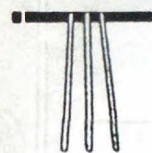


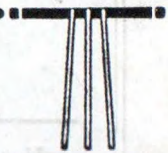
ABEL'S



PHOTOGRAPHIC



WEEKLY



'Entered as second-class matter June 10, 1909, at the Post Office at Cleveland, O., under the Act of March 3, 1879'

Vol. XXI. No. 523

SATURDAY, JANUARY 5, 1918

Price Five Cents
\$2.00 a year

Watch the work of the man
who uses

ARTURA

EASTMAN KODAK COMPANY
ROCHESTER, N. Y.

All Dealers'.

This issue of Abel's goes to 2334 interested *subscribers*—all owners of studios, professional dealers or traveling men and demonstrators

Combat the shortening days by use of HAMMER PLATES

They give results where others fail

Hammer's Special Extra Fast (red label) and Extra Fast (blue label) Plates for field and studio work and

Hammer's Extra Fast Orthochromatic and D. C. Orthochromatic Plates for color-values.



Hammer's little book, "A Short Talk on Negative Making," mailed free

Hammer Dry-Plate Company

Ohio Avenue and Miami St.

☎

☎

☎

St. Louis, Mo.



photo by A. J. Tessier

For speed work no lens can compare with the Tessar lens. If the object is moving fast and you are forced to use a high shutter exposure, the large diameter of the Tessar passes three times as much light as an ordinary camera lens.

For picture making on gray, gloomy days or late in the day, when the sun is waning, or in the house, where the light is always low in actinic power, the light-gathering power of the Tessar will be instantly appreciated.

New York
Washington

Bausch & Lomb Optical Co.
631 ST. PAUL STREET ROCHESTER, N.Y.

Leading American Makers of Microscopes, Projection Lanterns (Balopticons), Photographic and Ophthalmic Lenses, Stereo-Prism Binoculars and Other High-Grade Optical Products.

In Stormy Weather

In rain or shine, at noon or in the dusk, you can depend upon

Bausch^{and} Lomb

Tessar lens, F:4.5

Master of Speed and Light

The dark days of Winter demand a lens with speed. With the Tessar you can photograph a baby indoors, or the little family gatherings, or those intimate home portraits which are so valued in later years.

If you will write us for the little booklet "What Lens Shall I Buy?" you will have an insight into the possibilities of the Tessar and our other lenses. Our photographic departments are always at your service. If you have any photographic lens questions. Booklets sent free on application.

Chicago
San Francisco

ABEL'S PHOTOGRAPHIC WEEKLY

A JOURNAL FOR THE PROFESSIONAL PHOTOGRAPHER

Member of Audit Bureau of Circulations

JUAN C. ABEL, Editor — CHAS. L. ABEL, Associate Editor

Published Weekly at 401 Caxton Building, Cleveland, Ohio, by The Abel Publishing Company

VOL. XXI. No. 523

SATURDAY, JANUARY 5, 1917

PRICE FIVE CENTS
\$2.00 A YEAR

Terms: Two dollars a year in advance. Postage free to all subscribers in The United States, Mexico, Hawaii, Porto Rico and the Philippine Islands.

FOREIGN SUBSCRIPTIONS: Canada, \$2.50;

other countries, \$3.00 per year in advance. TO PREVENT loss or delay by mail, all communications and photographs should be addressed to Abel's Photographic Weekly, 401 Caxton Building, Cleveland, Ohio.

In Passing By

THE TEMPORARY PASSING OF AN INSTITUTION We don't hesitate to call it an Institution, for any activity which through a long series of years has shown an actual educational value and which has grown with each succeeding year until it has come to fill a place so distinctly its own that even its temporary disappearance causes, not inconvenience, in this case, but a feeling of some necessary thing missing, can rightfully be termed an Institution.

