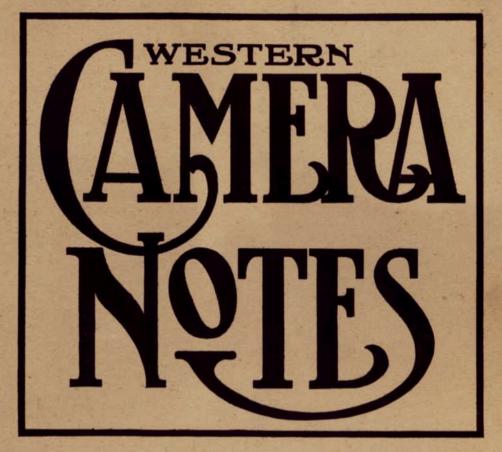
AUGUST, '07

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A MONTHLY MAGAZINE
PICTORIAL PHOTOGRAPHY
MINNEAPOLIS, MINNESOTA.

MONTHLY COMPETITIONS

FOR 1907

SUBJECTS FOR PRINT CONTESTS

JULY	Genre-Pictures that "tell a story."
AUGUST	Animals.
SEPTEMBE	R. Summer Landscapes, including one or more figures in the picture.
OCTOBER.	Flower or Fruit Studies.
NOVEMBER	Marine Pictures, on sea or lake, including one or more boats.

REWARDS IN EACH CONTEST ARE AS FOLLOWS:

First Pr	rize,	Books	or	Photo	Supplies,	value	.\$6.00
Second	**	- "	**	**	Teeli	34	4.00
Third	44	- 66	44	**		44	3.00
Fourth	**	**	44	**	- 46	- 11	2.00

Honorable Mention—In addition to the above four awards, we will retain additional prints which may be deemed worthy of reproduction and will give the makers one year's subscription to Western Camera Notes, or their choice of any article on our current premium list, for each print so used.

LITERARY COMPETITIONS

We invite contributions covering any phase of photographic work, or travel with the camera. All manuscripts received during any month will be entered in the competition for that month, and will be judged according to practical merit rather than length or style. We want ideas, and facts plainly stated.

FOUR PRIZES AS ABOVE, \$6.00, \$4.00, \$3.00 and \$2.00

Should less than four competing articles be received any month, we reserve the right to cancel the contest for that month and to re-enter the manuscripts in the contest for the following month.

RULES

Contests for each month will close on the last day of the month.

All prints must be mounted, and have title and maker's name and address on

As our aim in conducting competitions is to secure original material for illustrative purposes, we will not enter any print which has ever been published. We also reserve the right to reject any or all prints, in any competition, that do not reach the standard of excellence which our illustrations have always maintained.

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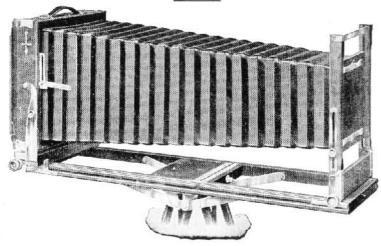
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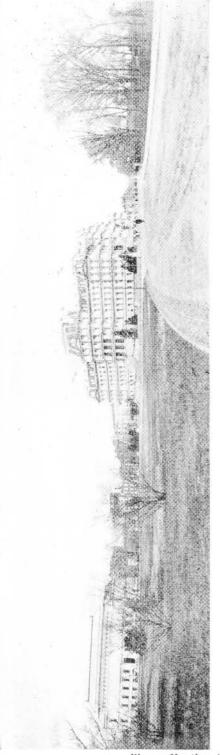
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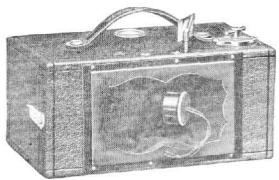
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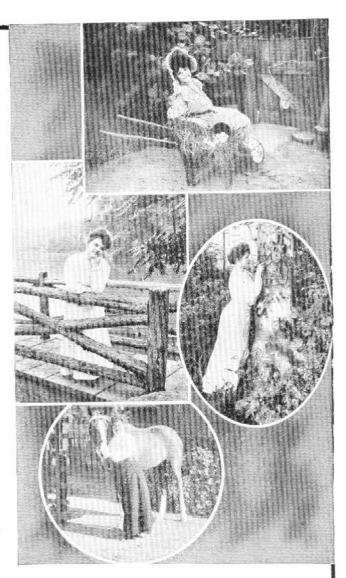
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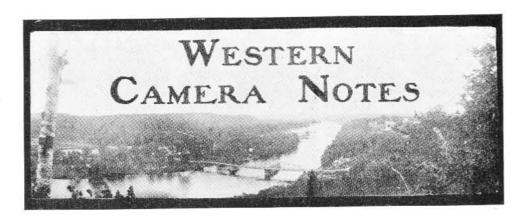
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Advertising rates quoted on application. Articles solicited on photographic subjects, also prints, in any medium, having artistic merit.

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Entered at Minneapolis Postoffice as Second-class Mail Matter.



First Prize.

Portrait.

C. M. Whitney.



WESTERN

CAMERA NOTES

Eighth Year.

AUGUST, 1907.

No. 8.

PICTURES OF THE MONTH.

A Critical Review.

A. G. Marshall.

N many ways this is a very satisfactory contest. There are many entries of fairly high class work; and there is evidence of much sincerity of purpose, with little of the mere dilletante sort of thing. With everything furnished ready to hand, and processes brought to an exactness undreamed of not many years ago, more amateurs are finding Portrait Photography something deeper and calling for higher mental effort than the pretty pastime which lately contented most of them. These earnest ones are faithfully seeking, even though at times blindly groping, after possibilities higher than bare "likenesses." The present showing is a good one to contemplate, notwithstanding abounding merit makes the awarding of prizes with just discrimination a difficult task.

Portrait.

C. W. WHITNEY.

This little fellow speaks for himself. Placing, pose (absent in the conventional sense) and expression, are all that could be wished. The one note of criticism we have to make is that the border of the collar on the child's right shoulder is somewhat too white, and makes, with the outline of the shoulder, an acute angle leading the eye away from the face out of the picture. The illumination is direct, simple and commendable. The chief distinction, technically, of this print, is the really fine quality of flesh, completely modeled, yet pulpy and transparent.

Portrait Group-Margaret, Elizabeth and Edward.

W. AND G. PARRISH.

Originality of composition, with entire absence of conscious pose, impress one in this charming group. How well the panel is filled, and how its close-





Portrait Group. W. and G. Parrish.

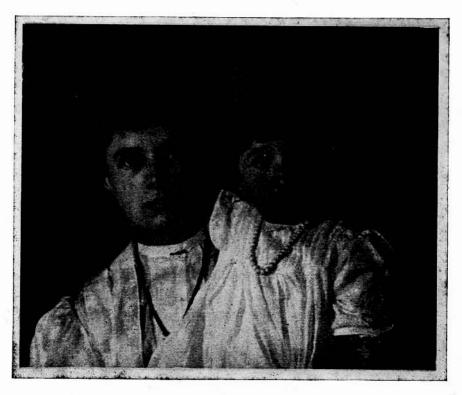
ly fitting frame assists the idea of coziness. Noteworthy is the symmetrical line of construction, at first analysis seeming to set aside the first principles of agreeable spacing. Three equally spaced verticals with one horizontal across the middle, yet sufficiently varied by subordinate lines and massing of light and dark values to obviate any thought of formality in arrangement. The spirit of childish interest, focalized upon the book, is well carried out to the observer's eye, not only in the faces and action, but in the structure of chief and minor lines, bringing the sight finally to the same point to which the children's attention is directed.

