were workmag late one night in the bank of which both were partners-Mr. Arthur Mees being the junior.

On the night in question Arthur left the office earlier than his partner, and as he strolled along the street on his way homeward, his attention was attracted by the name of his old friend, Harry Walton, standing out in large letters from posters on the wall, the said posters announcing that his friend Harry was appearing nightly in his successful comedetta entitled "The Photographer's Fad"--it was also stated that the house would on that evening be, for the first time, lighted by the electric light--so Arthur resolved to go and give his old friend a hand, and also see what he made of the farce, for Harry Walton was a good amateur photographer as well as a clever actor. He went to the theatre and after enjoying the play he went home.
He was sitting amusing his wife with a description of some of Harry's eccentricities in the play, when a violent knocking at the door made them both start. Arthur hastened and opened the door, when to his surprise he was con-
fronted by a couple of Metropolitan police.
" Arthur Mees, I believe?" said the first constable.
" Yes, that is my name," replied Arthur.
"We have a painful duty."
"What do you mean ?" demanded Arthur.
"We must arrest you!"
"On what charge?"
"The attempted murder of your partner, George Selborne."
Although considerably staggered, Arthur did not lose his head; he knew that there must be some mistake somewhere, and he consoled his wife by assuring her that it was only some misunderstanding, that he would have to go to the city, but that he would be back shortly.

On the way to town the constables explained how Mr. Selborne had been found with hardly any life left in him, on the floor of the counting-house, and the safe and the drawers had been rifled and one Mogford, the chief cashier of the bank, had sworn that he had seen Arthur leave the premises where he and his supposed victim had been last seen together in angry conversation.
On the ground of this evidence the authorities had decided to arrest Arthur Mees, the charge being attempted murder and robbery.
Mogford had a very plausible manner, which was very convincing to the minds of those who heard him give his evidence. He said that he had returned to the office on the fatal night for the purpose of rectifying some errors in his accounts, the discovery of which might have led to his discharge from his post. The housekeeper, he said, when admitting him into the bank, told him that Arthur and Mr. Selborne were
closeted together, so that he resolved to wait till they were gone. As he was about to leave the building for this purpose, he overheard high words between the partners, which caused him to listen.

The unfortunate part of this testimony was that it was partly true, as there really had been some disagreement regarding some business transaction.

Mogford, as he listened, heard one of the partners rise to his feet, when he hurriedly made for the street, so as not to be seen by either of his employers. After some time he saw the junior partner leaving the building in a hasty and flurried manner.

Mogford still hung about waiting the departure of Mr. Selborne before he would go into the bank again, but when an hour had passed and his employer did not appear, he ventured into the bank again.

The housekeeper let him in-he crept stealthily to the counting-house to see what Mr. Selborne might be doing, when to his horror he found him lying in a pool of blood.

The housekeeper corroborated every part of Mogford's statement.

Arthur's defence was an alibi, in proof of which he stated that he had been at the Gaiety theatre on that night, and at the time when the affair took place. He could describe the piece-and the time that each part was being performed, but this did not go for much, for the piece had been running for a hundred nights and of course the description would suit any night that it had been played.

Mark, Arthur's brother-in-law, was tearing around every likely and unlikely place in his eagerness to trace some evidence in Arthur's favor, or to find some one who might have seen him by chance on that night. He happened to
drop into Harry Walton's studio on Christmas day. (Harry had a regular photographicstudiofor his amusement.) Photographs were strewn all over the place. The whole talk was Arthur, how to get him off. Walton was sure that Mogford was the man, and he regretted so that that night of all nights Arthur had not come behind just to say, "How do you do ?"

Mark was sitting listening to Harry's regrets, carelessly handling a photograph that was lying on the table, when he was attracted by the subject, and starting up he exclaimed:
" Harry, for God's sake! tell me, have you any more of these pictures? If you have, then by heaven, Arthur is a free man."

Harry seized the picture and shouted, " Great heavens, Mark ! you are right, I see it all!"

The picture represented the front of the Gaiety theatre with the audience portrayed, every face, every feature, had been limned by the magic art. "Have you any more of these pictures ?" Mark demanded.
"Why, of course I have," replied Harry. "What do you think the electric light was turned on for in my theatre. Why, to be the slave of my "Fad" as you call it, and as he spoke, he trembled and fumbled among a heap of photographs which lay in a corner of the room. "Did you suppose I chose a piece in which the photographer is supposed to be only taking imaginary pictures of his audience? I have half a dozen pictures of every man, woman and child who has witnessed the representation of "The Photographer's Fad" since the first night that the electric light was used."

Then followed an impatient rummaging of the portfolios. The picture taken on the night of nights was not there.

But by-and-bye Harry remembered that, it being the first night of the electric light, he had put it carefully away in an old cabinet.

The picture was there.
The alibi was proved, for in the centre of that photograph was an unmistakable portrait of Arthur Mees, who had occupied a seat in the dress circle of the Gaiety theatre.

Harry proved to demonstration that the picture was taken on that night and at the time when some unknown was attempting to murder poor George Selborne.

This piece of evidence was deemed sufficient by the jury to justify them in bringing in a verdict of " not guilty."

The housekeeper on her death-bed, confessed her complicity in the attempt to murder Mr. Selborne. Mogford had been admitted by her to the house on that night, and had never left it until he believed that his victim was silenced for ever.

He is now undergoing a sentence, which, but for the revelation brought about by "The Photographer's Fad," it might have been the lot of innocent Arthur Mees to endure.

Feminine Criticism.--He: "Do you think Miss Plainer's photographs do her justice?"

She: "Oh, yes; justice tempered with mercy."
"I wish to say to my congregation," said the minister, "that the pulpit is not responsible for the error of the printer on the tickets for the concert in the Sunday school-room. The concert is for the benefit of the Arch Fund, not the Arch Fiend. We will now sing hymn six, 'To err is human, to forgive divine.'"

## IS LIFE A FAILURE?

E. POOLE.


Passing through this world, it would seem as if some men's lives are a failure. I say seems -is it really so? A man may fail to accomplish the end he aims at, but that life is not necessarily a failure. No ! rather let it be understood that for every honest effort put forth, the world is that much better, and forthwith some man may take heart-and 'tis true. Let it also be understood that every honest effort a photographer makes in an endeavor to improve his productions, that therein does he fulfil, in a measure, his destiny. The Great Architect of the universe does not desire to be alone in planning and laboring. He has given to each one something of Himself, along this line. The world is better or worse, as we make it. What a pity that so many photographers seem to be aiming only at dollars and cents. It may be, and is, necessary to get dollars and cents, but is that all? Nay, nay! A kind word, cheery look, less jealousy and more of the golden rule in our lives, and then our profession is elevated. Gentlemen! better work, better lives, and our work is done-but not ended. It tells, tells for time, tells for eternity.

Something never before heard of: a unique Mailing Case for large photos., from $63 / 4 \times 81 / 2$ to $22 \times 28$. It is strong, light, practical, neat, handy, very compact and cheap. (See "Ad." in advertising pages for address of Becker Mailers.)

la villa oratara, tencriffe.

THREE MONTHS WITH A CAMERA IN TENERIFFE.

w. hule.
-
w. bull, quebec.

A bitter northeast wind was blowing down Southampton water as I stepped on board the tender of the Union Line boat bound for the Cape via Lisbon, Maderia, and Teneriffe, the last week of last year. Teneriffe was my desinattion, and accompanied by my beloved and constant companion, a whole-plate tourist camera, and a good stock of isochromatic and slow landscape plates, etc., I intended having a real good time for three months. My anticipations were more than realized; for under its sunny skies, in the most delightful climate in the world, and amongst magnificent scenery and a most picturesque peasantry, I brought back many delightful impressions, both
in mind and on plates, and learned, withal, valuable experiences, some of which I had jotted down in hope of their being useful to fellow-amateurs. After calling at Lisbon, where a host of delightful snap shots may be taken, both in the harbor and on shore, three days of unusually heavy weather brought us to Santa Cruz, the capital and port of Teneriffe. What a delicious change it was, after the biting winds and damp cold of England; here we could bask in the glorious sunshine, or in the shade of palms, bananas, and gorgeous tropical climbers. But the enthusiastic photographer, unless an invalid, will be far too energetic a person to bask in the sun, for the place simply swarms with pictures. Landing at 5 o'clock a.m., and partaking of a sumptuous breakfast at Camacho's English hotel, I sallied forth with my three-legged friend rigged ready for action, and made for the end of the quay, where while landing I had noticed a nice view of the town, showing the cathedral, part of the harbor with its crowd of boats and shipping, and the
quay itself, with groups of Spanish sailors lolling about, and peasants, in bright colored costumes, bringing water in casks on mules, or carried by the women on their heads, to the boats. For this picture I exposed an isochromatic plate $1 / 4$ second (using $f / 3^{2}$ ) and developed with a pyro-soda cleveloper. Commencing with half the normal amount of pyro, full dose of soda, and one grain of pot. bromide to the ounce, gradually increasing the pyro up to 3 grains to the ounce as development proceeded, and the detail in the heavy shadows came up, gave a nice soft but bright picture. By the way, I may as well remark here that the above is the method of development I have found the best, after many hard pictures, for views taken in such bright sunshine as one gets in tropical and semi-tropical countries-especially for street scenes, where the high lights and glare from white-washed walls and houses are intensely bright and the shadows correspondingly heavy. Another view, across the harbor, including the great rugged volcanic mountains, some 4,000 feet high, coming sheer down to the water's edge ; a view of the harbor and shipping itself, from the flat top of the hotel ; a few street scenes, obtained with great difficulty, and after much waiting and patience, with the inquisitive crowd of Spanish youngsters, who, as usual, posted themselves in lines and assumed tragic attitudes within a few feet of the camera, and I got my camera and baggage into a carriage drawn by three wiry mules, joining two fellow-passengers for the 26-mile drive across the mountains to the town of Orotara, right the other side of the island, which we intended making our headquarters during our stay. Orotara, the favorite health resort of nearly all tourists, whether
invalids or pleasure seekers, is situated on the coast in the centre of $a$ valley supposed to be the bed of an ancient volcano, the walls of one half of which having burst out and down into the sea, left the remainder as a vast semi-circular amphitheatre of mountains, attaining in some places a height of 8,000 feet. It has five or six excellent English hotels, many private residences, and a population of about 15,000 -including some 400 English, the number of whom increases every year as the salubrious and equable climate is becoming more and more realized. But to return to our drive : The first thirteen miles are a continual ascent along a winding but very good road; for several miles above Santa Cruz a magnificent panorama is afforded of the town and harbor, and good views are obtained during the halts to give the mules a breather. A long-focus view lens being necessary, I used the back combination of my rapid rectilinear. The scenery was somewhat bare and arid looking : euphorbias, prickly pear, and cacti being the only vegetation, excepting the eucalyptus trees bordering the road the whole way. Groups of bare-footed Spanish peasants, the men in coarse duck shirts and knickers, leading mules heavily laden with fruit, vegetables and green fodder, for the town, and the women in brilliant colored cotton blouses and skirts, with cotton handkerchiefs tied over their heads, and carrying enormous baskets of fruit on their heads, enlivened the scene, and gave my friends, who had kodaks (I despised kodaks before, but I envied them theirs now), plenty of work to do. Six miles up we rattled through Lajuna, the ancient capital of the island, a sleepy old place, but with a fine cathedral and buildings, and an English
hotel with a dark-room (the only one in the island, up to last year). After an hour's stoppage at an inn at Matanza, some fifteen miles from Santa Cruz, where, after a dumb crambo show with the Spanish proprietor, who, however, understood the word "Junch," we refreshed the inner man by getting outside some very strange, though fairly palatable, dishes. At Matanza, on fine days, a magnificent view is obtained of the peak of Tenereiffe, towering up into the sky, its cap of snow glistening in the sun, and contrasting beautifully with the dark basaltic hills surrounding it. But it was hidden to-day in a mass of clouds, and we had to content ourselves in gazing at the spot in the clouds behind


Lava Boulder. near Garrachico, Tenertffe.
which it presumably lay. We had crossed the highest ridge now and had begun the descent; the sea and the other side of the island being before us. The panorama spread out below and before is superb and indescribable. One spot, not far from Matanza, where the south side of the island bursts into view, is now called "Humboldt's corner." Here this great traveler is said to have thrown himself down, exclaiming that it was "the most glorious view in the world." It is almost too extensive from a photographic point of view. The carriage
rattled gaily along now, following the mules as fast as they could go, the road crossing deep ravines on wellbuilt bridges and winding along the hill-side, where in some places one looked down precipices apparently sloping steeply 2,000 to 3,000 feet into the sea. Peasants' houses, with their patches of carefully terraced gardens, in which were growing luxuriant crops of maize, tomatoes, potatoes, and bananas, became more numerous and made some nice pictures with their background of date palms and a foreground of lava built walls and prickly pear. Arriving at last at Orotara, we drove to our respective hotels and settled down to a week's quiet inspection of the town itself. Everything, except where English influence has been at work, is typically Spanish: the stone cobbled narrow streets, stone and plaster houses, flat roofed, or with red and brown tiles, and painted or washed in bright colors-yellow, red, and blue-mingling with quaint overhanging and often beautifully carved balconies, and possessing nearly always a central courtyard, or patio, planted with palms, ferns, and gorgeous purple bougainrilleas ; the dark-eyed, swarthy peasants, mostly going in and out of the town with fruit, poultry, eggs, and native lace work to sell to the hotel folk-all gave us plenty of work for our cameras. I was greatly at a disadvantage in having no hand camera; my apparatus, though light and handy, could not be brought to bear on street scenes quickly enough, as Spanish women strongly object to being photographed, especially at work or in their working costumes, and great caution and tact has to be observed if one wants the figures in their natural attitudes, especially in the case of the women, who invariably hurried

down side streets directly they canght sight of my instrument.