The Eastman School of Professional Photography is to be abandoned this year. That is the word sent out from Rochester. It has not been done away with or put into the category of activities which have served their purpose, but is withdrawn for the period of the war and for these reasons. An enormous amount of apparatus, five or six tons this last year, had to be moved promptly from city to city each week. Every square foot of transportation space is needed for the Government to keep food, supplies and munitions moving. The railroads have been taxed to their limit and beyond these past few months and it is only the right thing to do to curtail absolutely unnecessary freight shipments. In the same spirit the board of officers of the National Association were persuaded last year to abandon the National Convention. America is at war. The war has got to be won. Everyone must give way to the Government's needs in a successful prosecution of the war. And the School gives way in its turn. Photographers everywhere will miss the School and its splendid opportunities but it will be all the more welcome when it again makes its rounds, for the Eastman Company says that "After we win this war, the work of the School will be resumed."

MORE GREETINGS. Cards of good wishes and greetings are still coming to our desk. Since we wrote the last acknowledgments, we have received cards from—Mr. and Mrs. Frank Scott Clark of Detroit; Peter Hauenstein and Chas. C. Kastenzholz, heads of the Northern Photo. Supply Co. of Minneapolis, Minn.; Mr. and Mrs. C. W. Taylor with the

Hammer Dry Plate Co.; H. A. Collings (known as Joxie Collings) with the E. K. Co.; Mr. and Mrs. Melvin M. Sykes of Chicago; F. E. Abbott of Little Falls, N. Y., president of the New York State Society; Joseph Knaffl of Knoxville, Tenn.; J. B. Schriever of Scranton, Pa.; John F. Sherman of Newark, N. J.; Clifford Norton and Family of Cleveland; Joseph Kinn with the A. M. Collins Mfg. Co.; The Faber Studio of Norfolk, Va.; Wm. G. Rounds of Woodstock, Ont.; Louis Dworshak of Duluth; Belle Johnson of Monroe City, Mo., (a calendar bearing one of her celebrated kitten pictures); Mr. and Mrs. John Kennedy of Toronto; William Shewell Ellis of Philadelphia; Mr. and Mrs. Clarence Stearns of Rochester, Minn.; J. J. Flaherty, proprietor of the Johnston Studio of Pittsburgh; William H. Rau of Philadelphia; L. L. Higgason of Asheville; Ben R. Strauss of Kansas City; Mr. and Mrs. Joseph Shrader of Little Rock, Ark.; J. B. Gissy of Weston, W. Va.; Mr. and Mrs. Pirie MacDonald.

H. Essenhigh-Corke, F. R. P. S.

Author of our New Series Monthly Thought Rambles

This interesting story of Mr. Essenhigh-Corke, which has just appeared in the Professional Photographer, issued by Kodak Limited of London, is very timely, as the first article of Mr. Corke's series appears in this issue. In later issues we shall publish some of Mr. Corke's pictures so our readers may know that Mr. Corke is not only a good writer about matters photographic but also a first class photographer.—Editor.

MR. ESSENHIGH-CORKE of Sevenoaks belongs to the new school of professional photographers. He is one of the advanced men who refuse to accept the theory that a photograph is merely machine-made, and therefore must be cold and lifeless. Photography means more to him than a mechanical reproduction of the features of his sitter. His portraits are more than contour maps of human faces; they are full of character and personality. He is a man with big ideals. He believes that photography is becoming more and more recognized as an art, and that its scope is rapidly widening. He is not one of those who maintain that art spells ruin to the professional photographer, or that the public won't pay for anything that goes beyond the stereotyped methods of posing and lighting.

"I disagree with Mr. H. Walter Barnett when he declares that the photographer is simply the outcome of his environment," said Mr. Corke, "and I won't admit that the quality of his work is nearly always governed by the tastes of his customers. My experience has been all the other way. I am convinced that a photographer is the

architect of his own fortune, and that the quality of his work depends upon his own ability and the standard of his own taste.

"I wouldn't take it so seriously if this musty old fallacy had been trotted out by a professional whose ideals have been stifled in some ugly manufacturing town, where art has never been able to raise its head. But Mr. Barnett is at Hyde Park Corner! He has probably the most enviable spot for a studio in London if not in the world. When a man in his position suggests that the photographer must pander to the tastes of his customers, it is decidedly discouraging to the young enthusiast who is struggling to raise the standard of work.