"Mother and Child."

Отто Косн.

There is much true sentiment in all of Mr. Koch's work, although he affects a somewhat somber and sometimes obscure key not quite in keeping with his otherwise admirable studies of children and women. This print is a characteristic example of his best production, technically fine, beautiful in its tone of old ivory,





Third Prize.

Mother and Child.

Otto Koch.

and showing perfect sympathy with his subjects. The outline of the white draperies might be improved in form. Textures are well suggested and there is plenty of atmosphere.

"Playmates."

Alfred L. Fitch.

A fortunate plate of a complex subject, not the easiest to handle. Just a bit "photographic" in the sense that painters dislike—"lensey," so to speak—and the white lights at the top are out of value. Action and lines of figures are good, and all lead the eye to the object of mutual interest of the two human subjects—the cat. A "popular" picture, yet considerably above the common run of its class.

Portrait.

John A. Schreurs.

Elegance of line and a certain pleasing quaintness, combined with a delicate but not finicky technique, give an unusual quality to this good little print.

"Little Mischief."

Belle Johnson.

This is one of the happy ideas with which Mrs. Johnson seems specially gifted. A little less "professional" definition would be an improvement pictorially.



"Dorothy."

"THE THOUGHTS OF YOUTH ARE LONG, LONG THOUGHTS."

WM. WHEELOCK.

A serious effort at psychological interpretation, possessing merit in spite of the angularity of line at the top of the forehead, and something to be desired in the modeling of the face.

Portrait.

GEO. H. SCHEER.

The spirit of the inquiring child all over. The lines of the arm and hands and skirt in front are particularly fine, taken by themselves. The figured background is a bit too insistent.

"A Study."

A. F. FRANCE.

Placing, action and lighting are commendable. Would be improved by trimming off the left edge up to the outline of the sleeve.



Fourth Prize.

Playmates

Alfred L. Fitch,



THE PHOTOGRAPHIC PICTURE POST CARD.

Second Paper.

Jas. Thompson.

N the sensitizing of the post card where only a portion of available space is wanted for the picture, I have found it sometimes advisable to simply coat the space wanted, thus making sure of a perfectly white margin outside of the image. In such an exigency it is well to indicate outlines with pencil, then with a small wad of absorbent cotton apply the sensitizer to the spot, and a little over the line. We may then adjust mask and proceed to print.

Very artistic effects are possible by giving the outlines an appearance of carelessness much as would be the case in a wash drawing done by a master hand. With a small wad of absorbent cotton—once we have made up our mind precisely as to what we want to do,—we may quickly daub on the sensitizer, the edges in the resultant print having much the appearance of India ink or sepia color applied with a brush. It, of course, requires a little skill to do this nicely, but once one has acquired the knack it may be quickly and with certainty effected without much trouble and with the added desirable quality of no two cards being in pictorial outline precisely alike. The mask, of course, in such a case, will be quite unnecessary, the portions sensitized being alone affected by light action.

Printing frames made for the post card are now upon the market, but most workers doubtless do as I do, employ a frame of the regular kind, but larger than the negative, whereby the card and mask may be shifted about, up or down, from side to side or oblique. To do this, however, requires a clear or ground glass full size of the frame, and an inside kit to take the smaller negative. This kit may be either of thin wood or pastebeard, (Fig. 1). The small sized negative is thus held snugly in place, but there is sometimes a difficulty in arranging the mask and card and keeping them in position until the frame back has been sprung into place again. Assuming that our cut out is an ellipse, any trifling departure from the perpendicular, or from the center, becomes quite noticeable.

All such troubles vanish in the presence of a mask arranged as is portrayed in figure 2. The right angle piece may be cut from a discarded post card, pasted to the mask, thus assuring perfect centering in the case of elliptic and circular openings, also making sure of paneled outlines in the case of square or oblong pictures. The usual mask as provided by the dealer being made of but a single sheet of paper, there is consequently always a difficulty in centering and arranging matters so parallel outlines will result. All troubles of this nature may be avoided by the simple expedient of making masks of a double sheet instead of a single, one side having the opening, round, square or elliptic, while the other is a blank. Carefully arranging the post card so as to be exactly centered, one has to fold over the blank side in order to provide in the crease an unerring and always—safe guide against which to press the card. Thus we insert the post card as it were between the leaves of a book, knowing that when it is forced in

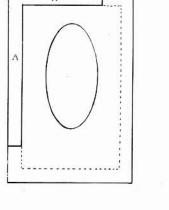


5x7 FRAME BROWING INSIDE PASTEBOARD KIT MADE TO TAKE A 4x5 NEGATIVE

FIG. I

SIMPLE DEVICE FOR CENTERING
FOSTAL CARDS IN PRINTING
AA. SLIGHTLY RAISED

FIG. 2. DOTTED LINES INDICATE CARD IN POSITION



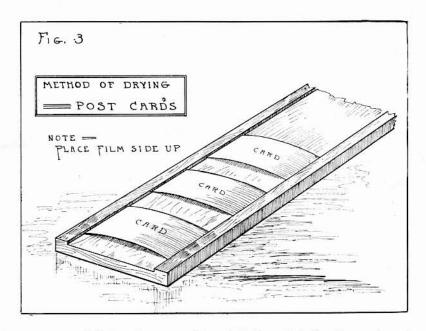
as far as it will go it will surely be centered and have parallel outlines—that is to say, the outlines of the pictorial space (if straight) will be parallel with outside edges of the card of which it forms a part.

A late ruling of the post office authorities allows the pasting of a thin sheet of paper on the side usually devoted to correspondence on the post card. Misprinted,—over or under printed post cards,—may thus be utilized by printing the picture on a thin sheet of paper and then pasting on and keeping under pressure. I have found *Strathmore Parchment* writing paper excellent for this purpose, though any good brand will answer. A little glycerine in the paste in mounting. I imagine, would prevent any tendency to warp, though the use of a special device in any event may be relied upon to insure the desirable quality of flatness.

As is well known to photographic workers, cards coated with collodion or gelatine emulsion in drying always warp. The device here illustrated may be depended upon to keep the cards from warping. The cards measuring in length $5\frac{1}{2}$ inches, between the strips should be an inch less, or $4\frac{1}{2}$ inches. The film side of the card should be uppermost, and in cases where a *thin print* is pasted on a *common postal card*, or one that has been misprinted and eventually made as good as another by this devise (pasting on of a print) the mounted side should be on top. (Fig. 3.)