From Orotara, trips may be made to almost any part of the island by carriage, or riding on mules or horses. Mules are by far the best for mountain climbing, as the paths, or rather tracks, often over solid sheets of rough jagged lava or loose volcanic cinder, are terribly slippery and rough riding. I made an almost complete tour of the island with two friends; it took us six days' continuous riding, doing some thirty miles a day. We left the hotel at six o'clock one Tuesday morning, each one mounted on a sturdy mule, with his respective guide, the partybeing headed by Lorenza, the chief guicle of the island, a splendid fellow and about the only man on the island who knows all the paths over the mountains. As he knew a few words of English, and we, between us, a smattering of Spanish, we managed to get on very well, our baggage and cameras being strapped on a pack horse. Our destination the first day was Guimar, a sunny little town of I suppose some 5,000 or 6,000 inhabitants, with a nice English hotel, and enjoying a delicious, dry climate. To get to it, one has to cross the high ridge of mountains enclosing the Taro valley, on the seaward side of which lies Orotara. An honr's ride brought us to La Villa Orotara, a most beautiful little town, once the resort of the Spanish aristocracy, but now cut out by the new Orotata with its drier climate and situation by the sea. A lovely view is obtained a quarter of a mile from the town, coming up the rough and steep bridle path, the town backed by great mountains behind, with its domed cathedral, flat-roofed houses, and tall palm trees, having quite an Oriental appearance. One tall palm, pointed out to us, was said to be the
tallest in Europe. It was growing in a Spanish Marquesa's yarden, and was the rallying point of the brave Guanches (the aborigines of the island) during the Spanish invasion which ended in their ruthless massacre and almost total extermination. There are some magnificent balconies in this town which can be photographed with a mid-angle lens from adjacent buildings. Once through the town, the ascent began in earnest up a terribly slippery and rough path. At an altitude of about three thousand feet we passed through the clouds for about a thousand feet, the vegetation consisting of scrubby oaks and cherries, succeeded by pines, and giant heaths from twelve to twenty feet in height. At a still greater elevation these gave way to the retaina (a kind of broom) and lichens; and at last, after several halts, we reached the summit of the ridge, nearly 8,000 feet high, at a spot called the Arafo Pass, where we clismounted, and the pumped and breathless guide lay down.

The view was most magnificent Far below us, and as far as the eye could see, on both sides of the island was a sea of billowy clouds, resting softly on the mountain's side; while looking sideways, along the ridge up which we had come, was the peak, some twenty miles away, rising nearly 5,000 feet higher than the Arafo Pass, his snow-capped crest glittering in the sun. After taking a view of the peak and the sea of clouds below us, we ate our lunch and began the descent, reaching Guimar at about five o'clock in the afternoon. The next day was spent in visiting one of the two great ravines (or "barancos," as they are called) in the vicinity, three hours' ride from the town. I found it very clifficult to obtain photographs of these, as they are excessively deep, and the one we
visited was heavily wooded and with one side in heavy shadow, but a fair result was obtained on an isochromatic plate, which would have been much better had the plate been backed. Our route the next two days lay through an uninteresting patch of country, chiefly over vast plains of pumice, with no vegetation except euphorbias and prickly pear. We reached the lovely village of Vila Flor the fifth day; it lies at a great height above the sea and is surrounded by pine forests (and cherry orchards in full bloom when we visited it) and affords some grand pictures. From Vila Flor we returned to Orotara, back over the mountains, crossing at a height of 8,000 feet a vast plain of pumice and lava, called "The Canadas," from the centre of which rises the grand old peak to a further height of 4,200 feet. The ascent of the peak is generally made several times during the season, the parties being conclucted by Lorenzo, the guide. It takes two to three days, and is very tiring to any one unaccustomed to mountaineering. The mules take you up to about 10,000 feet, where, wrapped up in rugs, and with a stone for a pillow, the night is passed in a cave, and the remaining 2,000 feet has to be done on foot the next day. At the top is a small cone, some sixty feet across, which can be crossed, though in some places hot sulphur vapor escapes from the cracks in the rocks. The view from the top is, of course, tremendous, but offers nothing for the camera, and, moreover, one cannot stay more than a few minutes owing to the high altitude and intense cold.

Other places of interest are Icod de los Vinos, fifteen miles from Orotara, a little town once celebrated for its wines. It has still an immense dragon tree said to be 2,000 years old and the
largest in existence. To Garrachico is a pleasant ride of about eight miles from Icod, where an immense lava flow marks the site of the last eruption of the peak, which destroyed the town and filled up its harbor, the finest in the island.

Before concluding let me add a few, remarks re matters purely photographic. The best results I obtained were from isochromatic plates used without a screen, though if I had had one my negatives of the peak would have been better and the old difficulty of differentiating snow-clad mountains against a bright blue sky, without under exposing the usual dark nonactinic foreground, would have been still further avoided. In fact, I have almost entirely discarded ordinary plates for landscape photography, in favor of isochromatic of medium rapidity, and develop with pyro-soda, though I like rodinal sometimes for views with violent contrasts. I also found that one had to be careful to give full exposures to get detail in the excessively deep, inky shadows generally found in street scenes in southern towns. As regards size of camera, a half plate (i.e. $61 / 2 \times 43 / 4$ ) is by far the most convenient, and is the largest size with which I have succeeded in using films comfortably, and without cockling or bending; even if plates are used, half a gross do not take up much room and the weight can be distributed amongst one's baggage. A spare lens cap or two, a foreground shutter, and just enough material to make a few developments from time to time in one's bedroom at night (in the absence of a dark-room) to see that exposures are about right, and that all is working well, will be found all that is necessary. As regards customs at Tenereiffe, there is no difficulty what-
ever. Materials can be bought at Orotara, but are excessively expensive, and I found the plates unreliable. Hotel expenses throughout the island are moderate. As a delightful spot for the photographer and painter I can recommend Tenereiffe.

## HALATION AND ITS PREVENTION.

w. H. MOSS.

w. H. Moss.

All of us, no doubt, have noticed in photograms, otherwise exceptionally good, halation more or less pronounced, in landscapesaround the tops of trees, and between the branches, when the light was very active, causing a haziness and want of definition in the leaves and twigs and about the stems; in interiors, when the camera included a window the latter was more or less indistinct. Often, if the shadows in the building were dense, and the exposure much prolonged in consequence, the outline of the window was almost lost, and naturally the beauty of the print was much marred.

Halation is caused by the rays of light, admitted to the plate through the lens, passing through the film and being reflected back again by the outer surface of the back of the plate; the damage done is worst in places where the rays penetrate at the greatest angle, giving an out-of-the-focus appearance at the extreme sides and corners of the plates.

The following diagram will, I think, help to demonstrate my meaning.


Before proceeding further, I would like my reader to convince himself that I am correct in making this statement, which he can easily do by procuring a piece of plain glass and holding it so that he can see reflected on its surface a bright jet of gas or a lamp. If he will now examine the reflected image arery closely, he will see a double reflection, caused as I have stated.

If he will now take a negative, and look at any reflected light or object in it, keeping the film side down, or rather catching the reflection on the smooth side, he will see the image reflected as clear and sharp as he sees his face reproduced in a good mirror. The opaque film on the back, being in optical contact, absorbs the rays which penetrate the glass and prevents their reflection from its surface.

The prevention of halation is very simple and inexpensive, and once resorted to will always be practised by those who value the possession of a really good negrative.

If dryplates are, previous to exposure, coated on the back with a substance which easily adheres, and is opaque enough to prevent any light passing through it, there will be a pleasing
absence of halation. The substance which I recommend, and have used all summer, is a mixture of caramel (i.e., burnt sugar), burnt umber in powder, and a little mucilage or dextrine.

Mix all to a stiff paste with as little water as possible, and then thin down with methylated spirits. Apply to the back of plate with a soft camel-hair brush and store in a light tight box to clry.

This past summer I have treated all my plates, used for time exposure, in this manner and am very much pleased with the results; so much so, indeed, that I do not intend ever again to use an unbacked plate, except perhaps for instantaneous work. The backing can easily be removed by applying water with a sponge, or soft rag of any kind, before development.

In conclusion, I may say that I have lately been treating my lantern-slide plates in the same way, and find a marked improvement in the transparency of the shadows and clearness of the high lights.

Try the remedy and you will not have to complain of halation !

## HALF-TONES FROM HALF-TONE ENGRAVINGS WITHOUT "THE CHECKERBOARD."

THOS. W. ELLIOTT,
I have never yet seen published the true method of producing half-tone engravings from half-tones in such a manner as to avoid the well-known " checkerboard" in the reproduction.

Some time ago The Practical Photographer tried to solve the difficulty for some enquirers, but, in my opinion, their method was defective. Many photo-engravers are obliged to refuse this class of work simply because they do not know how to tackle it.

It frequently happens that the halftone engraving from which the copy is required is too poor to copy direct, and the use of a screen almost invariably results in the " checkerboard" or moire effect, which, of course, spoils the appearance of the work.

The way in which I avoid this defect is to first of all paint over the highest lights of the engraving from which a copy is desired with Chinese white and India ink mixed to a light grey. I then go over the darkest parts with India ink alone. I then make an enlarged negative slightly out of focus, and flow this with a matt or ground glass varnish. When dry I work it over with a soft lead pencil, or lithographic chalk. From this negative I next make a positive on glass, which I also coat with matt varnish and work over with pencil as much as may be necessary. From this positive I make the final reduced half-tone negative which usually turns out as perfect as if made direct from an ordinary photogram. I am sending the editors a print from a photo-engraving made by my method, and I think they will be unable to discern any sign of the moire effect upon it.
[The print is very fine, and absolutely free from " checkerboards."-EDS.]

To bring about a speedy introduction of the Becker Photo Mailers and Holders, the low price of $\$ 1.00$ per 100 has been placed on them (including a fine gold embossed show card). You can mail from one to twenty-four photos, in the same mailer, and it will cost one cent for three, or four cents per dozen. (See "ad." in advertising columns).

Next to acquiring good friencls the best acquisition is that of good books. -Colton.


SUGAR MILL-ORANGE MOUND.
Special photo. for this Journal by Clarence B. Moore, Philadelphia. Pa.

## PHOTOGRAPHING " BIG BUGS."

s. J. JARVIS, OTTAWA.

S. J. Jarvis.

On receipt of a photo print of my large group, which I sent to the World's Fair, the eclitor asked me to write a few lines for the Christmas number with the above subject for my text. It was explained that in this case the word "bug" referred to the genus homo, and that the adjective was a more important word than the noun. As we have rather more than our share to whom this synonym may apply at the capital, I consented.

It is no easy matter to get such persons in to be photographed, particularly if it be for your own use or benefit. They are usually too busy, or too important. Take this statement as you like. Of course, I am speaking now of experiences in general, and to what generalities are there not exceptions? In my case I found that those who are "too busy," and themselves too important, are those who shine as candle lights in comparison with the suns.

There are some men who cannot be coaxed, even by judicious flattery, but they are few, no matter what their rank or position may be. Just say that "there is a constant demand for their portraits, and that orders cannot be filled (much to the surprise and regret of their admirers)" and, if you there and then appoint a time convenient to his majesty, the probability is that he will try to be on hand. If you put the plea on the basis of pleas-
ing a photographer the probability is that you will get left.

A caller is usually very civilly treated by the "big 'uns" when, perhaps, after calling many times and waiting long, you are at last ushered into their private compartments. Now, when you have the chance, you must make your request an urgent one, or your cause is lost.

So much for catching the "big B." The next thing is how they act when you have him. Remember, he is hard to get, so don't kill him. With the photographer the chief thing necessary is patience, not the kind used for babies, but a peculiar, special kind, hard to explain.