"There are difficulties, I admit, in getting the public to appreciate really good photography. The difficulties in London, however, where the population is so large and includes so many people of taste, are nothing compared with the difficulties in a small town. There are fewer people here with any feeling for art; but, even if they all wanted portraiture of the highest merit, there wouldn't be enough to keep a photographer busy. One has to cater for a great deal of work outside the studio, animals, houses, groups, and a thousand other things. The work is honest, and very often just as difficult as taking portraits; but, however well it may be done, customers do not look upon it as evidence of artistic ability. The country photographer cannot afford to refuse work of any kind; he must tackle everything that comes his way. The London man can confine his efforts to the studio

and to his own particular style of portraiture. He can afford to—well, to swank, if such a word isn't forbidden in your pages.

"And remember, too," he continued, with a vigor which showed that he felt keenly about the subject "that we have to compete with the best men in London. We're within a short distance of town; and a large number of the residents, being season-ticket holders, have almost daily opportunities of being photographed by London firms.

"In a situation of this kind, the natural temptation is to cut prices, but no photographer could make a bigger mistake if he really wants to get a reputation for good work. Whatever his difficulties may be, it is downright folly for him to think that he can prevent wealthy people in his district from going to the nearest big town for their portraits. His only salvation lies in keeping up his dignity and in letting his customers see that he knows the value of his own work. It is hopeless to attempt to convince the people of his district that his portraits are worth four guineas a dozen so long as he sells them at twenty-five shillings. As soon as he gets his work up to the standard of work in larger towns, his prices should be only slightly lower than those charged for the best work in London."

It is quite natural to ask why a man like Mr. Corke, with a big reputation, should be content to settle in a small town like Sevenoaks. Does he like struggling with difficulties? When you get to know him, you soon realize that he is one of those men who find it hard to breathe when surrounded by the bricks and mortar of a large town. He is a student, a lover of nature, an enthusiastic botanist, and nothing that town life could give would be enough to tempt him from his beloved woods and fields around his native town. For a time botany was merely his hobby, but now it is part of his profession. His books and lectures on flowers have made his name as well known among horticulturists as his striking portraits had already made it known among photographers.

In fact, Mr. Essenhigh-Corke has linked botany and photography together. He stands well up in the front rank of Autochrome workers; all the illustrations in his books, and all the lantern slides used at his lectures, are his own work done in direct color photography. Perhaps his abilities may be indicated when it is stated that he is a fellow both of the Royal Photographic and the Royal Horticultural Societies, and

that he has been awarded the R.P.S. medal on two occasions—a few years ago for color photography, and this year for portraiture. His 1917 medal portrait is reproduced as the frontispiece to this number.

From all this you might conclude that Mr. Corke was an unpractical idealist. He can afford to smile at that description of his character because he is above all things intensely practical. He is, indeed an Admirable Crichton in his own way. Blessed with a gift for invention, his ingenuity finds an outlet in contriving devices for increasing efficiency and for saving space and labor.

"The saving of space is forced upon me," he said. "My premises are surrounded in such a way that they cannot be extended. I have therefore to see that not an inch of room is wasted. That's why I've put shelves along the top of my workroom, and used the spaces between the rafters for storing negatives. I couldn't spare a separate room for enlarging, and had to fit up my lantern in the dark-room. I hung the easel from the ceiling so that it could be pushed up out of the way when not in use. My printing machine, as you see, is also in the dark-room with the light outside. It is a contrivance of my own; the exposures are made by a treadle which works a roller blind in front of the little window. My copying rack is designed for saving both space and time. It is suspended from the roof of the work-room so that it can be swung out of the way when it is not in use. The camera is on a sliding platform with the distances marked on the side, and when I am copying, the easel is illuminated by two incandescent lamps. The light being constant, it is easy to work out the correct exposure every time. All these little things look very unimportant, but it's surprising what a lot of time and money they save in the course of a week."

There is evidence of the same ingenuity and love of order in the reception room. Specimens are all classified and kept in albums. One set of albums contains nothing but outdoor pictures, such as animals, houses, gardens and groups.

"I believe in being able to show specimens of every kind of photography I undertake," continued Mr. Corke. "I'm afraid many photographers neglect their outdoor work in this respect. It's bad business. When an architect wants photographs of an old building which he is going to pull down, or the manager of a factory wants views of

his works, or a farmer wants pictures of stock, I don't believe in having to hunt all over the place to find a few dusty old prints to let him see that I have really done this class of work."