Unless one makes use of the cards such as the French Satin,—washed and resensitized for black or brown,—there is always the lack of the printed matter on the front side. The legend "Post Card" we *must* have on the card whether we buy it already sensitized, or do all of the essential preparatory work ourselves. In my own manipulation of cards wholly made at home, I have found it best to print the customary lettering of the post card front with special negative made





for the purpose. With a lantern slide plate I copied the face of a clean cut strongly defined (as regards lettering) post card in the camera. Great contrast in such a case being desirable it will be necessary to employ in developing some such developing agent as Cramer's Contrast developer supplies. The action should stop before the shadows—which in the present instance is the lettering,—begin to gain density, in fact, the letters should be clear glass. Where opacity in wanting resort must be had to intensification or a black paper mask may be pasted over all of the negatives save a narrow strip carrying the lettered portions. This method will work quite well, the letters printing dark upon a half dark strip of ground, while all other portions of the surface show up pure white paper.

In place of sun printing for the front, hand lettering may be substituted, or a rubber type may be advantageously utilized. In general the brown and white formula herewith submitted will be found to work excellently well in printing the letters.* Simply daub on sensitizer on the parts to be treated, using for the purpose a wad of absorbent cotton. In the sun, printing will be found quite rapid, and a large number of cards may be run off in an hour. The greater the contrast the better and the less liability of the white becoming tinted.

Copying in facsimile anything so small as the lettering on the face of a postal card is quite beyond the capacity of the average folding camera, unless a supplementary lens is employed. A cheap uncorrected magnifier will answer for this extra lens, which will doubtless be mounted in an adaptable cell made to fit over the hood of the camera lens mount. In lieu of such an extra lens the possessor of an ordinary camera may find a reading glass of 4 or 4½ inches diameter a good substitute. Place this in front of the camera, moving it back and forth until the lettering is of the dimensions desired and in perfect focus.

*See part one of this article in July Western Camera Notes.





Portrait.

By Geo. H. Scheer.
Honorable Mention.

All this may seem somewhat needless work where post cards all nicely coated are offered at small cost. So it would become the object of the mere turning out of a large number without pride in performance, or exercise of individuality. Where one card is simply like thousands of others, its value to a great many people is small. Given a thoroughly artistic subject,—a gem of a picture that is not to be made any the more valuable by multiplicity,—it demands our printing it on the finest paper, something in character out of common. This we may easily do by using the formulæ herewith submitted and the cost of materials trifling when we consider the large amount of surface a dollar investment will cover. An ounce of sensitizer, costing not over five cents, will certainly coat at the smallest computation three dozen post cards, or a couple of dozen sheets of five by seven papers.

There are doubtless some who see in the program outlined more work than they care to assume. For those of this mind then there is the alternative plan of using French Satin or other brand of blue print cards, washing them, as recommended, and sensitizing with solutions for black or brown. While this plan is not expensive, the buying of a suitable paper and doing all the needed work from the beginning is much less so, very much less indeed, paper costing not over 30 cents a pound.





Portrait.

By John A. Schreurs.

Honorable Mention.

A good post card carrying in its entire make up the individuality of the maker is worth all the care one may take in its production. The worthless truck that passes current for views of places where summer visitors are wont to go is not in the same class with the cards made by the individual of even average taste.

Where time is of small moment and pride in performance is present many novel effects are possible in the direction of multiple printing of borders. With the appliance here suggested to regulate masking, borders around the picture space may be indulged in to any desired extent. In order to do this one has but to substitute semi-transparent paper on all except the space intended for the pictorial image, and on that of course light proof paper must be placed. If one will now draw lines in India ink around picture space, when printing is effected these lines will show up white upon a ground lighter than the part it encloses. We must first print for the border, then when that has been effected cover up the portion printed with a suitable mask, and print in the image itself.

Reverting to the subject of a suitable paper for post cards, wedding card bristol, plate finish, or the regular heavy tough Steinback drawing paper to be had of the dealer in artist's materials will answer. There is a buff paper called Strathmore detail paper, which, when heavily sized, may be made to serve for sepia colors, also the same make of Deckle edge cover papers might be made to suit. These cover papers are about the right thickness and very tough and strong, and may be bought of high class printers, or bookbinders in small quantities.





Little Mischief.

By Belle Johnson.
Honorable Mention.

The regular Whatman water color paper, if chosen, will always require a heavy coat of size, arrowroot by preference, otherwise the image will have a flat, sunken appearance. In the making of good pictures through home effort in sensitizing this matter of the sizing of the surface is all important. Where there is scant sizing on the surface of the paper, the resultant image, when one comes to print, will be found to have a scurvy look, the shadows flat and devoid of detail. In order to get depth in the shadows we must have a generous coating of organic matter such as arrowroot supplies to fully benefit from the reduction of metallic particles following development through the aid of the silver solution in the one case, and plain water in the other.

The Photographic Picture Post Card, by E. J. Wall and H. Snowdon Ward, honors me by submitting my Kallitype formula as "the best" for black and white effects in post cards. It is now some four years since I worked out the formula in question and gave it to the craft, and I cannot see now that it can be improved. It is inexpensive, and withal simple in operation, while with it the most intense blacks may be had, and through dilution all fine graduation to be found in the negative.

In formulae submitted in the book mentioned is one error. The editors call for the *green* ammonia citrate of iron in the formula, while I hold that the *brown* scale is the better for our present purpose. For most photographic purposes the *green* ammonia iron citrate is best; for this particular formula the more common and easier obtained *brown* citrate should be used as producing the most pronounced, visible, though faint, provisional image as seen when printing has been completed.



COLOR PHOTOGRAPHY.

My Own Experiences with the Autochrome Plates.

By R. CHILD BAYLEY.

HE "discovery of photography in natural colors" is boomed in some quarters or another almost every week. "Wolf! wolf!" has been cried so frequently that I should not be greatly surprised if a number of my readers pass the announcement we make this week with some such phrase as "Oh! the old story."

phrase as "Oh! the old story."

Yes. It is the old story, down to its very details, but with the difference

that what has hitherto appeared as a theoretical possibility is

Actually a Practical Commercial Fact.

"What is that?" says the reader.

Just this. That it is now possible, or it was last week, to go into a shop in Paris, and to purchase a special form of dry plate, which, exposed much as any other plate is exposed in the camera, gives within half an hour of exposure, a finished and dry positive transparency on glass, in all the colors of nature, as true as the best three-color work I have ever seen—far and away better than most.

No Skill Required.

There is no difficulty about the process whatever. It calls for no skill or knowledge that is not the common property of every photographer. There is no balancing of one screen against another, no dyeing or washing out, no triple exposures and triple treatment of any kind, no registration or want of it, not even any waiting. It is a simpler and a far easier process to produce a perfect color photograph on these plates than it is to make an ordinary negative and to print it in P. O. P.

No Imperfect Rendering Needing Apology.

Nor is there any imperfect color rendering to be apologized for. One or two shades are not quite right, but as a whole the colors are true; certainly there is none of that general weakness of some one color one often sees in three-color work.

The Severest Test Passed.

An expert knows that the severest test of three-color photography is to get a white and black. Many a process, which will deal fairly well with colored subjects, breaks down completely when tested by its power of dealing with white, black, and grey, giving them with a marked tint. This does not. In the midst of the most brilliant colors faithfully rendered, black, white, and grey, come out without the faintest tinge.