I have made more than half a dozen appointments with certain men near the top in Canada, in order to obtain one sitting ; and the worst of it is that when such a one does come, he is always in a hurry, and never fails to remind you of it. It is not an uncommon request that they desire to be taken "naturally," with no attempt at fixing up or posing-just as they are, no matter how. Oh! what a bore such unsympathetic persons are to us photographers. These people know not how they rack us, nor what results are missed by their selfish and shortsighted policy.

I will trouble my readers with one case in point-that of an aged knight, who is exceedingly hard to get. The chief reason in this case is that he is such a busy man and has so much to attend to that he considers having photos taken too frivilous a matter for serious consideration. He has no future to help along by advertising himself in portraiture. My experience in this case was a series of disappointments, owing to the non-appearance of this noble knight. The reason usually
given was, that he "had no time that day, so had put it .off"! That was because every thing else seemed of more importance, and the photographer was out of the calculation. However, I succeded at last by waiting a couple of mornings at this "Sir's" domicile for an hour or so with a cab, and promising most emphatically that I wouldn't take long, for, of course, he had to catch a train. What a nervous gentleman this was ; even when I had him I was afraid I shouldn't get him steady, even with the most rapid appliances. He was no easy subject, but, with a fair chance, an effective result was obtained. When the negatives were developed I sighed a sigh of relief, for, by continued effort a desirable result was nearing completion. Of course, this was an extraordinary case, even with the class of subjects under consideration. Many are easy and affable in manner, as well as good posers, and are consequently a boon to the operator.

Again, some will sit often, though, as I have intimated, this is the exception. There are vain old gents, who, even with the assistance of the retoucher and all the rest of the staff, you cannot flatter too much. No, nothing is too nice for them; but if you can please them, why then the boodle flows in. The worst of it is that you often attempt an impossibility.

The younger men are, in all, the best patrons. It was amusing to note, when making my big political groups, how many were "almost the last one required to complete the group"; some even had to have the whip (of the party) applied, if not a request from their chief. The latter was a final and always successful way, but one that, of course, the photographer would not avail himself of, if he could help it.

After all the arduous labor involved in photographing the "big bugs" of our country (aside from the honor and experience gained by photographing men of note), I consider, that in this day of photo-engraving, and good illustrated magazines and papers, it does notpay the original photographer; because he cannot get a price commensurate with his effort, nor can he prevent pirates from copying his work.

Although many shout loud for the leaders they admire in state, church, or army, yet their enthusiasm does not count for more than roo cents when they come to buy a photo of the said person.

Groups pay best ; and they need to, for the photographer needs all he can get.

If I have either entertained any one, or given the least bit of information regarding this dark and unwritten subject, I shall not regret having said a word re the "big B's."

## A NEW YEAR SERMON.

You are the architect of your own fortune. Rely upon your own strength of body and soul. Take for your motto : Self-reliance, faith, honesty, and industry. Inscribe upon your banner: Luckis a fool-Pluckisa hero. Don't take too much advice, keep at the helm and steer your own ship, and remember that the great art of commanding is to take a fair share of the work. Don't practice too much humility; you can't get above your level. Put potatoes in a wagon over a corduroy road and the small ones go to the bottom. Think well of yourself -strike out-aṣsume your positionfire above the mark you intend to hit. Civility costs nothing, and buys everything. Energy, invincible determina-

Supplement to Christmas Number Casimpas Protociramic Jotrsai.


Inembers of The thouse of Commons
tion, with a right motive, are the levers that move the worlcl. Don't deceive. Don't tattle. Be in earnest. Be self-reliant. Be generous. Love your God and fellow-men. Love truth and virtue. Love your country. Obey the laws. Advertise your business. Read The Canadian Photographic Jolrnal.

## THE DARK SIDE OF THE ART.


w. E. H. Massey.

Wondering what had happened a friend of mine who had remained in the darlsroom aln incredibly long time one very warm day last summer, I banged at the cloor to know what was up. He had not expired, but he could define the verb " To perspire" in all its tenses and intenseness. "This confounded plate develops mighty slow," he said, "and I'm sure it was exposed enough." Only the faintest image was apparent atter all his efforts. I ventured a diagnosis of the case, which was unsatisfactory. A little investigation, however, solved the mystery. I was not familiar with all the "appliances" of that clisorderly dark room, but thought I had seen the tray with which he was developing used for " hypo" on a previous occasion. Sure enough, so it was! and it was therefore my turn to laugh.

And who has not blundered more than once working by the dim glow of a ruby lamp. A large proportion of the mistakes and troubles of the amateur photographer occur in the dark-
room; and if there is one work-room where more than another, the old adage, "A place for everything and everything in its place" applies with greater force it is in the photographic dark-room. Assuming that there is a likelihood of accomplishing better work in a well-kept workshop in any line of science or mechanics, this may certainly be said of the developing room with special emphasis; and if there is little excuse for being slovenly and leaving things in disorder in any other kind of a work-room, there is no excuse for so cloing in a dark-roons, where it is certain to lessen the chances of good work, and more often causes trouble and disappointment. "Cleanliness and order" should be the motto for every amateur's dark-roon--the professionals, of course, need no such intimation. In planning and arranging my dark-room I have sought to accomplish two points:

1. To so arrange and place appliances and material as to minimize the chances of mistakes when working by the clark-lamp.
2. To provide such handy apparatus and so arrange it as to admit of doing the greatest possible amount of work in the shortest time.

Like many other amateurs, my time for photographic work is extremely limited, and, therefore, when I have an hour or two to devote to it, I want to make the best of it.

It was with no inconsiderable difficulty that I succeeded in making the two general views of my dark-room (Fiys. 1 and 2) which accompany this article, as the room is only 3 ft . 6 in . x 6 ft . However, by placing the camera in the corner against the wall and using a very wicle-angle lens, the image was at last made sharp on the ground glass, a hand mitror being called into


Fic. t.-W.E. H, Massey's Dark Room.


Fig. z.-W. E. H. Massey's Dark Room.
service to assist in focusing. Magnesium powder finished the job. These two pictures will convey a very fair idea of the general arrangements of the room. The sink is a pine box lined with sheet lead, which is little affected by acid or other chemicalsa tinsmith made this for me. An elevited hollow stopper is used for the sink, which allows the water to rise withinhalf an inch of the top, thus making an admirable running water wash for prints when wishing to use it for that purpose, though of course before so doing it should be well scrubbed out each time. I prefer the high "china sink" faucets. By attaching a piece of rubber tube the stream of water can then be directed as desired, and there is also less danger of scratching the film when washing a plate hurriedly in the dark.

The rack of slats across the sink is movable and is a good rest for the tray, being more cleanly than a flat
surface, since any liquids spilled or slopped over fall into the sink. My dark-lamp is electric, and is therefore "instantaneous" and free from smell and heat. It was made by taking a wooden box and fitting into the front a double thickness of ruby glass, with a sheet of yellow paper introduced. There is also a ruby window about 18 inches square for day use, which receives borrowed Jight from the adjacent outside window.

A convenient shelf for holding trays is specially illustrated in Fig. 3. It also shows in the upper left-hand corner of Fig. I. This is made by stringing copper wires from the edge of the shelf to the wall, as indicated. Grooves can be cut on the surface of the shelf with a gouge to allow the trays to drain, while the use for each particular tray can be plainly written on the edge of the shelf. This may seem a little fasticlious, but it would have saved my friend a heavy sweat
and the loss of a good picture, as mentioned at the beginning of this article. Further, the trays are more easily kept clean in this way, and are less Jikely to make trouble by " contamination" than when piled up together or left lying about. Always label your bottles carefully-it pays. Keep some gummed paper by you for this purpose. It is also a good plan to paste the formula right on the bottle. Then it is always there for reference. If a particular formula is afterwards discarded for the time being, the solution may be availablelater on, provided you know for certain in what proportions it was made up. I have formerly lost a good many clollars' worth


Fig. 3.-The Tray Shelf.
of chemicals because I was not sure just what a certain bottle contained which had been left standing and unused for some length of time. I suppose others, like myself, have got into trouble through mistaking their numbers " $I$," " 2 ," and " 3 ," in the dark. The large plain figures cut from a large calendar will help cure that, and a difference in the shape of the bottles is an additional aid. My plan of labeling and numbering the bottles shows plainly at the right of Fig. 2. I also paste standard formulæ and directions on the wall, in plain sight, for ready reference.


Fig. \&.-Tine Wash Box ando Rachs to Fit Same:
A special feature of my dark-room, and one which has received much favorable comment, is the "washingbox" for plates-l know no better name for it. It shows while in use at the left of Fig. I. Did you ever scratch the film of a negative when washing two or more in a wash-bowl at one time? Almost everybody has. This washing business is the drudge of negative making, and yet, if imperfectly done, is of course disastrous. Even professionals seem to find it troublesome, or at least some of them do. Several negatives were washing at the time I visited a professional's dark-room not long since. The first negative was placed flat on a box and the tap turned on to it nearly full force. The water ran from this negative to the others, which were arranged on dishes, etc., so as to form a series, of miniature cascades. This may possibly be a "professional method" of washing, but it certainly is not scientific.

After considerable thought I devised the comparatively simple method illustrated more especially in Figs. 4 and 5 . It consists of a wooden box, A (Fig. 4.), lined with zinc. The water enters the tube C (Fig. 4), made of zinc and soldered into the box lining.

A rubber tube connects this with the faucet. As the water rises it overflows by the spout B (Fig. 4), into the sink. For washing small negatives I have made a series of racks, of which E and H (Fig 4) are samples. These racks just fit into the wash-box and rest on the corner blocks, F (Fig. 5). As they are made of wood, a couple of turn buttons, D, are necessary to keep them from floating when empty. The plates after being fixed are placed in these racks in the wash-box and are then perfectly washed. The cool water


Fig. 5.--Detalas of Wash Box.
entering at the bottom rises up between the negatives, giving splendid circulation, and floats off the surface water into the sink. As rapicl or slow a change of water as desired can, of course, be regulated by the faucet. Rapid and perfectly safe washing can thus be assured. When the plates have washed a sufficient length of time one has simply to lift out the rack full of negatives, as shown, E (Fig. 4), and set it aside, leaving them to dry. In washing the largest negatives I do not use a rack, but simply place them in the wash-box, resting them on the notched blocks, F (Fig. 5), placed in the bottom at the ends of the wash-box, the plates being kept apart by the pieces, G(Fig. 5), soldered at the ends near the top, as shown.

When the picture (Fig. 1) was taken the negative of Fig. 2 was wash-
ing. This wash box can of course be made of any desired size to suit one's convenience. . Make it large enough to take in the largest plates you use without a rack, and then make racks for the smaller sizes. I have three cameras taking $\mid 61 / 2 \times 81 / 2,4 \times 5$, and $31 / 4 \times 41 / 4$ plates. I made the box just large enough to hold six $61 / 2 \times 81 / 2$ plates at once, and then made a rack to hold twelve $4 \times 5$ negatives, one to hold twelve $31 / 4 \times 4 \frac{1 / 4}{}$ negatives (it also takes $31 / 4 \times$ $31 / 4$ lantern slides), and one to hold some of either sized plate in case of developing a few of each at the same time. For instance the rack shown with plates drying in Fig. I contains two $4 \times 5$ negatives, five $31 / 4 \times 41 / 4$, and not lanternslides. This device hasgiven me great satisfaction and may possibly be useful to others.

By exercising a little thought in the arrangement of the clark-room one can greatly increase the pleasure of making negatives and lantern slides, and if I have been enabled to make any suggestions on "the dark side of the art" that will be helpful to my fellow-admirers of the photographic art, my mission in writing this article will have been accomplished.

## PORTRAIT PHOTOGRAPHY BY FLASHLIGHT. <br> J. J. HOWFILI.

It is not necessary to have an expensive apparatus, such as was exhibited at the convention of the Photographic Association of America in Chicago, to obtain very good results in portraiture by flash light photography. With a few pieces of apparatus that can be made or obtained at small cost, a good flash lamp, and a moderately rapid lens attached to the
camera, good work can be done, and the results will repay anyone who will take the time and trouble to try.

The majority of flash light pictures are bad on account of bad lighting; many making the mistake of having the room in almost total darkness and then making the flash, obtaining a picture of the most startled and unearthly looking subjects imaginable. When their eyes arc open, the pupils are widely dilated, the iris of the eye not having time to adjust itself to the sudden change from darkness to blinding light. This can in a great measure be overcome by having the room as brilliantly lighted as possible, during the whole operation.

This applies to all flash light work where there are figures in the composition, and particularly to portrait work. It is not necessary to wait for night, as dark days can be utilized for this work to great advantage, and even in bright weather in rooms where the light is not quick enough.

The flash lamp should be one that will give a powerful quick light; a magazine lamp such as the P.S. Co's., or the Prosch, is the best. It should be mounted in the focus of a curved tin reflector, that can be adjusted at any height on an upright rod, having a firm base or stand. By these means the light can be placed in any position desired to give the proper effect.