Any photographer who is on the look-out for useful hints and practical dodges for the smooth working of his business, couldn't do better than run down to Sevenoaks and have a chat with Mr. Corke.

The versatility of the man is very striking. He is a rare combination of naturalist, student, artist, inventor and sound practi-

cal worker. A chat with his father very soon proves that many of the son's characteristics are family traits. Mr. Corke senior, who founded the business 37 years ago and retired in 1904, is a water-color painter with more than a local reputation. He didn't retire on account of age; he wanted to give his time to his art, and the exceptional success of his son in the business made this possible. Now, however, during the rush of work and the scarcity of labor, he is doing his bit by helping his son over a trying time.—*Prof. Photographer.*

Monthly Thought Rambles

BY H. ESSENHIGH-CORKE, F. R. P. S.

NOTE:—This series of monthly articles, at the request of the Editor of Abel's Photographic Weekly, will summarize the Author's ideas, with the ideas from which he has personally received help from others, and will deal with various matters concerning the subject of running a business, and Photographic Studio, catering to an all-round class of work. The more or less topical questions involved will be dealt with during the special month in which they are most likely to occur.



JANUARY *Sketch of H. Essenhigh-Corke F.R.P.S.*

AFTER the rush of work which the Christmas season brings with it and when the work for the New Year is commenced, it is a good plan to revise all that has happened during the past season, and to find out those points which will tend to better business and better working conditions during the coming months.

Undoubtedly to my mind the chief place where there is a continual need for new work, new ideas, and all-round improvement is the show case, or the shop window, and here I would add that after deep consideration in the past I have formed the opinion that where it is possible, as it usually is in a smaller town, the preference should always be given to a show window in place of a locked up show case. There is a great deal more in this apparently small matter than meets the eye, and there is far more scope to make an effective display in a window than a case. As it is presumed that the worker who will be

interested in these articles will cater to all kinds of work, I would further advise that two small windows, as a shop front, are better than one large one, as the work shown can then be more attractively placed and more than one kind of work can be on show at a time, whereas in a large window if the effect is to be "telling" and look good it is impossible to mix different styles.

As an instance of this I need only refer here to the "killing" effect that is produced if several specimens of a dark sepia kind of print are indiscriminately mixed with other specimens of a delicate sketch style, or perhaps as a more drastic example, the effect of a few really good portrait studies mixed with a selection of views of houses, animals, or some of the other work which one desires to display.

In order to make the specimens shown appear to their full value, then it is important to show only one kind at a time and even then only a few of them at once. Half a dozen good prints well displayed will "tell" far more than a dozen closely packed specimens.

The question as to whether the window specimens should be framed, or simply mounted prints, depends much upon local circumstances, but the fact cannot be denied that framed prints not only look better, but remain in better condition without getting grubby or spotted, for a much longer time. Then also, if the supply of frames is part of the general business there is scope for good advertising in this line, and what is perhaps of greater importance there is the chance to show clients how the particular styles of prints should be framed so as to help the general effect. Suitable framing also helps to minimize the "killing" effect of a mixed display, if it be imperative that such must at times be shown, as the frames help to isolate the varied styles of prints.

The majority of portraits which are now made are either printed out on large sheets of paper in the "sketch" style, or even if they are dark rich prints with dark backgrounds printed either in sepia or in black and white (awful term and out of date, "gray" sounds so much better) these are usually mounted upon large light mounts.

The vogue for several tints of dark art papers is past, and the day of dark mounts is closing, too, and photographers are beginning to understand that a really good photograph will stand by itself, and does not need an elaborate mount to help it off. Indeed, one of the foremost workers of the day has recently said that "a photograph that will not stand a pure white mount has something wrong with it." This is a broad statement but a true one, and in almost all cases that "something" wrong is simply in the tone values. Once get the tones correct and however the prints are mounted the effect will be right.

The use of large white or cream mounts makes the matter of suitable framing much more easy and almost all specimens can be framed with a narrow moulding of a dark brown or black color.