Transparencies on Glass.

The results are positive transparencies on glass with a fine grain, so fine that they can be used very satisfactorily as lantern slides; but people with good sight can detect the grain without a magnifier, while with a magnifier it is very distinct. There is, up to the present, no way of reproducing these pictures on paper, but they can, of course, be used as originals from which three-color illustrations can be made in the customary manner. They can be viewed from either side.

Personal Experiences with Commercial Plates.

Nor are these "inventors' claims," but a matter of my own personal knowledge. My results have not been obtained on samples sent me by the makers



for trial. I wish they had, for the new plates, half-plate size, cost about half-acrown apiece, and I had to buy them in the ordinary way. Nor is there any secret, mark, as to the general outlines of their production. The makers give all the necessary formulæ, so that those who will, can make up the solutions for themselves, while those who like to save themselves the trouble can buy them ready made. They are just ordinary developers and things, without anything not readily purchaseable.

The Inventors.

The new plates are called "the Autochrome plates." They are the invention of Messrs. Lumiere, of Lyons, and have been on sale in Paris for some weeks. I say "on sale;" perhaps I ought to have said "they have been sold," for the demand has so outrun the supply that they can only be gotten now and then, and in small quantities. So great has been the interest they have aroused there that none have yet made their appearance in the English market. But the factory in which they are made is rapidly extending its capacity, and before long no doubt they will be obtainable in any quantity through the recognized channels. My own supplies were obtained from the shop of M. Henri Calmels, of 150 Boulevard Montparnasse, Paris. In 13x18 centimetre size (a trifle larger than 7x5 in.) they sell at ten francs, a box of four. In addition to the plates a yellow screen is used on the lens, and a few chemicals are required. The yellow screen must be that which the makers supply; no other will do.

The Exposure Made Through the Glass.

Later on I will say something about the theory of the process. Let me first deal with the manipulations. I will suppose the plates, chemicals, etc., have come to hand, and the impatient amateur wishes to make his first color photograph. First of all, then, he turns his focussing screen round so that the ground side of the glass is away from the lens. This is done because the plates are exposed through their glass, or from the back, so we must allow for the different distance in focussing, and turning the glass does this near enough.

Filling the Dark Slide.

Then we load the slide, having first made a carrier to take the French size plate, if we have not got one already. As the plate is turned glass side to the lens, we must be most careful not to injure its very sensitive surface with the spring of the dark slide, so with each box of plates we find we have given to us a set of cards of the same size with one side of each blackened. After putting the plate in the slide, one of these cards is laid down on the top of it, black side next the plate, and then the dark slide is fastened up in the ordinary way. As the plates are sensitive to red light, as they must be to reproduce red colors, the slides must be filled in the dark, or at least in a position where no direct light from the lamp can reach them. This I did by turning the lamp to face the wall, so that there was just a very feeble light in the room, but nothing more. I may say there was no trace of fog on any of my results.

The Exposure Problem is the Only Problem.

All is now ready for exposure. Although the emulsion is extremely sensitive to light, the plates need a comparatively lengthy exposure; that is to say, a very little light will fog them, but a good deal is needed, reaching them in the legitimate way, through the glass, to give the picture in its natural colors. The makers say that in good bright sunshine a landscape, with f-8, requires one second exposure. Six seconds are needed if the weather is cloudy. Few people are likely to expose their first plates on landscape subjects, but will select rather a group of flowers or some other still life, readily attainable, and the problem of exposure is to be





Dorothy.

By Wm. Wheelook.
Honorable Mention.

faced. It is all the more serious because it is the only problem in the whole process. Everything else is quite automatic, and could be done almost, if not quite, as well by a machine as by a man.

A Watkins Speed of About Two.

I arrived at the exposure by the aid of the invaluable Watkins meter, of course. I harkened back from Messrs. Lumiere's instructions. In good diffused light we are told that the plates require about six seconds at f-8. Now six seconds is about the time the meter paper takes to darken in good diffused summer light, from which it is clear that they must have a Watkins speed of about 2. This means that with f-II the correct exposure is about twice as long as it takes the Watkins meter paper to darken.

Accordingly, having set up a still life subject indoors, I put the meter down beside it, and found the paper in the meter darkened in four minutes. Using f-II for my first exposure, then, I gave eight minutes. The result was a tribute to the accuracy of my deduction and to the usefulness of the meter. It was as correctly

exposed a plate as could possibly be wished.

The development was next put in hand. Never since I developed my first plate, twenty-three years ago, did I feel the interest and impatience that filled me as I carried that slide into the dark room. For the reader must remember that I had seen specimens of what the process would do in skillful hands, and wendered how far I dared hope to be able to do likewise.

Pyro-Ammonia the Developer.

The developer is the old-fashioned pyro-ammonia, and a liberal supply has to be used, for there can be no stopping over the dish in the red light to see if the plate is covered. It must be covered and developed in the dark. The Stanley clock, which forms a prominent feature of my dark room, is put where the light of the red lamp falls on it; there is no need to take the temperature of the solution, for sufficient reasons.



Development and Completion.

The developer is poured on, the dish covered with a card, and rocked for two minutes and a half. As soon as that time is up, the developer is poured off, and the plate held under the tap for fifteen seconds, put back in the dish, and covered with a solution of potasium permanganate and sulphuric acid. I will not go into details of the composition of the baths, as elsewhere this week I give a translation of the formulæ. Let it suffice to say the acidified permanganate (Namias's reducer, in fact) is poured over the negative, and as soon as that happens—less than three minutes, all told, after beginning the development-the plate, unfixed, may be carried out into broad daylight, and everything else done in the fullest light. In less than half a minute, on holding up the plate, the colors will be seen to make their appearance; and in a couple of minutes the permanganate has done its work, and the plate is no longer a negative, but a positive, in true colors, though the colors are not so brilliant as they will be at the finish. It is again rinsed for fifteen seconds, and an ordinary amidol developer poured on, in daylight. darkens the creamy-looking surface of the film, and when it has acted for two minutes it is poured off again. Another fifteen seconds rinse is followed by a quarter of a minute or less in the permanganate reducer, but this time it must be very dilute. Another rinse, and we pour on a silver intensifier, which is allowed to act for half a minute or more. This brightens up the colors, and as soon as it has acted sufficiently it is poured off, and a fairly strong plain solution of permanganate is applied for half a minute. This is followed by a rinse, which in its turn is followed by two minutes in acid-hypo, then the plate has five minutes washing under the tap, and is finished. It dries in ten minutes or a quarter of an hour, without the aid of heat, and may be varnished or protected with a cover glass, like a lantern slide.

No Difficulty of Any Shape or Kind.