As the light given by the flash comes from practically one point, the shadows will be very hard, and to modify this, a screen of light white material, such as white cheese cloth or waxed tissue stretched on a frame, is placed between the light and the sitter; the distance between being varied to suit the subject-the nearer the subject the softer the effect, and
the greater amount of light required. A reflector of white cotton stretched on a frame, and mounted so as to be inclined at any angle, is required, and is placed on the side of sitter opposite the source of light.

In arranging and posing the subject, only one light should be used, all others in the room being turned low. When the correct light effect is obtained with a lamp, the flash lamp should be placed in exactly the same position; all the lights turned up, correct focus obtained either on the sitter or by a naked flame placed at the correct distance at the side of the sitter, the lamp made ready and the exposure made.

This is best done by having an assistant light the alcohol wick of the flash lamp while the plate holder is being inserted, or immediately after, then uncapping the lens, final instructions to sitter and a strong, quick pressure on the bulb of the lamp, or full short blast from the lungs, the exposure is made, and the lens capped. Flashlight cartridges may be used, but are objectionable on account of the smoke which they make, it being almost impossible to give a second exposure for some time after. The pure magnesium powder, as burned in an alcohol flame by these lamps referred to, gives the most satisfactory light. For the best results, the powder must be dry, and not old or oxidized.

As large a stop as is consistent with good definition and a plate of extreme sensitiveness, such as the Cramer Crown, should be used, so that as short a flash as possible can be given.

It must not be supposed that good results can be obtained by careless work. Artistic portraiture is the most
difficult branch of photography, and while artificial light has certain advantages to a person who has not a good skylight to work by, it cannot as yet be regarded as a substitute for daylight.

## PHOTOGRAPHY WITH TELE-PHOTOGRAPHIC LENSES.

w. K. BURTON.

w. K. BURTON.

The writer has now had some considerable experience of work with a tele-photographic lens, and thinks that a short description of his practice may possibly be of interest.

Here, in the first place, is a very easy way of illustrating the action of such a lens. A common opera-glass is taken, and is held with the big end towards the sun, the image produced by it being allowed to fall on any fairly white surface. The opera-glass is held in the hand, pointing as nearly towards the sun as possible. It will be seen that two bright spots are thrown on the white surface, and that they move about rapidly with only a small motion of the opera-glass. The latter is held some three feet or so from the white surface, and is brought into such a position that each white
spot falls in the middle of the shadow of the corresponcling barrel of the opera-glass. By focusing, it will now be found that the spots can be converted into perfectly well-defined circles, some two inches or so in diameter, these being true images of the sun. This is actually an illustration of the principle of the telephotographic lens. If a lens of the usual photographic type, and if three feet focus had been used, the image would have been less than three-eighths of an inch in diameter.

By the way, the experiment just mentioned may actually be of use at times in testing opera-glasses. For these instruments to be efficient, it is necessary that the two systems be properly paired. Now, in cheap opera-glasses-or indeed, sometimes in the case of expensive ones-the pairing is by no means perfect. Whether it is or not, may readily be discovered by performing the experiment just described, taking care that the white surface is at right angles, or nearly so, to the axes of the barrels of the opera-glass. If the lenses are properly paired, the two images of the sun will be in sharp focus at the same time ; if they are not, one will be out of focus whilst the other is sharp.

The opera-glass experiment shows several characteristics of the telephotographic lens. Thus, if the bright surface be removed to twice the distance, an image of the sun more than twice as large will be got, by a re-adjustment of the focus; the slightest alteration of the focus will put the image out of all definition, and the smallest angular motion of the opera-glass will send the image a great distance to one side. In fact,


VIEW as TakEn with a rapid rectilinear lens.
it is impossible for the steadiest hand to hold the instrument so that the images do not dance about. All these peculiarities are characteristic of the tele-photographic lens.

There is one misconception about tele-photographic lenses of which I should like to say a word or two. A contemporary recently, in describing the Parvin lens, gave results of work done with the Parvin tele-photographic lens, and with another lens
of the same diameter. Now, although I am here by no means condemning the Parvin tele-photographic lens, I wish to state that the diameter of the lens has nothing to do with the matter at all. If diameter be a criterion, how highly telescopic is, for example, a rectilinear lens, as compared with the rapidest portrait lenses made! Moreover, it would be very easy to make a slow narrowangle rectilinear that, with the same


SAME VIEW TAKEN WITH THE DALLMEYER TELE-PHOTOGRAPHIC LENS.
diameter, would give a much greater telescopic effect ; but in all such cases an increase in size of image is got only by greater extension of camera.

The criterion of a tele-photographic lens. is the size of image got, as compared with that got by a rectilinear lens, with the same extension of camera, or the difference in the extension of the camera to get images of the same size, with the tele-photographic lens and a rectilinear lens.

A tele-photographic lens is, in fact, a lens in which the nodal point for the axis of the pencils of light forming the image is thrown entirely outside and in front of the lens. The first lens of such a kind was, so far as I know, our old friend the orthoscopic lens. I once possessed a lens of this kind, and regret that I ever parted with it, for it was an excellent instrumont in many respects, and it was a
distinct advantage that the nodal point was some inch or two in front of the front combination of the lens, so that the camera did not need to be extended to nearly so great a length as with a rectilinear or a single lens.

The orthoscopic lens is thus, as is Parvin's lens, truly tele-photographic in a certain sense, but the great advantage of all other tele-photographic lenses is that they give us the power, within very wide limits, of placing the nodal point as far in front of the lens as we like, or, in other words, of giving the lens, within these very wide limits, whatever equivalent focal length we may wish, and of making the image of whatever size we like to have it.

I do not intend to give any description of the tele-photographic lens, as many descriptions have already been
given, but merely to give some hints as to the working of it. I should premise these remarks by the statement that the lens I have worked with is No. 3-that is to say, the largest of the lenses advertised by Messrs. Dallmeyer \& Co., of the form consisting of a patent portrait lens, with an attachment that goes within the camera. This lens is undoubtedly the one capable of giving the most remarkable results to be got by any tele-photographic lens, but it is equally undoubted that it is the most difficult of all the tele-photographic lenses with which to work. Just as the equivalent focus of the whole combination increases, so increases the difficulty of getting perfect definition, and this principally on account of the fact that the minutest vibration of the camera spoils definition, when the amplification is large, or, what means the same thing, when the equivalent focal length is great.

Until the back focus of the lens reaches some sixteen inches or so, at which the equivalent focus is somewhere about six or seven feet, no difficulty has been experienced, except that of making the adjustment for correcting spherical aberation, and up to such extensions as I speak of, it is possible, with all conditions favorable, to give what are commonly called "instantaneous exposures," by which, to take an entirely empirical standard, I mean such exposures as are less than a second. One-tenth of a second is the shortest exposure that I have given with the lens I am writing about, but there are circumstances in which the exposure might be reduced to one-fiftieth of a second, with the equivalent focus still about five
feet. As a rule, however, the exposures, when great amplification is attempted, are somewhat long, and it would really seem as if the ordinary camera stand has the habit of "giving" a bit, out of "pure cussedness," during an exposure of say half a minute. At any rate I have found that, when using the lens with such extension, that the equivalent focus was some twelve feet or more, an ordinary camera stand, even of heavy make, was very far from rigid enough, and that even using a second tripod to support the extension bearing the lens, there was difficulty in getting absolute definition.

This is always supposing that absolute definition is considered necessary. There is no difficulty whatever in getting definition better than the folks that used to call themselves " naturalists" deemed artistic.

To illustrate to you what I here mean, and also to show the powers of the tele-photographic lens, I send you prints from two negatives on plates $18 \times 14$ inches. One is taken with a single lens of twenty-five inches focus, the other with the tele-photographic lens, with about the same extension of camera. The remarkable power of the lens will be evident to all, and I have no. doubt that, if you reproduce the prints, as I hope you will, of about the size of a page of your journal, the definition will appear perfect in both cases. Yet you will see, if you look closely into the print by the tele-photographic lens, that, although the definition is more than is necessary for artistic effect, it is yet not absolute. The camera was moved about five feet laterally for the tele-photographiclens, so as to avoid the branches of the
tree, but the distance is the same for both exposures. For very great amplifications, it is necessary, in the case of the tele-photographic lens, to have a stiffer camera than is commonly used for out-door work, and a more rigid support.

The glasses of the tele-photographic lens must be kept scrupulously clean. There are so many free surfaces that, if each be only a little dirty, the image is greatly degraded on account of diffused light.

In most of the past summer's work with the tele-photographic lens, I have erred on the side of over-exposure, exposing on distant objects. It should always be borne in mind that the exposure for a small portion of the distance in a landscape, should be only a fraction-commonly, for example, about one-quarter of what should be given for the landscape as a whole, and moreover, that, as the range of light is comparatively small in the case of the little bit of distant landscape, there is comparatively little control of the result during development.

The adjustment for correcting spherical aberation is rather troublesome to make in the lens of which I am writing, whatever be the extension of the camera. Focusing is nearly impossible when the extension is such that the milled head attached to the lens cannot be reached whilst the head of photographer is watching the image on the ground glass. A photograph representing the gearing whereby both difficulties have been got over, in the case of the lens used by the writer, may be of some interest to your readers. The two adjustments are made by long spindles and a bevel-wheel gearing, the whole of
which was described in Photograplic Work, in a number issued during the past summer.


Our frontispiece is from the gallery of Pfeiffer \& Mulligan Bros., Columbus, $O$. The high reputation this firm bears for artistic work is fully borne out by their work here shown.

That they are clever workers of the popular American Aristo paper is also shown, for they have managed to bring out all the many good qualities of American Aristo paper. It is a fact, however, that the good qualities of this paper "come out" so easily under even ordinary handling, that almost anyone can work it successfuily.

Our half-tones this month are plcrures. Each one is the work of an artist in half-tone engraving. All that we feel it necessary to say is that in reading the names of those to whom we are indebted for them, our readers will become acquainted with the leading half-tone engravers of the day.

## PICTURESQUE MUSKOKA.



At a distance of about one hundred and twentyfive miles northwards from Toronto lies the southerly boundary of the District of Muskokaaland of the forest primeval ; of sparkling lakes studded with islands of all sizes andshapes, now flat andlow-lying, now rising boldly in rugged masses of granite and covered with giant pine and hemlock, now acres in extent and now hardly large enough to afford a landing place; a land of winding streams, now moving quietly between thickly wooded banks and reflecting shadows as in a mirror, and now tumbling in wild disorder over a precipice or through a rocky gorge; a land whose waters teem with the pickerel, the salmon trout and the smaller but more gamey bass, whose fastnesses are the home of the deer and the partridge, and whose marshes afford a feeding ground for the black duck, the teal and the mallard, a land that is the tourist's Elysium and the sportsman's paradise; a land surpassing in beauty and grandeur the St. Lawrence or Lake George ; a land as yet undefiled by patent medicine advertise-ments--an El Dorado, though much visited by Canadians, until recently comparatively unknown to our neighbors to the south.

The parts of this resort most visited by the summer tourist and the sportsman are Lakes Muskoka, Rosseau and

Joseph. These lakes, speaking generally, run north and south and are from twelve to fifteen miles in length and from two to five miles in width. Lake Muskoka is the first reached, and is comnected by locks at Port Carling with Lake Rossean, which lies further to the north and east, and from the south-western extremity of Lake Rosseall we come to Lake Joseph, which lies further to the north and west, and is entered by a cut or canal at Port Sandfield, where a swinging bridge allows the steamer to pass.

A most excellent service is given by the Grand Trunk Railway by the Muskoka Express, which leaves Toronto every morning during the summer at half-past ten, making quick time, with but few stops. Leaving Toronto, the train burries along, and the first stop is at Allandale. From the train, as it stands at Allandale, a view is had, across the sparkling waters of Lake Simcoe, of the pretty town of Barrie, sloping up gently from the water; a few moments later we are at Barrie, and then on to Orillia, which is the last stop. Leaving Orillia, the train picks its way carefully over a long wooden trestle under which the crystal waters of Lake Couchiching, on the left, are hurrying to join those of Lake Simcoe, on the right. Then we head northerly again. Numerous little streams and rivers are passed; on either side are seen immense lumber yards and saw mills; these are left behind and the country grows more bold and rugged; deep rock cuttings are passed through, the train takes a sharp turn to the left down a gentle grade and a few minutes after one o'clock we are at Muskoka wharf, a short distance from the little town of Gravenhurst, and the

brown waters of Lake Muskoka are at our feet.