Indeed there is nothing nicer than a narrow black bead moulding, and this being the case it is a good plan to have several stock frames made in this pattern with easily removed backs, so that fresh specimens can be quickly inserted, and almost all the new specimens desired can be slipped into these.

As a change or as a less expensive venture a series of passe partout

frames can be employed and I have for some time past had a series of these in general use made after my own design.

Space does not permit of a description of these here, but I hope from time to time to contribute separate articles to these pages dealing with little matters of this sort individually.

Concerning the specimens themselves that are shown, portraits will, of course, be the most usual, and an effort should be made to show not only the better class and more expensive styles, but occasionally some of the smaller prints, so that the townspeople who have not so much money to spend can see that in addition to the highly priced work, cheaper kinds can be had if desired.

I would especially refer to the error of having one or two "good old stock" enlargements always on view; I mean the regular old things that one sees in so many windows of the local Clergyman, or of a child's head. I know these do not get out of date so far as the general new public are concerned and that as types of that kind of subject they may be quite good, but I do know that the local people of the town get heartily tired of seeing them so often and so long.

Get the minister to give you another sitting so that something different can be made if you must show him, and think of the young lady's feelings when she becomes engaged or married and passes your window where she still appears with her hair down. Surely with the present facilities for enlarging it is worth while to scrap these old things and show new ones.

Another point which is not given the attention it deserves is that an attempt should be made to keep the show cases and windows more or less topical in their contents, and during these colder months of the year more prominence should be given to such subjects as fancy dress portraits, flashlight groups, firelight effect portraits, and portraits of ladies in furs or winter costumes, snow views, and any other subjects that suggest the winter months rather than the summer. Of course, ordinary portraits of people in the studio can, and should, also be shown, but the simple fact of exhibiting these topical subjects will awake in people the suggestion and desire to be photographed.

One other vexed question is whether the prices should be shown in the windows; and I am of the opinion that, if it be well and artistically done, it is better to show people what they will be called upon to pay for the different styles. I do not mean that each photograph need necessarily be ticketed like a pound of tea or butter, although even this has its advantages, but it is a good plan to keep in the window some suggestion as to the prices asked, and this can take the form of a small label neatly typed or printed, stating that many different styles of portraits are made varying in price (according to the style, size, and other conditions) from "so much" to "so much" per dozen.

In conclusion for this month I would suggest that every effort should be made during the coming year to make a much greater and wider appeal through the medium of what is one of our best assets, the shop window or show case.

St. Paul, Minn. 1891

'TIS HERE—MAYBE!

George Holloway spread himself the week before Christmas, taking the whole front cover of the Saturday Spectator, a well known weekly published in Terre Haute. George advertised the Portrait Gift Certificate. Hope you got oodles of business from that ad., George.

The Binocular Department of the Crown Optical Co. of Rochester has been purchased by the Government. A couple of years ago this business was a small concern employing about sixty workmen, making cameras and motion picture lenses.

During the year the business grew so greatly owing to contracts with the British and U. S. Governments that over 550 men were employed and now the binocular department will be still further increased to take care of binoculars and other optical instruments needed by the navy and war departments.

In the British photo. journals, several of the larger advertisers, including Kodak Limited, are using their advertising space just now to boost the purchase of National War Bonds, issued by the British Government.

Once converted into a Thrift Stamp, that handcuffed quarter can only work for the Government and yourself. Just think that over.

The plant of the Rochester Photo Works, of which Dr. Shultz was president, makers of sensitized papers, was damaged to the extent of \$500 by fire the other day.

The business of Mabel Sykes, photographer, has been incorporated with a capital of \$5,000.

We weren't told to tell it, neither were we told not to tell it, but Frank Moore's friends will be interested to know that he committed marriage on Friday afternoon, December 28th. The bride is Miss Stein, who has been associated with Frank in the selling end of the studio. Frank is to be envied and we wish the happy couple all the best there is on earth.

It works while you sleep. The four per cent compound interest on your war savings certificates. You get \$5.00 for \$4.12.

The U. S. Food Administration Board has sent out some new food saving suggestions and the Food Saving Card which you received when you signed the pledge card should now read*:

ONE WHEATLESS day each week and one WHEATLESS MEAL each day; the wheatless day to be Wednesday. By wheatless we mean to eat no wheat product.