Now, although, if that list of operations is read over quickly it seems elaborate, they take less time to perform than it has taken me to write a sketch of them. The sensitive film is so thin that each solution speadily acts right through it; hence the fixing is complete in two, the washing in five, and the drying in fifteen minutes. Here, too, let me point out the absence of difficulty of any shape or kind. Except the silver intensification, there is no one stage which calls for any determination by the help of the eye. The development is done by the watch, and all the other operations by time also. Anybody who can pour liquid over a plate and can tell the time by a watch can carry them out as efficiently as Messrs. Lumiere could do them themselves. As for the intensification, that is done until either the colours are bright enough, which can easily be seen, or the solution becomes muddy, in which case it must be poured off, and fresh must be used.

The First Attempt a Complete Success.

But I do not want, here, to rewrite instructions, but to narrate how I myself got on with my own attempts. Let me say that my first plate was as good as any three-color photograph, produced in any method, by the most skillful three-color experts that I have ever seen. And it was my first—using a strange, unfamiliar plate, a developer I have not used for years, and working with nothing more than the makers' printed instructions, with the recollection of an interview a day or two before with my friend, Mr Steichen—a full report of which I give elsewhere this week.

Portraiture, with Fifteen Seconds Exposure.

My second plate was a portrait. Now for portraiture with comparatively slow plates, a good light and a rapid lens are almost essentials. I have no studio available and no portrait lens, so I had to do the best I could with an f-6 stigmatic



and an ordinary London room, light being the light of London in (alleged) summer. A lady model was good enough to sit unmoved for three minutes (f-8 being used), the time of exposure being the time it took to darken the meter paper. The result was equally good. The flesh tones were flesh, the color of the eyes distinct and unmistakable, and the shadows in the white blouse free from the slightest trace of any greenish tint so often seen in three-color work in such conditions. A bunch of roses, a blue-black velvet focussing cloth, and other details, were equally well rendered. With a studio in a good light, and a portrait lens, the exposure should not be longer than from fifteen to thirty seconds. Other plates were exposed on other subjects, but need not be specifically described. Let me add merely that the plates worked "like clockwork," and there was not one which, treated exactly as the makers laid down, did not give perfect rendering.

How the Plates Are Made.

The theoretical basis of the process must not be passed by, although it has all been published years ago in *Photography*. It is only our old friend the threecolor process in a new guise; only, instead of interposing screens, getting three negatives, making positives and superposing in registration, all is lumped into one. The glass is first coated with some tacky adhesive, on which is spread a layer of transparent grains of starch. These grains are all of a size. They are of three kinds, however—one dyed an intense violet, one a vivid green, and one a brilliant orange. The dyed starch grains are thoroughly mixed in such proportions that, when dusted over the plate, the coloured light passed by them, being combined by the eye, as the grains are very small, looks perfectly white, and without any trace of color whatever. The interstices between the starch grains are then filled up, in some way not described, with black particles—carbon in some form—so that no light whatever can pass through the plate, except through the dyed starch grains. So that, although every particle of light passing through such a plate is vividly colored by the starch, yet on holding it up to the light the plate only looks much like a piece of finely ground glass, without perceptible color. It says wonders for the able way in which this most ingenious process has not only been devised but carried out, that this blending, easy in theory, is accomplished in practice.

I believe that at this stage the plate is subjected to pressure to consolidate its coating, but this is a detail of manufacture which has not been published. At any rate the starch-coated plate, with or without some protective varnish, is then used as the basis for a coating of some panchrematic or red sensitive emulsion, similar to that used on the red-sensitive variety of orthochromatic plates; but this layer, as already mentioned, is kept extremely thin. Such is the "Auto-

chrome" plate.

A Yellow Screen Used on the Lens.

As no emulsion is so perfectly orthochromatic that it can be used without any color screen at all, a yellow light filter, adjusted to these plates, is supplied for use with them. It is fairly intense in colour and is of the ordinary kind in tint, very much like the "ten times screens" on the market, but deeper.

What Happens.

When a negative is made by exposing an Autochrome plate with its glass side to the lens, the light after passing through the glass has to pass through the dyed starch grains before it reaches the sensitive film, and these starch grains act as the color screen. Let us suppose we have a colored object, and for simplicity's sake we will assume that it is violet in color—the exact shade, in fact, of the violet-dyed starch particles. The violet light passes unaltered through the starch that is dyed violet, but is stopped completely by the green and orange particles. (The action is not quite so simple as we are describing it to be, but



this may be taken as being true in outline.) After developing them, under each violet particle, in the part of the plate representing the violet object, there is a little particle of black image, while under each green and orange particle, no light getting to the sensitive emulsion, nothing develops. When the acidified permanganate is applied, this reducer dissolves away the black particle of silver under the violet starch grain, but has no action on the unaltered silver bromide under the green and orange starch grains, which, therefore, remain, not opaque, but partially opaque. On holding the plate up to the light at this stage, therefore, and looking through it, the light comes through the violet starch grain uninterruptedly, but the green and orange grains are partly hidden by the undeveloped, creamy colored, silver bromide. The result is that the film in part looks violetthe color of the original. When the plate is immersed in the amidol developer, in daylight, this darkens the silver bromide, and makes it more opaque, and so the colors are brightened up. When we further intensify the picture with silver, we darken the silver bromide grains (which are no longer bromide, but metallic silver), and so still further brighten the colors. Finally, if there is any unaltered bromide left in the film, this is removed by the hypo, which acts as a kind of guarantee that the final image is silver, and silver only.

To What Will It All Lead?

Such is the process in outline. It is impossible at this stage to forete'l what will be its results. That it is revolutionary is unquestioned, yet, paradoxically enough, it is not novel. Messrs. Lumiere published the details years ago, and they were faithfully recorded in *Photography*, but, to tell the truth, the photographic world looked upon it much as it looked upon the Lippmann results—as the outcome of a beautiful laboratory experiment, and nothing more. Messrs. Lumiere have shown that it is very much more. That it is a practical, commercial, simple process. Just as the Kodak Co., advertise "the skill is in the tank," so may Messrs. Lumiere say "the skill is in the plates." They have done the experimenting and the thinking, they have done the balancing of violet against green and green against orange, the orthochromatism, the dyeing, and the registration. The customer buys the product of their inventive genius and their great technical knowledge, he uses it with his ordinary photograph knowledge—nothing more whatsoever.

And the results. Well, they must be seen to be believed. I did not believe in them till I saw them. And I can hardly believe in them now that I have made them myself.—*Photography*.

HOT WEATHER TROUBLES.

FELIX RAYMER.

HE troubles that most amateurs will be having just about this time are the same that they were last year at this time and for many years previous to that time. They will likely remain the same for many years to come. These troubles make it almost impossible to get good negatives every year at this time, and in fact it is impossible to get good negatives unless we do something to prevent the troubles. We all of course have had some of our most valuable plates shed their coats in the washing water, and as a consequence have come near losing all of our religion. But the reason for this shedding of garments is very easily explained if we understand the nature of a plate. And when once this is understood we will see how almost impossible it is to get a good negative without having the right conditions for work.