Two fine steamers of the Muskoka Navigation Company are waiting at the wharf, the Medora, a fine new screw steamer, for points on Lake Joseph, and the side-wheeler Nipissing, for points on Lake Rosseau, both steamers of course going through Lake Muskoka. The passengers and baggage are quickly transferred to the proper steamer. The scene is a busy one and a good snap shot or two may often be obtained of a group of tourists at the wharf, a boat hand or an Indian basket-maker. The writer finds his way on board the Medora, which is soon plowing her way through the water, and we soon after reach The Narrows, where the steamer goes through a channel where a pebble could be tossed to either shore. Just at this moment the steamer slows up and finally stops completely. An immense tow of logs in trying to go through The Narrows, has become jammed and we are delayed ten minutes while the lumbermen work it free and use unparliamentary language. We are soon through, however, and head up Lake Muskoka, while the Nipissing, which has followed us, bears off to the right. The welcome dinner bell summons us to the cozy cabin of the

Medora, where an excellent meal is given at a very moderate price. Everything is fresh and clean, the silver and glassware fairly sparkle, and the attendance is as good as the dinner. While at dinner we see Browning's Island, which we pass on the right, and shortly after coming on deck we come to Beaumaris, where the first stop is made. This hotel is nicely situated on Tondern Island and is a most comfortable hostelry. Near by are a pretty cluster of summer cottages occupied by Toronto and Hamilton people. Across from Beaumaris, some four or five miles to the west, is Bala, and near by, Bala Falls. The water from the Muskoka lakes finds its outlet by Bala Falls and thence down the Muskosh and Moon Rivers into the Georgian Bay.

The Falls are worth several plates from different positions. To the camerist who desires a few days' sport with the rod, I would advise him to try the Moon and the Muskosh: bass are plentiful and 'lunge are frequently taken. Between Bala Falls and Georgian Bay are several portages which will add variety to the trip. But to return to Beaumaris, where we left the Medora. Shortly after leaving Beaumaris we pass the pretty summer residence of Mr. Hugh Neilson, one of the charter members of the Toronto Camera Club. Near by is a wonderful formation called " The Face in the Rock," where a giant head is perfectly formed in the granite. Continuing on, we pass islands of all shapes and sizes and here and there summer cottages nestle amongst the trees. At one of these a red flag is waving as a signal to the steamer, and we stop and take on a couple of passengers. Soon after this, with a good deal of whist-


CUPDD'S SERENADE.
From photo. by Pifer \& Becker, Clevoland, O. Origimal, exhibited by Eastman Korlak Co., on "Solio," at P.A.C. Convention, Jing.

ling of a "clear the way" sort of tone, we enter the Indian River, a narrow, tortuous stream leading to Lake Rosseau. From the stern of the Medora a good shot may be had of the Nipissing which is following us. Finally, after a good deal of twisting and turning, we reach Port Carling and slowly enter the locks. Here is always assembled, to meet the boat, a gay crowd dressed in flannels, Tam O'Shanters and blazers, and all of a more or less brilliant coloring. The scene is an animated one, people on shore talking to acquaintances on the boat and nice zersa. The lock is now full and we leave this merry, laughing, chattering crowd and proceed on past several cottages and finally out of the Indian River into Lake Rosseau. Here we part company with the Nipissing, which proceeds up Lake Rosseau, while the Medora heads to the west for the entrance into Lake Joseph. On Lake Rosseau are Windermere, with a couple of hotels; Clevelands, Maplehurst and Rosseau, the two latter being at the head of the lake, one on either side, and between is Shadow River, a narrow stream, and, as you would hardly
expect, somewhat muddy, but reflecting shadows with a brilliancy that is startling. No one who visits Muskoka should neglect seeing Shadow River. Some fine negatives may be obtained here if you can find a good position, though the edges of the river are inclined to be marshy, but any pictures procured will be worth the trouble spent in obtaining them. Not far from this point is the summer residence of Senator Sanford, of Hamilton, whose dainty, fast-running steam yacht, with its polished brass fittings and fluttering flags, is the nautical aristocrat of the lakes.

Leaving Port Carling, the Medora takes a sharp turn to the left and soon calls at Ferndale, where there is a quiet, comfortable hotel. Leaving Ferndale, we see on the left Edith, Fairview and Sunnyside Islands, and near here is the pretty residence of Mr. G. R. Baker of "ours." Near by are the summer homes of Mr. S. Warren and Messrs. H. and C. Blachford. A pretty shot is had from the bow of the steamer as we pass Oak, Flora, Cedar, Beacon and Olive Islands on the left and the larger and thickly wooded Fairylands on the right. Directly across from Olive Island is the entrance to the Joseph River leading to Lake Joseph, and on the right hand the red roof of Mr. F. W. Kingstone's cottage peeps through the trees. Turning again to the left past Olive Island, occupied by Mr. Frank E. Macdonald, is seen Eagle's Nest, a bold, rocky crag rising sheer from the water to a considerable height, and well worth a plate or two. The steamer plows on towards a point where there is no apparent opening, but in a few moments the wheel is rapidly thrown over, the boat turns sharply to the right and glides into
the canal at Port Sandfield, the entrance to Lake Joseph, while the white drawbridge ahead swings slowly and silently.

Here is located Prospect House, a large, comfortable hotel owned and managed by mine host, Enoch Cox. Port Sandfield is voted by many the most comfortable and jolliest place on the lakes and is given the sobriquet of "Giddy, giddy Sandfield," and, in fact, this has been worked into a sort of Sandfield yell by the young people. The situation of Sandfield at the junction of Lakes Rosseau and Joseph is perfect; charming views meet the eye in every direction and on one lake or the other smooth water for rowing or paddling can always be found. Sandfield boasts the finest ballroom on the lakes. It is detached from the house proper, and at one end is a famous open fire-place, which on cool or chilly evenings is filled with roaring logs. Dances and progressive euchre and whist parties, varied by an occasional concert, pass the evenings only too quickly. Here we decide to linger a few days, and our goods and chattels, including the Rochester Universal, are put on shore. The arrival of the daily boat with passengers and the mails is the great event of the day at all these Muskoka resorts, and everybody goes down to the wharf to see who is coming and who is on board. Sandfield is no exception, for the entire population seems to have turned out cll massc. There are many greetings and good-byes and everybody seems to be talking at the same time, while the young man in charge of the news stand on board the steamer does a rushing business in cigarettes and caramels. As it is now near the mystic hour when the tea bell shall ring,
we put off our exploration of Lake Joseph until the following day. The clear, bracing air has developed a tremendous appetite and we are positively ravenous. The steak and hot muffins are delicious and we keep the waitress busy for some time.

The next morning we take the steamer Muskoka, a daily excursion boat, and start up Lake Joseph. It is a glorious morning and the scene is fairy-like. The lake is narrow here, and continues so for two or three miles, widening out gradually after passing Redwood. Some distance off to the right, a little higher up, is Governor's Island, the summer home of ex.Lieut. Gov. Robinson, andgon the left is Hamill's Point and a hotel of the same name. Islands of every size greet the eye and the scene is ever changing, a perfect panorania of beauty. Here we swerve off to the right, taking the "inside channel" and passing Chief's Island, the largest of the Ponemah group, on the left, skirting the entrance to Little Lake Joseph, a wonderful little land-locked punch bowl, save for its narrow entrance, and, then, turning to the left pass through a winding channel close by the mainland and on into the main body of the lake. A broad stretch of water sparkling in the sunlight is before us, and in the distance is Yohocucaba, familiarly shortened into "Yoho," the residence of Rev. Prof. Campbell. As the boat glides up to the wharf a sandy colored collie rushes up and down the shore like a thing possessed, and every moment or two dashes into the water up to his neck, barking furiously the while, and the performance is kept up until we are out of sight. The dog, we are told, has been doing the same thing evrey
day in summer for years. Heading up the lake again, the cottage of exMayor McMurrich is passed on the left, and we turn off to the right into Shanty Bay, where a short stop is made. Here is located the Stanley House, well managed by W. B. Maclean. There is a dark-room here, open to the use of amateurs. Soon after emerging from Shanty Bay we pass Round Island, a high conical mass of rugged granite, and then a straight run of two miles brings us to Port Cockburn, the extreme north of Lake Joseph. The tourist is well looked after by genial Alec. Fraser at the Summit House, a large hotel with long spacious verandahs. A fine grove of pines is in front of the hotel, and then a long rocky eminence, forty feet or more above the water, from which point a magnificent view is had straight down Lake Joseph. Several interesting spots are close at hand and one of these, Fraser's Lake, is a natural curiosity. It lies a quarter of a mile back in the bush, not far from the hotel, and is a hundred feet above the level of Lake Joseph. We portage a canoe without much difficulty and are soon floating on its waters. The stillness is profound, broken only by the whirr of a couple of ducks startled from the rushes by our intrusion. Every fleecy cloud is reflected in its mirror-like surface and scores of magnificent water lilies of a small, delicate species float on its bosom, turning their star-like petals and green pads to the sky. With these we garnish our canoe and return down-hill again to Lake Joseph. Half a mile farther down are Echo Rocks, where wonderful double and triple echos are heard with a startling clearness, while the report of a rifle reverberates again
and again like a volley from a battery of artillery.

From Port Cockburn a daily stage departs for Parry Sound, some fifteen miles away. on the Georgian Bay, and the tourist may obtain his ticket to return that way if he so desires. The impatient whistling of the Muskoka hurries us on board again, and after a delightful sail down Lake Joseph we arrive at our quarters at Port Sandfield. Here the yellow August days pass only too rapidly. Walking parties, boating, bathing and tennis fill up the days and at night the ball-room is the centre of attraction. This night a children's ball is in progress, and the pretty little youngsters have donned their best attire after a day of feverish excitement, and are enjoying themselves hugely under the guidance of some of the young ladies.

A weekly hop is held, when the regular guests of the hotel welcome their friends from neighboring camps and cottages, and the great event of the year is the annual regatta, lasting generally two days. There are yacht races and rowing and paddling races, also swimming and tub races. Some capital shots may be had of the different events, provided you use a fast plate and a fast shutter. The festivities, which are attended by cottagers from all points on the lakes, close with a grand annual ball on the second evening.

Some ludicrous or interesting event was continually happening. Some distance up the Government road, running back through the woods from the hotel, was chained a small brown bear a year or two old, and his bearship was often visited by the guests of the hotel and was quite tame. One fine morning, when the verandahs
were full of people, Bruin managed in some way to slip his collar and then he strolled quietly down to the hotel and up on to the verandah. With one united shriek every, man, woman and child made a wild rush for a point of safety, and in a second the little bear had sole possession of the verandah. He was enjoying the fun immensely when his owner appeared on the scene armed-not with a gun -but with a piece of apple pie. Bruin couldn't withstand the inducement, the pie was too much for him, and he was led away a willing captive.

But all things must come to an end, and after devoting some days to obtaining several of the pretty bits with which the neighborhood abounds, one fine morning found us again on board the Medora, and this time heading homewards.

## THE HAND CAMERA.

ROBERT E. M. BAIN.
The button-


1R. E. M. RAN pushing fraternity greatly outnumber those who use the tripod, and yet how few hand-camera pictures will bear inspection, either artistically or technically. The principal work of the hand camera user seems to be by main strength and awkwardness. Hence a large share of the results are relegated to the ash barrel, or become an eyesore to those who view them. Most of this could be avoided if the camera man would only stop to consider first and snap afterwards, instead of reversing things, as seems to be the
rule. For instantaneous work a good light is necessary, but this does not mean that the sun should be at the operator's back, thus giving a glaring, flat picture, devoid of shadows which are so necessary to bring out perspective. Nor should the camera be pointed towards the sun, which would give the effect of a very foggy eclipse. With the sunlight coming at an angle of, say, $40^{\circ}$ to $60^{\circ}$ with the line of the camera, results could be much improved. This assurance does not include portraiture, which is almost invariably a flat failure with a hand or instantaneous camera. Many persons purchase these boxes for the purpose of preserving family likenesses, and then wonder why their results do not approach that of the professional photographer, at least in expression; but they never do. The subject usually has a pained expression ; add to this the effect of improper focusing, and the picture gives little satisfaction to either the photographer or the sitter. Again, the subject is generally placed in strong sunlight, and the result is some-
 thing like this: abrupt sunshine and shadow, and, as a rule, totally unilike that expected or clesired. Learn, then, that portraitscannot be madein sunlight with any hope of success; they require special treatment and lighting, and a timed exposure, to give any satisfaction. Genre pictures have been made by catching the subject, or subjects, unaware, but they are exceptional cases. Pictures of that class are usually the result of careful posing, and much arranging of details. The hand-camera has a field of its own, as hundreds who visited the Columbian Exposition will testify, and as the results of their efforts prove, but that field is not portraiture or Gente work. As good composition
can be obtained in snap shot work as with a large camera, but the camera will not discover it alone. The operator must study these things and endeavor to make each exposure an artistic piece of work that will give pleasure to those whose taste in such matters has been cultivated. In this respect the hand camera sometimes offers advantages of life and movement to pictures that in the ordinary camera would prove uninteresting. Small cameras are of most value to those who make lantern transparencies, as they can usually be copied by contact, and then, by enlargement on the scene, give very pleasing effects. Another advantage of this class of lantern work is that the making of the slides by contact can be performed by night, and the exposures made by gaslight, giving pleasant employment during winter evenings. The user of the hand camera has a place all his own in the photographic world, but frequently he does not see it, and, reaching out for the impossible, he meets with failure. Let the handcamera man learn to excel in his own field of work, and he will find ample in it to give him pleasure, without endeavoring to enlarge the scope of his work by adding to it other branches that are entirely outside the limit of his camera.