ONE MEATLESS day each week, which shall be Tuesday, and one meatless meal each day. By meatless we mean to eat no red meat—beef, pork, mutton, veal, lamb; no preserved meat—beef, bacon, ham or lard.

ONE PORKLESS day each week in addition to Tuesday, which shall be Saturday. By porkless we mean no fresh or salted pork, bacon, lard or ham.

SUGAR—You can materially reduce sugar by reducing the use of candy and sweet drinks. We will make every endeavor to see that the country is provided with a supply of household sugar on the basis of three pounds of sugar for each person per month. Do not consume more.

HUMAN FOODSTUFFS COMPRISE THREE PRINCIPAL ELEMENTS:

PROTEIN: Mainly present in meat, beans, fish, poultry, milk, and to some extent in grains.

FATS: That is, butter, cream, lard, bacon, margarine, cooking fats, beans, cotton seed oil and other vegetable oils.

CARBOHYDRATES: Grains, sugar, potatoes and other vegetables.

As a nation we eat and waste 80 per cent more protein than we require to maintain health. Therefore, we can reduce the amount of meat we eat without harm.

We eat and waste 240 per cent more fat than is necessary.

Of the carbohydrates we can just as well consume corn, oats and the other cereals as wheat and we have abundant supplies of potatoes and vegetables.

Do not limit your supplies of milk and table butter, but consume it all. Don't waste any.

You can reduce the consumption of fats by reducing pastry and fried foods.

Remember the gospel of the clean plate, the serving of small portions, the purchase of less supplies.

HOARDING.—Any person in the United States who buys more foodstuffs than he customarily keeps at home in peace times is defeating the Food Administration in its

purpose to secure a just distribution of food and in its great endeavors to reduce prices. The hoarding of food in households is not only unnecessary, as the Government is protecting the food supply of our people, but it is selfish and is a cause of high prices.

Mr. P. J. Hoffstad, for many years a prominent commercial photographer of Chicago, passed away on Dec. 26th, after a lingering illness.

Mr. Hoffstad was a prominent Mason, an active member of the Chicago Commercial Photographers Association, and other fraternities. The funeral was largely attended by the photographers of this city.

Mr. Hoffstad leaves a widow and seven children. Mr. Mangus Hoffstad will probably continue the business.

Phil B. Keeler, Ansco Company's Cyko demonstrator, who has been calling on the photographers in California for several years, has been commissioned a captain in the non-flying officers corps of the Air Section of the United States Army. He is now located at the U. S. A. School of Aeronautics, Squadron W, Ohio State University, Columbus, Ohio.

The Central Dry Plate Co. in Its New Quarters

AN event of real interest to the photographic fraternity is indicated by the announcement published the other day of the removal of the Central Dry Plate Company from St. Louis city to their new factory at Benavis.

The new factory is located at what was formerly known as Woodland, eight and a half miles from St. Louis and (it is interest-

ing to note) located on the exact ground formerly occupied by the M. A. Seed Dry Plate Company.

The new "Central" factory covers a ground area of almost nine acres and is built for and devoted exclusively to the manufacture of dry plates. Following closely the design and general lay out of the Seed Company, which formerly was located there no pains or expense have been spared to equip the building in the best and most modern manner for the work in view, i. e., the production of a definite and standardized product. All modern methods which would aid or assist in such production have been incorporated, and it is worthy of special note that not until every department in the new factory has been tested out in actual practical work was the order given to dismantle the old factory. So closely was the change co-related that we understand not one single day's work was lost. Coaters from the old place simply reported for work the next day at the new and resumed their usual occupation on the new machines; the same being true with the workers in all other departments.

It is the intention of the "Central" people to produce a complete line of photographic plates suited to every branch of the art. Special plates for color workers will receive particular attention as will also a complete line of color filters for all processes or methods.

A thoroughly equipped commercial research laboratory assures that no problem of general photographic interest will be neglected and that special requirements in any line will receive the consideration commensurate with their importance, while careful and intelligent supervision will at all times guarantee that the manufacturing departments will keep pace with proven scientific advances.

Focussing the Graflex

WHEN you look into the focussing hood of a Graflex camera, you see upon the focussing screen a brilliant image of the subject you wish to photograph—an image, right side up, the full size of the finished print.