If we will but read the directions and formulæ as given in the little booklets that are published by the different plate manufacturers we will find that we can easily conform to the required conditions and thus save many uncalled for annoyances as well as a loss of actual material. First of all I would like to impress upon the minds of my readers the importance of fully understanding the directions and formulæ for the particular plate that you are using. If you are a user of Seed plates study the conditions necessary to get good work on Seed plates, and study the formulas recommended for their use, as well as all other matter pertaining to their manipulation. If you use Cramer plates do the same thing by them. Do not try to use a Seed formulæ for the Cramer plate, as the two plates are entirely different in their manipulation, and the formulæ for the working of them must be different. The same is true of the Hammer or the King plate. All plates must be treated for their own particular emulsion, and when we try to use a formulæ for a certain plate that is recommended for another brand we run the risk of something coming wrong before we are done with the work. There is positively no developer that will act the same on all plates. We may have the same ingredients in that developer but they must be in varying proportions for each brand of plates. So treat the plate you are using fairly and use the formulæ recommended for its use, and not some other that may be the very worst for it.

Next we will call attention to the question of temperature. Now these are all of them old questions and have been asked and answered hundreds of times, yet we find many that do not place the amount of importance on them that they should have. The matter of temperature is of the greatest importance to the plate. In fact the results depend upon it, and if the conditions are not right

the result certainly will not be.

I have been in dark rooms that were so hot that it was like taking a sweat bath, and then if the plates came up all blocked up in the high lights with no sparkling darts of lights they were pronounced no good and the manufacturer called all kinds of bad names. It was not the fault of the plate for the manufacturer expressly stated that the temperature should be kept down in the summer and up in the winter. Again the developer would be so warm that it would almost float the film off the plate and of course the result was the same. Now the plates of any make will work better in a cold solution in summer than they will in a warm one. But the average workman will be in an awful hurry to see what he has and will develop in any thing he has at hand, it makes no difference what the temperature. If it is warm, the plate will flash up all at one time and the high lights all run together and then begin to bury down into the emulsion so that there is no sparkle to them at all. We think we can make matters all right next time by giving less time so that development will be slower. This is not true for the temperature has its part to perform as well as the exposure and the part it plays has nothing to do with the exposure. Try developing one plate in a warm solution and another in an ice cold solution and see which has the finest grain and detail. It will be found that the cold solution will give a fine grained result and that the detail is fine and delicate whilst the high lights fairly sparkle, and dance up in perfect ratio.

Many resort to the use of alum to prevent the plate frilling or shedding the coat. This will answer the purpose that far but in doing so we do not get the same effect that we would get if we controlled the film by temperature. A cold temperature will give a fine grained transparent film in which the lowest parts show detail in perfect harmony. But without the low temperature and the use of alum, while we will prevent the film from frilling we have a plate that has all of the high lights run together and there is but little or no transparency to the film, and the grain is coarse. Try two plates one developed in warm solution and soaked in alum to prevent frilling and the other developed in cold solution and no



alum used and see which has the finest grain. Now what is the effect of coarse grain and fine grain in the resulting picture? It is this. The coarser the grain of a plate the more light is allowed to pass between the little sacs which go to make the grain and in passing between it results in a gray high light instead of a crisp, sparkling light. The fine grain negative holds the light back in parts that are more deeply lighted and the result is a sparkling effect to the high lights. Again, it is much more difficult to retouch the coarse grain than it is the fine grain. It is more difficult to get the retouching to blend with the surrounding parts. The lead does not seem to match with the image and we can see every stroke. This is due to the heavy grain allowing the lead stroke to show through the pores or sacs of film, and the result is that every stroke of the pencil shows in

the print.

The developer should be mixed with ice water and it makes no difference at this season of the year how cold that water is, for it will be but a very little time before it will be warmer after it has been flowed over the plate and as the temperature begins to come up the action of the developer will become more rapid. But if the film is kept cold the grain will be fine, for the reason that warm developer breaks the pores of the film, and a cold developer does not break so many, but holds them intact and prevents the film from "rotting" as the manufacturer calls it sometimes, as it would with the warm solution. Neither do I believe in the use of an acid fixing bath, for the same reason that I do not believe in the use of an alum bath by itself. If the temperature of the developer and the fixing bath are kept down there will be no need of the alum in the bath, and the grain of the plate will be finer than it would if the alum was used. Low temperature gives a smooth grain and such is not the case with an acid bath. If a fresh hypo bath is mixed every time one develops, it itself will be cold enough, and will give a fine grain negative. Hypo is the cheapest chemical used, and yet photographers economize in it more than any other chemical. If they were half so economical in other respects as they are in the use of hypo, they would save much more money than they do at present. But low temperature is the secret of success in dark room work at this season of the year and there is no make-shift that will take its place. Use ice if a good soft smooth grained negative is wanted. Try both ways, the warm and cold development, and see the result. That is what talks.

THE COMPLETE PHOTOGRAPHER,

E have just had the pleasure of looking over a book that is, without doubt, all and more than its title indicates—a complete photographic instruction book.

In "The Complete Photographer," however, the author, Mr. R. Child Bayley, has made a very distinct departure from the lines followed by previous works on photography. We quote from his perface to the book as

follows:

"Nobody who has once come under the spell of the camera, and has so far penetrated into the mysteries of photography as to be able to expose with a reasonably quiet conscience as to the ultimate nature of his negatives, can ever thereafter free himself completely from its fascination. As a hobby, its claims over nearly all others are twofold. With fresh subjects it is forever fresh, and its pursuit is as delightful abroad as at home. I have been under that spell for more than twenty years, but my camera is as good a companion as ever, and photography is as entertaining in 1906 as it was in 1885. And incalculably



easier also. I shall be glad if I am able to pass on some of the pleasure to fel-

low-photographers, or to incite others to enjoy it.

"In 'The Complete Photographer' I have made no attempt to compete with the many books on photography that have already been published. These, in the main, divide themselves into two classes: scientific treatises upon the principles underlying the practice, and elaborated instruction manuals—"how-to-do" books, in short. Without going so far as to omit formulæ altogether, they will be found to be very few, and then only such as are not dealt with in the maker's instructions enclosed in every box of plates and packet of paper. Too many have stuck hopelessly amongst prescriptions, going from one to the other in the hope of finding some magic fluid that shall dissolve all the obstacles in their path, not realizing that it is not the formula but its use that is at fault. It is their application to photography that has formed my topic, and in that respect I hope 'The Complete Photographer' may find a place on the shelves of its namesakes."

The volume contains over four hundred pages and is thoroly indexed, mak-

ing its contents readily available for reference.

Unlike an ordinary reference work or book of formulæ, however, it is a volume that is so entertainingly written and so well illustrated that one can go thru it from start to finish, even tho well versed in the art-science, and find it all of interest and benefit.

The several divisions of photographic work, from the selection of camera and lens to the production of finished photographs in many different processes, are all ably treated in a natural sequence of arrangement.

The book is profusely illustrated with the best examples of modern pictorial

photography; the work of both European and American workers.

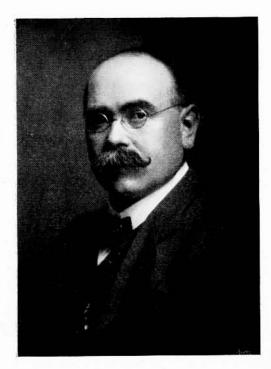
"The Complete Photographer" is published by McClure, Phillips & Co., of New York, price \$3.50, postage 22 cents extra, and may be ordered thru Western Camera Notes if desired.