## IMPORTANT TO CAPITAL AND LABOR.

## MORE CONCERNING CERTIFICATES.

We have long realized that the institution of a duly qualified Board of Examiners, to issue certificates of proficiency in the various branches of photography, would prove a boon to both employers requiring assistants and employees in search of situations.

As a permanent feature of The

Canadian Photographic Jolrnal we have decicled to issue certificates of three grades in special branches of photography to anyone presenting themselves, or their work, for examination. It is not necessary to be a subscriber to The Journal in order to try for our certificates; nor will the examinations only be held at specified dates. Competitors may send in their work at any time, and the certificates will be sent out in rotation at as early a date as possible, the winners' names being announced each month in these pages.

The third grade certificate in any branch will signify that the holcler has gained at least fifty marks out of a possible bundred, and is competent to fill the requirements of a small studio ; the second grade will signify that the wimer has gained at least seventy marks. The holder of a first grade certificate, who must gain at least eighty-five marks, will be competent to fill the best positions in the large cities of the world.

Two of the most skilled photographers in the Dominion, Mr. Eldridge Stanton and Mr. J. Fraser Bryce, both of Toronto, have kindly consented to act as judges. Each certificate will bear the signatures of these two gentlemen, and will be countersigned by the editors of The Journal.

For answering every requirement for a mailing packet for photographs, the Becker mailing device, advertised in another column, certainly takes the lead. By its use photographs can be sent to any part of the world without fear of the slightest injury. Photographers will find it a money-maker, as every customer is bound to want it.

W. BRAYBROOKE bAYLEY
"There are a large number of amateurs, most of them, no doubt, bright young men, who need to remember that they are wasting their time, material, and postage, in sending us groups which are clownish, coarse, and vulgar, smart youths posing as if drunk, etc., etc. Real humor and good taste combined usually make an acceptable picture; but nothing more quickly condemns a picture than to have it represent 'smartness,' not to mention other exhibitions of bad taste, which several amateurs mistakenly offer."

The above extract from the remarks of the editor of a well-known paper during its present season's annual photographic competition, evidences a sad lack of knowledge in the rank and file of our amateur corps as to the aim and motive of our work, but once so glaring a misconception causes us to consider the whole question of what we are aiming at, or working for, it seems to open up a vista that increases but in vagueness the more we try to satisfactorily bring it into focus. That a great lack of unanimity in work exists, and hence the consequent difficulty of fair comparisons of individual merit in general improvement, an inspection of any club exhibit will plainly show ; but as this necessarily exists in all art bodies, where individuality must be the prevailing power, it would seem
that the only practical method for enabling comparisons of individual and general improvement, is by adopting a gencral scheme for $7 \% 0 r$ in what may be decided as the proper channel or direction. It is doubtless somewhat of this idea, besides fraternal discussion, comparison, and general good fellowship, that actuates the formation of camera clubs, and as outside the aid of the press, they seem to be the only practical and proper medium for mutual improvement, it behoves them to consider what general lacks exist, and what remedies can be attempted. Most praiseworthy arrangements are made at the sacrifice of valuable time, most generously devoted, for educating the beginner, by their more advanced co-workers in the, so to speak, mechanical or manipulative details, by regular demonstrations, etc., and all can testify to the benefits received thereby, but in the higher plane, or artistic conception and composition of work, there seems to exist a sad dearth of practical information or direction. An art apprenticeship being, of course, not generally enjoyed by our amateur body, and, unlike the mechanical part, not being
the possibility of a night, the weakness of clubs in this respect is easily understood, as while all the members cheerfuly impart what they know, they cannot give that which they have not. If some knowledge of the rules by which pictorial art are governed be admitted as a sinc qua non in camera work, we must perforce, in the absence in the amateur body of the necessary power to instruct, turn to those professionally educated, and there seems to be no reason to doubt that by securing artists to give practical art lectures and demonstrations on composition, etc., a great amount of benefit would be derived by all, and an interest maintained for advanced members, for whom the club, so far as personal benefit is concerned, has fulfilled its purpose, and which, in the absence of some particular attraction, is apt to be by them neglected to the mutual loss of all concerned, both beginners and advanced.

Some systematic plan for swiding the selections of the lacading subjects of the scason, and outlining them at its commencement, should be creative of improved results, as opposed to the at present unsatisfactory method of declaring after the close of the season, what a club desires an exhibition of, and if on the final club night the committees should declare what special subjects premiums would be awarded for at the end of the season, and on the lecture nights preceding, arrange for practical instructions on subjects having a bearing upon their intended selections for competition, an instructive and intelligent annual collection would doubtless be made and greater emulative interest created. This too would cause the Executive to give the important question of
what subjects or clussc's should have most attention paid to them, the thorough consideration the subject deserves, as the opening seems to exist for establishing a record and portrayal of customs, habits, character, habitations, etc., that are sufficiently, and in many cases and districts markedly, characteristic to warrant the distinctive appellation of Canadian; and no means can be so prolific nor more true and effective than the camera intelligently directed, and the proper and diligent perusal of work having in view so meritorious an object cannot fail to be, even to ourselves, most interesting, but to the outside world instructive as well, and cause in time its recognition as a true exponent of the national art, possibilities in which will but be esteemed the more highly as time rolls on and modifies or effaces the existing evidences of the primeval state; or, as it annually records a systematic compilation of real evidence of the natural beauties of our land and climate, official selections from which being entered in the various foreign exhibitions would assist in correcting the erroneous ideas thereof now so unfortunately prevalent abroad. Already in many of the classes adopted by the leading associations of Great Britain and other countries, where before landscape held first place it has been relegated to a subordinate position, whilst genre and figure studies are now given the positions of importance.

Concurrently with this official selection of subjects from an artistic and representative point of view, there could be formulated a definite and concerted scheme for illustrating given subjects by slides, and with this
object in view a sub-committee appointed to declare as the occasion arose what current events (chiefly local) were worthy of record, they to convey this to the members in general, inviting co-operation, the whole having in view an annual public exhibition, by means of which a handsome sum could doubtless be realized, thereby effecting the double purpose of rendering a proper equipment of club rooms in paraphernalia, reference library, etc., feasible without special subscription, and possibly a reduction of the usual membership tax to a nominal annual fee, besides creating a definite and common result for all concerned to work for than which in all things nothing better tends to best results.

The annual exhibitions or, more properly speaking, competitions, affording as they do the opportunity to see and be seen are unquestionably of the greatest interest and benefit to the fraternity locally and at large, but the heart-burnings of the unsuccessful competitors would be greatly lessened were there more care exercised in the selection of judges, and fixed rules adopted for their guidance in judging, and that of the competitors in preparing, work, and some method devised to convey whereby success was achieved and wherein lay defeat. A judge having no option but to render a verdict upon the evidence only that is laid before him, all technical points such as conformity with rules governing classifications (which, by the way, should be framed in a broad and liberal way, and yet so phrased as to render intrusion from other classes as unlikely as possible, or else boundaries precisely defined) should be relegated to a hanging
committee. A. certain maximum of total points in each class should be adopted and divided amongst such qualifications of merit as may be agreed upon, and of these latter forming their maximum, and the total of the sub-divisions would then decide the award. In the event of ties, equal positions should be given and the second place cancelled or made third. By the explicit definition of the sub-divisions of qualification the salient points intended for adjudication would be grasped at once and the judge's work be carried out in accord and in harmony with the intent of the authorities. Without this no one system would prevail, and with two or more judges acting, the probability exists of individual feeling for any one qualification, awarding it an undue share, or possibly a whole, that should have been divided. There is much to be said in favor of individual judging and after-comparison of awards as insuring freedom from the bias that the strongly asserted often exercises upon the well-intentioned but easy-going colleague, when comparisons and awards are made together.

By preparing suitably ruled sheets for each judge, entries could be made by them of the points for each qualification in each exhibit at the moment of awarding, and from this by comparison and average the final total arrived at for each exhibit, and from this a detached record of each exhibit made which would show exactly how each total was created, thereby supplying the necessary and interesting information and explanations requisite to make the competition instructive and satisfactory, and obviating the vast amount of con-
jecture hitherto so prevalent. This plain was adopted in one of the most important and keenest commercial competitions at the World's Fair, and committees from every state and country competing were appointed to make detailed records of points given for the classification in every exhibit, and copies printed for distribution to all concerned, so important did they deem a thorough knowledge of the whys and wherefores of the award. The numbering of exhibits only, as opposed to the former practice of exhibitors' names appearing, until awards are made, being now generally approved and adopted, no feeling would be created by having such record made showing particulars of each exhibit by numbers only. No liberal-minded competitor will begrudge the place of honor to another if he can find, or is shown, warrant therefor, but through the necessary intimate relation with his own work one is apt to become satisfied of the inherent merits, that the casual glance of the judge may not find as apparent as in another's, that it is only by comparison of an expert's particularized opinion taken from an independent standpoint that any existing weakness or inferiority can be located, but this once found and admitted, would surely mitigate defeat through the knowledge gained, enabling thereby a higher and more perfect degree of merit eventually attainable, whilst it would eliminate, to a great extent, the unpleasant feelings and modify the disheartening effect at present created by an unexplained adverse decision. For the judge's sake, and our own comfort and satisfaction, 'twere a constumation devoutly to be wished.

## RE PHOTOGRAPHIC EXAMINATIONS.

ELDPRIDGE STANTON.


ELDRIDGE STANTON.

I feel I must congratulate the Editors on their scheme to grant diplomas to workers in the yarious departments of photography that will show clearly the degree of efficiency attained in anyone or more of these departments. As I understand it, they propose to grant diplomas to applicants on a grade system, recognizing, say, three grades, which may be known as grades 1,2 , and 3, representing the highest-and thesecertificates are to be awarded after a critical examination of the work of the applicant in any one or more departments. In some departments, such as retouching, the work alone might be sufficient to enable the judges to pass upon, whereas, in other branches, an oral, accompanied by demonstrations, might be deemed necessary before passing upon the efficiency of an applicant. These are matters for careful consideration, but the idea is a good one.

Suppose you want a retoucher, printer, operator, or an all-round man. You advertise in the Journal or the daily papers. Applicants produce their credentials, and you are able to make your selection with a fair prospect of getting the kind of worker you require.

You are in a large city doing, or aspiring to do, only first class work. To accomplish this the heads of all your departments must be capable of
holding grade "I" certificates, or your productions will fall below the high standard to which you had aspired. Your operator must be master of the situation under the light. To him the operating room must indeed be in every sense a studio.

When a subject to be photographed enters there, he (the operator) must be able to take in at a glance in what light and pose he will be able to make the most of his subject. He must be able to make up his mind quickly, on art principles, what he can do to show his patron to the best advantage. He must see at a glance the different lines of face and body that might be taken, as well as the lighting necessary to make the resulting picture a thing of beauty. And in order to so decide, he must also be able to observe what lines he must avoid, as well as what lighting would be unsuitable in this case. To hold grade "I" certificate the operator must be able to give a reason, on art principles, without a moment's hesitation, for the lighting, posing, and entire composition of every exposure he makes in the camera, even in the work of a very busy day. I grant you the best operators make some exposures that are very faulty, but they know them to be not up to the mark before they expose.

An operator capable of holding grade " I" certificate must be a man capable of inspiring confidence. A master operator in a photographic studio never fails to command this confidence in his ability on the part of his patrons. He must, in short, be an artist capable of deciding and acting quickly, and be ready to do likewise with the next and next to the end of the day, and through all, while in the studio, he must be the embodi-
ment of patience and good temper, or he will have missed his calling.
The retoucher, what shall I say of the qualifications necessary to entitle a retoucher to grade " I" certificate? The duty of the retoucher is to correct the imperfections in the negative without destroying the truthfulness and beauties of the photographic image. A first class retoucher will find very little to do on a negative made on a first class plate and from a subject whose skin is fine and free fromfreckles, mothy patches, and deep lines. When the subject has been properly lighted, and the exposure and development what they should be, the retoucher's duty is to clean up whatever imperfections he finds with a masterly hand, without overdoing it and destroying the beauties of the negative. He must know sufficient of the anatomy of expression to give a pleasing effect sometimes where he finds it otherwise, and this without injury to the likeness. Having done this much the object of his vocation has been accomplished. He would be wise if he adopted as his motto " Don't do it too much."
The grade " $I$ " printer and toner will be careful to print to the proper depth and will see that all of the prints from the same negative are evenly printed. A first class printer will make a dozen photographs from the same negative, every one of which. is like all of the rest in depth of printing and tone.

In case of vignettes he will properly balance and blend the vignetting, and with the eye of an artist know how much of the subject to take in, and what parts to leave out, and will be very careful to see that his picture is neither too high, too low, nor on
one side of his paper, in short that it is properly balanced. All these things, and more, are requisites in a first class printer. The result of the printer's labor must be harmony of effect or he has failed.

In conclusion, I would again say I believe the scheme to be a move in the right direction. An employee will be able to find in what grade those competent to judge will place him, and the employer will be able to know the professional rating or ability of the applicant.

I have written hastily and will only add that I trust the scheme will be an incentive to better work and consequently better prices.
[Mr. Stanton writes as a Judge in our Photographic Examinations, as well as an accomplished photographer and employer of labor. We have much pleasure in inserting his article but regret that in writing only as a first class artist he has overlooked the mutual benefit our 2 nd and 3 rd grade certificates are likely to prove to both employers and employees in the smaller towns where only small salaries are paid.-Eds. C.P.J.

The omission of the photogram from several copies of our November number was due entirely to the delay on the part of Mr. Tugwell. This gentleman had undertaken to supply us with the prints by the tenth of November, to enable us to publish as usual on the fifteenth. As a matter of fact we did not receive any prints at alluntil the twentieth, and then only by dint of a constant personal attendance at his workshop. The prints were then dribbled in, a hundred or two at a time, until the end of the month, when we were finally compelled, much against our inclination, to send out the balance of the JourNals without the illustration. If the
subscribers who failed to receive it will send their addresses on a postal card, we will see that they have it delivered at an early date.

## ARISTO PAPERS, THEIR MANIPULATION AND PERMANENCY.

S. H. MORA.

s. H. mora.

Printing is a branch of photography that a great many first-class photographers pay but little attention to, hiring inexperienced help to do work that should be done by experienced printers who understand how to get all there is in a negative out of it.

In the first place, a large number of negatives are spoiled by printing under vignetting boards that are close to the negative, and which show a sharp line around the figure, giving an effect that is not pleasant to the eye and which no artist would tolerate.

To obtain vignettes that have a uniform and even blend, all that is required is that the vignetting board should be raised from the negative. Blocks from one to two inches high can be used to good advantage on full or three-quarter figure cabinets, and no vignetting board should be used
nearer to the negative than threequarters of an inch.

A very simple method. of making vignettes is to tack a piece of cardboard with a large opening on to the frame, which has previously been built up to the required height. Over the opening in cardboard, paste a piece of tissue paper. Place the negative in frame and hold to the light. Now, paint the tissue paper opaque, following the line of figure, depending on the height of vignetting board from the negative to secure the the required blend. For busts, the printing block should be made in the shape of a wedge, commencing to taper from the centre of frame. The use of cotton to prevent the blend from going too far is very objectionable, but it will sometimes happen that on black drapery it is required; in which case, always use a fine quality of cotton, absorbent being the best. Pull the cotton apart, place it in frame so that the fibre runs parallel with the figure. This is a very simple method of vignetting and always produces a blend that starts from the figure and gradually disappears.

When the negative is too strong or too weak, it can be greatly improved by the use of blue or yellow water color paints, painting the tissue of vignette on the required spot, using the yellow where the print requires the most "holding out." As the paint is so far from the negative it will always blend nicely, so that the fact that the print has been " held-out" will not be apparent.

A thin negative should never be printed in a strong light, and it can be improved by using yellow instead of white tissue for the vignette, as the slower printing gives stronger contrast.

There are so many brands of ready, sensitized paper on the market, that it is hard to lay down any given rules for their manipulation, each manufacturer recommending the formula sent out by him. Will, therefore, call your attention to a few points which apply to all.

In the first place, the chemicals should be mixed by weight and measure. This is especially necessary with the combined bath, as alum is an acid compound which will not stay suspended in a neutral or alkaline solution, and you can therefore add only enough borax to neutralize the excess of acid in the alum. Some waters are quite alkaline, in which case rain or distilled water should be used.

The only difficulty encountered in the combined bath is sulphurization, which is caused in three ways: First, by using the bath at a temperature higher than 60 degrees Fahr.; second, by trying to tone too many prints to a given amount of solution ; and third, by allowing the prints to mat together while in the solution, especially when first put in. To know the cause is to know the remedy, which is to keep the temperature at or below 50 degrees Fahr., never try to tone over fifteen cabinets to one grain of gold, and keep the prints in rapid motion the entire time they are in the bath, never using the solution a second time. The subsequent fixing solution should be used to insure the thorough fixing of prints and their permanency. The clearest and most brilliant results that can be secured with the combined bath are obtained when the bath has been made several days before use. As it keeps indefinitely, it can be made up in large quantities

At the present time many amateurs and professionals consider it their duty to themselves and all mankind to write a paper, setting forth the merits of albumen as against chloride ; claiming that albumen has keeping qualities that are not possessed by any collodion or gelatine paper.

That efforts of this kind are uncalled for and wasted is proved by the rapid increase in sales of Solio and other chloride papers, and at the present rate the numerous articles above mentioned will be compelled to act as a headstone to the "clear departed albumen."

A search through back numbers of the magazines will show that this question of permanency has always been before the photographer; that, before chloride papers were thought of, there was a continual complaint regarding albumen paper. And at the time the dry plates were introduced, every possible argument was brought forward to defeat them, some writers claiming that while they were good enough for children they would never do for regular porirait work, that they would not keep, etc., etc. Notwithstanding all this, the dry plate stands to-day the acknowledged means whereby photography has been raised to a standard never dreamed of by wet plate workers. The plates have shown remarkable keeping qualities, and made it possible for the photographer to become the rival of and be ranked with the artist, As dry plates have succeeded the wet, so will chloride succeed albumen.

A careful examination of the complaints will show that in 99 out of 100 cases, the cause of difficulty is carelessness. The fact that a large number of photographers have made prints on
chloride papers that have stood remarkable tests, is evidence that all prints can be so handled in manipulation that they will be permanent, the only condition required being that the photographer should take the directions sent out by the manufacturer and combine with them some practical knowledge and good judgment. The actual facts in the case being, that albumen, Solio, or Aristo will, any one of them, give prints that are permanent, provided they are properly handled in manipulation.

## OUR NOTICE BOARD.

The attention of our many readers who are interested in half-tone engraving and kindred processes, is called to the advertisement in another column of Alfred Sellers \& Co., of New York. A visit to Mr. Sellers' factory and salesroom showed us that this firm manufacture and keep on hand a well-assorted stock of all lines needed in the different branches of business to which they cater. They are one of the oldest establishments of the kind, and noted for being reliable.

We have received from the Stanley Dry Plate Company some samples of Stanley plates made at their factory at Newton, Mass. They are of two species, 35 times and 50 times. We have given those of 50 sens. several severe tests and find them combining great speed with good quality, and, for such extremely quick plates, easily worked and yielding vigorous printing negatives. We are pleased to learn that it is the intention of the Stanley Company to make and use these emulsions at their Montreal factory.

## EDITORIAL CHAT.

The rapid growth in popularity of the "N.Y." Aristo paper in the west has compelled the firm to open a western brauch at 17-21 Quincy street, Chicago, Ill.

THE brightest monthly magazine now published is undoubtedly The Cosmopolitan. It will interest you to read our offer regarding this publication in another column.

We are sorry to hear of the failure of the Photo Supply Co., of this city. Mr. D. J. Howell has our sympathy. We feel, however, that he will be seen "on top" again before long. We hope so, anyway.

A very interesting article, written for the Christmas number by Mr. T. W. Pattison, of New York, was unfortunately delayed in the Customs, and in consequence received too late for insertion. It will appear in the January number.

Accoridng to the Evening Nequs, Professor Steiner, of Prague, has utilized photography for measuring the vibration of bridges. As one result he finds that on an unloaded span of 140 feet, a locomotive with wheels four feet in diameter, moving at twenty-five miles an hour, produces dangerous vibrations.

Next month we shall issue a complete index to this, our second volume. The third volume will begin in January and we shall in future send out the Journal earlier in the month than has hitherto been possible. Reader-yon, individually-show us
your appreciation of our efforts by doing your best to send in one new subscription with your own. The best time to subscribe is nozo, immediately upon receipt of this number.

Ir is with much regret we have to inform our readers that owing to a severe attack of influenza, Mr. A. M. Cunningham, the popular President of the P.A.C., has been unable to contribute his promised article for this number. We hope to have the pleasure of publishing it either in January or February, and we are sure the majority of our supporters join with us in hoping Mr . Cunningham will soon be completely recovered from his illness.

And now a word about your negatives of pretty children. For the best three cabinet prints mounted on ordinary cabinet cards (not fancy sizes) we offer a handsome Silver Medal struck from our own die ; as a second prize we offer a bronze medal; and as a third prize we will send The Canadian Photographic Journal post free to any address for one year. All competing photograms must be received not later than the last day of January. Any printing process may be employed, and the name and address of sender must be legibly written upon the back of each mount. Competitors may send in any number of sets, but each set must be distinctly numbered "Set No. i," "Set No. 2," etc. No competitor may take more than one prize. All prints will become the property of the Journal and will be used for gratuitous circulation as a loan collection. Address The Editors, P.O. Drawer 2602, Toronto.

Commencing January ist, 1894, Anthony's Photographic Bulletin will be issued monthly, instead of semimonthly. We think this a popular move on the part of our esteemed cotemporary. The receiving and thoroughly reading once each month, of such a good journal as Anthony's Bulletin, together with other photographic literature of the day, should satisfy the most ardent reader. The staff of this journal has been greatly strengthened by the addition of Mr . F. J. Harrison, a very clever writer, and a thoroughly practical worker in the fields of photography. The price will be $\$ 2.00$ per year. This popular journal will be sent together with the Canadian Photographic Journal for $\$ 3.00$.

Our esteemed friend, H. Snowden Ward, informs us that he has relinquished his position as editor of Thc Practical Photographer, and London manager for Messrs. Percy Lund \& Co. In January next Mr. Ward will introduce a photographic magazine run on entirely new lines, which will occupy a field that will be largely new. The newcomer is backed by a large capital, and will be edited by Mr . and Mrs. Ward, who liave already gathered around them several energetic workers as permanent members of their staff. We most heartily wish Mr. Ward every possible success, although we are confident this is already assured. Those who have the pleasure of knowing Mr. Ward personally are well aware that when he makes up his mind to accomplish anything he never "lets up" until his end is accomplished. He has determined to make this new venture a success and, you may depend upon
it, the success is certain. The new journal will be sold to our subscribers at clubbing rates which will be announced next month.

A year ago we communicated to our readers the fact that a large optical establishment had doubled its plant to meet the growing demand for its product. We learn that the Bausch \& Lomb Optical Company are doubling the steam power which was put in a year ago. The maximum power then required was 350 horsepower, but this has proved inadequate, and they are now adding another engine of the same make, HarrisCorliss, and size, thus making a pair working on the same immense flywheel and giving a maximum capacity of 700 horse-power. It is difficult to conceive of such an amount of power being necessary in the production of optical work, which in the main is small, but the growing demand for their products, particularly the photographic, makes it necessary for them to go to this expenditure. Besides this, they have another r 50 horsepower engine for illuminating purposes, giving them a capacity of 1300 incandescent lights, and a further small one for the capacity of 100 lights for illumination for over time and special work.

For a long time we have been under the impression that manufacturers and wholesale houses duly recognized the valuable aid given by photography towards rendering unnecessary the transportation from place to place of heavy samples. In fact, for several years we have made a specialty of this branch of photography, turning out considerable
work for large houses employing travellers on the road. Yet, it seems there is an impression abroad that this application of photography is a novel one, as will be seen from the following clipping from an English journal :
" A new use of photography has been discovered. Many goods which were once sold by samples carried about at immense inconvenience by commercial travellers, and eventually ruined by wear and tear, are now being sold by photographic samples, thus effecting even marvellous saving in many trades. The loss upon samples has amounted to thousands of pounds yearly.
" Furniture, iron and brass work, massive clocks, and a hundred and one other such articles are thus sold. Cut glass and china are among the samples most successfully photographed.
" If the dream of photographing in colours shall ever be realized, the application of photography to the matter of mercantile samples will be wider than ever.
"The actual work of photographing samples is done at the photographer's, the shop, or factory. The art of commercial photography is one requiring considerable technical skill, and in a certain way a knowledge of posing. The essential thing in the pose of a sample is that it shall result in producing a faithful picture of the original, and the chief advantage that photography has over many cheaper pictorial processes is its truthfulness."