Geo. E. Becker.

"By the Sad Sea Waves."





Sweet Studios.
MR. LOUIS FLECKENSTEIN.

THE SALON CLUB.

An organization for the advancement of pictorial photography, mutual aid and support in the production of the best work of lens and plate, judged by artistic standards.

OFFICIAL ORGAN WESTERN CAMERA 'NOTES.

Director-Louis Fleckenstein, Faribault, Minn.

Secretary-W. & G. Parrish, St. Louis, Mo.

SALON COMMITTEE.

C. F. Potter, Jr., Chairman, 620 1/2 Nicollet Avenue, Minneapolis, Minn.

John Chislett, Crown Hill, Indianapolis, Ind.

Wm. H. Zerbe, Jr., 345 Spruce St., Richmond Hill, L. I.

At a recent meeting of the Salon Committee held in Minneapolis, at which the Director was also present, a revision of the Club's Constitution and By-Laws was decided upon, and a few changes made in keeping with the growth of the Club and its work.

It was decided to shorten the name of the club by dropping the words "of America," leaving it the "Salon Club."

A booklet containing the new Constitution will soon be issued and sent to all members, and a new design and monogram has been adopted for the club stationery.

The most important change in Salon Club affairs is the formation of what might be called an "inner circle," to be known as the Pictorial Section. It will be the aim of all members to secure admission to the Pictorial Section and this will be given only thru the acceptance of their work by some art committee of recognized authority.

The Salon Committee have in view the judges for this work and their names will be announced later on.

The Pictorial Section will be the representative body in the Salon Club in the event of



C. J. Hibbard. MR. C. F. POTTER, Jr.





Sweet Studios.

MR. JOHN CHISLETT.

exhibitions, and a loan collection will be formed and kept up-to-date with the best work of members in the Pictorial Section.

All members must qualify for this section who wish admission to it, not excepting any member or officer. It will be "a fair field and no favors."

Members should begin at once to qualify for this section by making up a small collection, say eight to twelve subjects, of their best work, to submit to the judges.

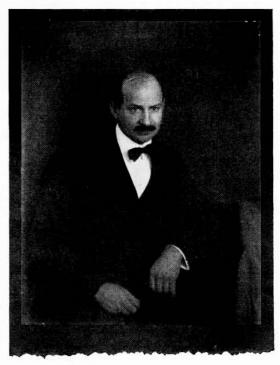
L. D. Sweet, of Minneapolis, and B. F. Langland of Milwaukee, are new members recently admitted to the Salon Club. Both were exhibitors in the Third American Salon and the Club is materially strengthened in securing their co-operation.

Entries for the Foreign Exhibitions were received from D. H. Brookins, John Chislett, Dwight A. Davis, Rudolf Eickemeyer, J. H. Field, Louis Fleckenstein. Sara W. Holm, B. F. Langland, Gertrude E. Man, W. and G. Parrish, W. W. Pearce, C. F. Potter, Jr., Robert Rhone, G. H. Scheer, L. D. Sweet, C. E. Townsend, R. E. Weeks, Dr. Walter Winchester, W. F. Zierath and W. H. Zerbe, Jr.

Selections are to be made by the Salon Committee for the R. P. S. (London) Sept. 19th to Oct. 26th, and other important exhibitions later.

If any members have not sent in their dues for the coming year, let this be a gentle reminder that a successful Club can only be maintained thru promptness on the financial side, combined with hard work and study on the art side. Our treasurer is particularly interested in the former matter at this time. The Club year began July first, at which date dues were in order.

During the visit of Messrs. Fleckenstein and Chislett to this city, portraits were made of them at the Sweet studio. Mr. Zerbe sends a portrait of himself, and we are thus enabled to present herewith the faces of our Director and Salon Committee. All our members will be glad to see these officers who are taking an active interest in Club matters.



MR. WM. H. ZERBE, Jr. A Self-Portrait.



National Association of

Amateur Photographers

Founded July 27, 1904 at the Louisiana Purchase Exposition St. Louis, Mo.

OFFICIAL ORGAN WESTERN CAMERA NOTES.

OFFICERS.

Stanley Mythaler, Washburn, Iowa, President.

C. B. Bolles, Aberdeen, S. D., 1st Vice President.

J. Howard Frick, Philadelphia, Pa., 2nd Vice-President.

Francis S. Ives, St. Louis, Mo., 3rd Vice President.

Harry Noerteman, Box 567, St. Louis,

Mo., Secretary. E. Theo. Beiser, St. Louis, Mo., Treasurer.

Association News Notes.

We help and assist our members in many ways, to secure the best results obtainable in their photographic work.

We maintain a pictorial library of all prize winning prints made by members of this Association.

We afford our members a medium of exchanging their prints, photo post cards and lantern slides through our Official Organ and circulating albums.

The Secretary will route a new circulating album each month or as soon as enough prints are received to fill one. In this way the members can see each others prints, learn their methods of work and criticise both on a separate sheet provided for that purpose, thus gaining much valuable information.

The Annual Convention, Election and Print Competition is held at a stated time and place. The selection of officers and the next convention seat is made by a sealed ballot of all members, both present and absent, during the annual convention.

The holder of a prize certificate awarded by the Judges at one of our annual competitions, has the honor and distinction of producing the First, Second or Third best Photograph made that year in the class mentioned, by any Amateur Photographer in the United States.

Our Official Organ, one of the best Photopraphic Magazines published, is sent free each month to all members, giving the Association news, what the members are doing in photography, route of circulating albums, new members joining the past month, news (f local Association meeting, annual convention and election, rules and results of the annual National competition, personal items and other news of interest to Association members.

On account of the limited time the results of the 3rd Annual Convention of this Association can not reach our members until the Sept. issue—when a full report of everything pertaining to the convention, election and print competition will be published in the National Association Number of the Magazine.



A Decorative Panel.

By David Blount.

From "The Complete Photographer."



OUR COMPETITIONS

Owing to the lack of new entries in the June print contest, which was a continued subject from some months ago, we are forced to acknowledge complete defeat in the attempt to call out examples of work in the carbon

process.

If we receive a sufficient number of requests to have this subject again announced, backed up with promises of support, we will place it on the list for one of the winter months, otherwise it will be dropped.

An insufficient number of entries in the June literary competition made it necessary to hold over for July the two manuscripts received. These, with July entries received up to date of going to press, assure us of a contest for

July.

The picture postcard business is stupendous —it is growing and will continue to grow. The view postcard is not a fad or passing fancy, it has come to stay and is as permenent as the postage stamp that carries it through the mails. The postal authorities quickly recognized the immense increase in revenue to be derived—hence every nation thruout the world is encouraging the use of picture postcards and have granted most liberal privi-The American Photocolortype Company, Chicago, makes the most beautiful cards ever produced in form complying with latest postal regulations. See their advertisement in this paper today.

Non-Slipping Printing Frame.

This printing frame is supplied with a nonslipping device so that when the print is placed in the frame with negative it remains stationary and avoids all possibility of any slipping, a complaint that has been made many times

against printing frames.