## BOOKS AND PICTURES RECEIVED.

We have received too late for notice in this issue, "The American Annual of Photography and Photographic Times Almanac for 1894 ."

We are in receipt of the revised price list and catalogue of Messrs. Ross \& Co. of London. The reduction in price noticed on their very popular "Patent Concentric" and other lines of lenses will be of interest to those intending purchasing a high grade lens.

From Messrs. Bradfisch \& Pierce we have received an album of extremely choice things done on their popular B. P. paper. These photographs, together with a number of larger size, fairly speak the praises of this paper. The range of tones shown is fine.

Scribner's Magazine for December (Christmas number) gains one's attention with the first page by "The Bachelor's Christmas," a most delightful story by Robert Grant, and holds it with scarce a break to the last page, leaving one wishing Christmas numbers were twice (at least) as thick. Among other interesting features might be mentioned "An Unpublished Work by Scott," "An Artist Among Animals," aptly illustrated by the author, F.S. Church, and a thrilling story by Herbert D. Ward, "The Semaphore." The illustrations are good.
"Photography at Night," by P. C. Duchochois, published by the author. For sale by The Scovill \& Adams Co., New York. A most interesting book upon the subject of the title. A most valuable book for those who work or wish to work by artificial light. Beginning with flashlight photography, the author goes thoroughly and instructively into the different compounds used and the apparatus with which they are used. That difficult feature of flashlight photography, portraiture, is ably handled, as is also the many other subjects which follow, such as the copying of paintings and other pictures. It is really invaluable to the professional or amateur who wishes to secure satisfactory results in "flashlight."
"Industrial Photography," by P.C. Duchochois, New York. The Scovill \& Adams Co., The Scovill Photographic Series No. 46. This, as the author says; is a description of the various processes of producing indestructible photographic images on glass, porcelain, metal, and many other substances. It is a most valuable book for those wishing to take up paying specialties. It teaches in a manner at once understood, the many different processes touched upon, the points likely to prove difficult of understanding being aptly illustrated and thus made plain sailing. The book is a valuable addition to this interesting series and should be in the hands of all.
"The International Annual of Anthony's Photographic Bulletin," New York. E. \& H. T. Anthony \& Co. One really needs a new introduction to this old friend, on account of its decided growth in size. It is as handsome as ever, and if anything contains more than its usual amount of good things. The increased size is a decided improvement. The frontispiece, a portrait by Dana, is in that gentleman's usual finished style. The large number of half-tone engravings are exceptionally good, among them being a number of excellent World's Fair views. The illustrations all seem to have been selected with great care. The many different articles are interesting and many of them instructive. The "Annual" contains the usual tables, formulae, and society addresses which prove so useful to the fraternity. The ' 94 Annual will undoubtedly have an unusually large sale. Be sure to get a copy before they are all gone.

Harper's Magazine for December (Christmas number) is a literary feast. "The Old Dominion" is a delightful story by Page, descriptive of life in Virginia and the South, richly illustrated. "The House of Commons," its structure, rules, and habits, by Thomas Power O'Connor, is an ably written and most interesting description of the "doings" of the House. A number of bright, seasonable stories by Matthews, Wister, Ruth McEnery Stuart, F. Rimington, Charles Egbert Craddock, Howard Pyle, and other notable writers, add to the interest of this number. The illustrations are exceptionally good.

The Cosmopolitan for December (Christmas number)is another World's Fair number. Interesting articles on the Fair are given by such writers as Paul Bourget, John J. Ingalls, Robert Grant, and F. Hopkinson Smith (illustrated by himself). The illustrations of the Fair are even better than those of the September number, the entire edition of which was exhausted within a short time after going to press, and will, more than anything else, perpetuate the memory of the great White City. "Travelling With a Reformer" by Mark Twain, is very humorous, with a large grain of sense running through withal. Many other interesting articles, combined with a wealth of artistic illustrations, go to make up one of the best Christmas numbers of '93.

## CORRESPONDENCE.

## To the Editors:

Gentlfmen,-In reply to Messrs. Taylor, Taylor \& Hobson's letter in your last issue, I shall be very glad
if you will kindly compare my article in the convention number of The Photograplic Times with that of Mr. Taylor's contained in the firm's catalogue.

The Photographic Times has already (issue of Nov. 24th) explained to its readers that the use of Mr. Taylor's diagram was an accident, and has given the fullest credit to that gentleman.

With regard to the similarity of the two articles, considering that they are both plain statements of the fixed laws governing photographic opics, there can be little wonder at many coincidences. I claim nothing original in my article; every line in it has been written over and over again.

With these remarks I conclude absolutely, as I have no desire to further assist Messrs. Taylor \& Hobson in gratituously advertising them. selves.

## Yours very truly,

Walter E. Woodbury.

## OUR SCRAP ALBUM

Brighton Front. - First Friend: "What an enthusiastic photographer you are, always with that hand camera."

Second Ditto: "Ah, grand scheme; directly 1 point it all the ugly girls rush off and the pretty ones remain, and it contains sandwiches and a flask of whiskey."

The kodak has made its way into the pulpit. A Springburn minister the other Sunday, during the service, took a snap shot of his congregation, at least so says a North country paper. To thus steal a march upon sleepy members may be keenly resented by drowsy worshippers. It is extra-
ordinary, but still a fact, that many persons in the habit of regularly sleeping during sermons stoutly deny the charge. In these disputed cases appeal may be made to the minister's handful of negatives. The other Sunday in an Edinburgh church a worshipper not only wooed the drowsy god, but spoke in his sleep, to the gratification of the occupants of the adjacent pews.

How She Knew The Baby.-There was a baby show in our town. Several of the fond mothers had taken their offspring to be photographed, and our only photographer was therefore " rushed."
However, he was equal to theoccasion, and promised to have the proofs ready by the end of the week. One lady came in advance of the rest, and the photographer, who could not remember which was hers, handed her all the proofs that she might take her own.

After showing considerable indecision, she took one of them home with her, apparently satisfied that it was her child's picture.

She came back a few hours later, pro-testing-
"This ain't my baby, sorr, mine had a bow on each arm, and this ain't got any at all."

The Royal Academy to-day contans at least three members who have in the course of their career been sign painters. Foremost among these is Sir John Millais, who, in his early clays, long before he met the tide that carried him on to fortune, painted a "St. George and the Dragon" for the "Vidler's Inn," at Hayes, in Kent. Mr. G. D. Leslie, R.A., is the author of the sign of "The Row-Barge," at St. Leonards, Walling-ford-at which place' he resides-and
the "St. George and the Dragon," at Wargrave. The latter was painted in conjunction with Mr. J. E. Hodgson, R.A., Mr. Leslie delineating on one side an orthodox St. George spearing a dragon, and Mr. Hodgson represented on the other the saint refreshing himself after the fight with a tankard of beer. Mr. W. P.Frith, R.A., has also displayed his talents in this direction in one or two instances.

An English traveller stood looking at the glories of Yosemite for the first time. He had journeyed three thousand miles to see the wonderful valley. Before him in solemn grandeur rose the Cathedral Rock, the Three Brothers, and the Sentinel Dome. The Bridal Veil Falls, dissolving in a feathery mist as the waters descended the tremendous precipice, lit up with varied tints the sombre majesty of the scene; while El Capitan, mighty, overpowering, unapproachable, seemed to frown sternly overall. The traveller becameconscious he was not alone. At hisside, apparently lost in wonder, stood a stranger, looking at the marvelous scene. He addressed the stranger :
"Is not this stupendous?"
The stranger bowed his head, as if he felt the inability of words to clescribe his emotions.
"Doyou think," pursued the traveller, "that this terrific gorge was caused by some Titanic upheaval from below? Or is it the result of glacial action? What are your views, if any, as to-".
"My views," blandly interposed the stranger, opening a bag he carried in his hand containing photographs, "are only one dollar fifty cents a dozen, and cheap at twice the money. Permit me to show you a few samples."

## AMATEUR COMPETITION.

Class a. landscape, announcement of prize winners.
Esson's Photographic Atelier, Preston, Ont., Dec. 15, 1893. Ged. W. Gilson, Esg.

Dear Sir-With this morning's express I return box of photos, judged according to their merits, totally irrespective of size, according to the following points, viz., A, B, C, as given in Journal. I have judged without favor, and trust in a manner satisfactory to all, according to the rules given. ist prize could not be better in $A, B$, or $C$; 2nd prize good also but not up to ist; 3rd prize work good.

Yours truly,
James Esson.
ist prize, Casket of interchangeable lenses, awarded to Alfred Stirglitz, New York city.
and prize, Silver medal, awarded to Floyd Vale, Kingston, Ont.

3rd prize, Bronze medal, awarded to $W$. Braybrooke Bayley, Toronto, Ont.

4th prize, Bronze medal, awarded to W. B. Post, New York city.
sth prize, Bronze medal, awarded to Clarence B. Moore, Philadelphia, Pa.
6th prize, One year's subscription to Canadian Photographic Journal, awarded to Robert E. M. Bain, St. Louis.

7th prize, One year's subscription to Canadian Photographic Journal, awarded to Harry English, Toronto.

Honorable Mention : W. Bull, Quebec, Que.; Mrs. R. M. Wilson, Boston, Mass.; Geo. Lees, Hanitton, Ont.; Roswell Goldie, Guelph, Ont.; J. A. Rueff, Ottawa, Ont.; A. H. Baker, Hamilton, Ont.; W. H. Moss, Toronto, Ont.
Preston, Dec. 15, 1893. James Esson, Judge.
Owing to the great number of pictures received, and their very high quality, it is impossible to give at this time more llan the above brief notice. We shall notice in detail, in the January number, some of the good features of the many deserving prints that have been sent in from all parts of the world.
our certificates in retouching.
The following gentlemen have passed our examination, ancl have been awarded first grade certificates : K. W. Snider, Hamilton ; Robt. Dumn, Brockville; R. A. Nunn, Prescott ; Amidie Archambault, Montreal ; P. F. Pinsomeault, Three Rivers, Que.

Juclges $\left\{\begin{array}{l}\text { E. Stanton, } \\ \text { J. Frazer Bryce. }\end{array}\right.$

## ANSWERS TO CORRESPONDENTS.

Arrangements have been made with a photographic expert of acknowoledged ability, whereby our readers may have the beneft of his experience, through this colnemn. absoltctely free of charge. Querics must be received by the first of the month to custure their appearance in the enryent issue.

Correspondents regieiring, detailed advice by mail, mast enclose a fce of One Dollar.

All commmenications for this columen to be a daressed to
W Ethelbert Henry.

Owing to lack of space we have answered other correspondents by mail.
J. W. Powell.-There is no necessity for using serum of milk. We will publish an article on this subject next month.
S. J. Jarvis.-Your "rural couple" must be very hard to please. Considering the fact that they were shown (and duly approved) proofs, they are not entitled to sit over again after receipt of their completed order. The size of the heads is certainly small for a cabinet 'mount, but we fail to see how you could make them any larger (side by side) without spoiling the whole effect. Besides, the couple saw the size before passing the proofs, so there is no excuse for them on this head. As for the depth of printing, in our opinion the shade is correct, but, of course, these "rural couples" usually desire their sun tanned features to be represented as so much whitewash; or in their own words, they prefer " nice white faces"-the abomination of a clever photographer. As for the lady not being taken front face, our candid opinion is, that the lady's front face would look simply absurd in a photogram: round and fat, and considerably larger than that of the man. Their contention that she "looks cross" is simply untrue-unless she " looks cross" in a totally different way to anybody else. She seems to us to be a very nice looking girl, and we would credit her with more common sense than she has displayed in this case. We suppose you have done the same as nearly every photographer does when a woman tries every method in her power to get a resitting-just to see how another dress looks when photographed,-you have probably swallowed your ire, looked pleasant, and given the resitting rather than have the cranky sitter sow broadcast untruths about you. In some cases this is good policy, but having shown a proof, and had it duly approved, we should certainly sue for the full amount of the bill. No sensible jury would hesitate for a moment in awarding the verdict to the photographer. Show the " rural couple" this paragraph and let them see what we think of them.

Think of a photograph holder that does not cover the least part of the picture, and comparing the real value (so far as doing justice to the photo. is concerned) the one cent Becker Holder is far superior to a $\$ 10.00$ cabinet frame, which takes the very life out of a photo. (See " ad." in advertising pages.)

## CERTIFICATES OF PROFICIENCY.

Rule r.-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 photogram.
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 distinctions 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.

Ruee 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 photograms will become the property of The Canadian Photographic Jouranl.

To do easily what is difficult for others is the mark of talent. To do what is impossible for talent is the mark of genius.-Amiel.

According to a French physician, to render tobacco harmless to the mouth, heart, and nerves, without detriment to the aroma, it is only necessary to insert in the pipe or cigar holder a piece of cotton wool steeped in a solution of pyrogallic acid.