The specimen frame sent us by the manufac-turers Geo. Murphy, Inc., of New York, cer-tainly shows that the problem of a perfert printing frame has been solved. It will pay one to specify this new frame when buying. Circulars and prices can be had of the makers on request.

"The printed words on picture postcards-'This side for the address only -has been inoperative since twelve o'clock on the night of February 28, 1907."—Harper's Weekly. postcards offered for sale that are not provided with space on the address side for messages or advertising, are out of date. The American Photocolortype Company, Chicago, make the correct kind. See advertisement in this paper today.



Art Principles in Portrait Photography.

The above title has been given to what is, without doubt, the most important work on photographic portraiture yet published. The photographic portraiture yet published. The author is the well known artist, Otto Walker Beck, who has delivered his illustrated lectures at the photographer's conventions for several years past, and has exerted an immense influence in getting professional work upon the

high artistic plane it today occupies.

Mr. Beck has made a special study of his subject, having become interested some years ago in seeing what might be accomplished by the application of the artist's training and knowledge to the "cut-and-dried" photography of that time. His results have proved a revelation to hundreds of photographers who have heard his lectures and now the whole thing is summed up in a volume of 244 pages, well illustrated, and is within reach of all. An opportunity is presented, by a study of this work, for any serious worker to make more progress in artistic portraiture in a year or six months' time than could be made in many years of unaided effort. It is a most valuable contribution to photographic literature and should be in the possession of all who wish to make a

success of portraiture.

Pub. The Baker & Taylor Co., New York, price \$3.00, postage 22 cents. May be ordered

thru Western Camera Notes.

The Port of Missing Men.

The titles chosen by Meredith Nicholson for recent novels have created more than an ordinary degree of interest and comment. His latest, "The Port of Missing Men," certainly piques the curiosity of the reader and gives one at once a desire to know all about this evidently mysterious haven.

While the title in this case is a little misleading, the story is a good one, nevertheless; just the kind of tale to keep one wide awake

on a sultry summer afternoon.

Mr. Nicholson introduces us to an intrigue connected with Austrian nobility, the scene opening at Geneva. His principal characters quickly shift to this country, where, in a Virginia mountain resort the action of the plot continues with unflagging interest.

A charming love story, of course, forms an accompanying motif and adds its complications to an already involved plot. The author skilfully takes us almost into his confi-



dence regarding the identity of his hero, but really never reveals it until near the close of his story.

One of the best things in current fiction. Pubs., Bobbs, Merrill Co., Indianapolis, price

Disinherited.

There is a dramatic quality about this novel by Stella M. During which at times ap-

proaches the tragic-

Not the tragedy of the superficial kind too often met with in modern fiction, but the deeper, silent tragedy of a real life, a life so changed in the making that a tragic end

seems the only fitting conclusion.
"Disinherited" is a story that holds the reader's interest altho almost revellant at times in the character of the author's "lead-One is disappointed in her so ing lady." often when expecting her to do the right thing and seeing her choose the wrong.

This is a story that reaches "deeper down" than the average novel, one that deals with a life problem which seldom appears in either fiction or real life, but which is full of possibilities for a gifted novelist such as the au-

thor proves herself to be.

To gain an inheritance which was to go only to a male heir, a mother contrives to misrepresent the sex of her daughter, and gives the child the training and education which belongs to a boy. The final success of the plan is only thwarted by the child herself, who discovers the truth regarding her sex, and repudiates her mother's scheme.

A thoroly interesting plot, skilfully handled. Pubs., J. B. Lippincott Co., Phila., Pa., price

\$150.

* * * The Mayor's Wife.

Anna Katherine Green has written many a story of absorbing interest but has rarely equalled "The Mayor's Wife," in mystery of plot and skill in untangling its threads.

We have in her latest novel all the exciting experiences of life in an apparently truly "haunted" house, a life which so preyed upon the nerves of its occupant, the Mayor's wife, as to nearly cause her undoing. manner in which the "hauntings" were finally traced to natural and human sources and, incidentally a life's history and tragedy revealed in the tracing, is told in the author's well known style and makes one of the best

stories of the season.

The name of Anna Katherine Green has become so well known that it stands as a guarantee of a good plot, and plenty of mystery, and the announcement of a new book by this author is sufficient to create wide-spread interest on the part of the reading

public.

Bobbs-Merrill Co., Indianapolis, price \$1.50.

Pubs.,

Photographic Lenses.

The new Bausch & Lomb catalogue of photographic lenses has been received, and is a book which will compare favorably with their former catalogues in artistic merit and good arrangement of contents.

The frontispiece is a fine example of color engraving, being a copy of a famous painting in which work the Apochromatic Tessar lens and B. & L. Precision Ray Filters were used. Other illustrations througt the catalogue pressent examples of high class lens work and are most interesting to the camera worker.

Altho the book is a beautiful and expensive piece of work, the Bausch & Lomb Co. offer to send a copy free on request to any of our readers. You are invited by them to send in your name for their monthly magazine "The Prism" which is also sent free. These publications are worth having, so just mention Western Camera Notes and tell the B. & L. Co. to put you on the list.

The picture postcard business-which is as yet in its infancy in America-has come to stay. "The Universial Postal Convention at Rome last vear endorsed the picture postcard as an aid to business and provided special regulations for their universal admission to the mails of the world. The American Photocolortype Company, Chicago, make the latest and only correct styles with space on the address side for messages or advertising (one cent postage). All other kinds are out of date. See their advertisement in this paper today.

"Defender."

This simple legend on the cover of a neat booklet, together with an appropriate illustration, is the outer coating of a well gotten-up catalogue of the Defender products.

A novel idea is the binding in of two prints made in one piece of Argo buff paper and so placed that they come just inside either

The Defender Co. are now making a very complete line of papers, plates, and chemical preparations and thru their branch houses in many of the large cities can supply anything and everything needed in photography.

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Every scene and object which makes a locality attractive, historic or noteworthy, should be reproduced for general circulation on picture postcards. Enterprising men are making fortunes catering to the demand for local views-even in the smallest villages. American Photocolortype Company, Chicago, can furnish the postcards ready to send out or sell in ten days from receipt of copy, description and order. See their advertisement in this paper today.



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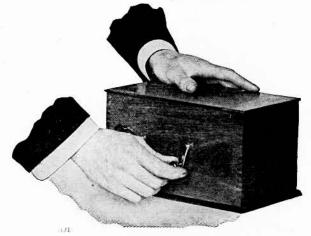
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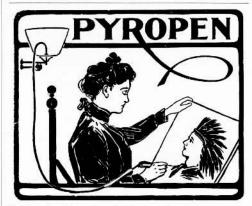
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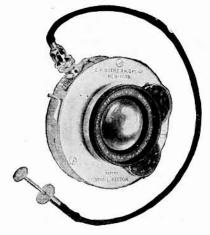
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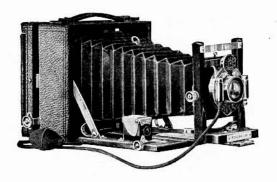
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