As the focussing button is turned, moving the lens backward or forward, it will be seen that the sharpness of objects, situated at varying distances from the camera, will be affected.

When the lens is racked inward, objects at a distance from the camera will become

sharp, while nearby objects will lose sharpness. Inversely, when the lens is racked out from the camera, nearby objects will become sharp, and distant objects will lose sharpness. This effect is more pronounced with large lens apertures.

The use of large lens apertures, for initial focussing affords a brilliant illumination of the image upon the Graflex Focussing Screen, and serves as an aid in fixing the focus at a proper point in the composition.

The distance between the nearest and farthest object from the camera, in sharp

focus, is known as the Depth Focus, which is regulated by the three following factors:

1. Focal length of lens used.
2. Lens stop used.
3. Point of focus.

Depth of Focus *increases* as the focal length of lens and diameter of stop *decreases*. If three lenses, having focal lengths of $5\frac{1}{2}$, $6\frac{1}{2}$ and $7\frac{1}{2}$ inches, are stopped down to $f/8$ and focussed upon the same object, about 25 feet from the camera, the nearest and farthest points in focus will be about as follows:

- $5\frac{1}{2}$ in. lens, $f/8$, 18 ft.—41 ft.
 $6\frac{1}{2}$ in. lens, $f/8$, 19½ ft.—35 ft.
 $7\frac{1}{2}$ in. lens, $f/8$, 20½ ft.—32 ft.

This example shows that with each additional inch in the focal length of the lens, there is a relative loss in depth of focus. However, the depth of focus for each of the three lenses, focussed upon the same object, can be very nearly equalized by stopping down the lenses of greater focal length, one stop for every additional inch increase in the focal length. For example:

- $5\frac{1}{2}$ in. lens, $f/8$, 18 ft.—41½ ft.
 $5\frac{1}{2}$ in. lens, $f/8$, 18 ft.—41½ ft.
 $7\frac{1}{2}$ in. lens, $f/16$, 17½ ft.—43½ ft.

When focussing a lens upon a certain point in the composition, the area of sharpness runs *back* toward the camera about $2/5$ from the point of focus, and forward about $3/5$ beyond the point of focus. A lens should, therefore, be focussed upon a point located between the nearest and farthest objects which are to be rendered with equal sharpness. With the lens focussed upon the proper point in the composition, the diameter of the stop should be gradually decreased

until the required depth of focus is obtained.

The visible effect of stop manipulation upon the Graflex Focussing Screen makes it easily possible to accurately control Depth of Focus.

It is easily possible, when desirable, to obtain "fixed focus" results by shifting the point of focus to approximately 35 feet from the camera, and stopping the lens down to an aperture that will render a relative area of sharp definition with lenses of varying focal length.

- $5\frac{1}{2}$ in. lens, $f/11$, 20 ft.—148 ft.
 $6\frac{1}{2}$ in. lens, $f/16$, 19½ ft.—171 ft.
 $7\frac{1}{2}$ in. lens, $f/22$, 19 ft.—196 ft.

Still further reduction of the lens aperture will result in greater increase in the distance between the nearest and farthest object in focus.

Focussing upon a point very close to the camera results in a great loss in Depth of Focus. A lens of $5\frac{1}{2}$ in. focal length, stopped down to $f/8$, and focussed upon an object about 6 feet from the camera, will render very shallow depth of focus—approximately 65 to 79 inches. This area of sharpness can be increased in two ways: by stopping the lens down as previously explained, or by receding from the subject. In such cases a slight reduction in the diameter of the lens stop, and a single backward step, might easily produce the required result upon the focussing screen.

It is inadvisable, under average conditions, to use a smaller lens stop than necessary to render the required Depth of Focus, thereby gaining the advantage of better illumination of the shadow portions of the composition, and the ability to use normal Focal Plane Shutter speeds.

Bloom on Negatives, Transparencies and Prints

SOME little time ago we had occasion to search through a number of old negatives for a particular one that happened to be wanted, and in the course of the search came across a very great number of examples of that annoying trouble which is best described as "bloom." This takes somewhat different forms, being in some cases a whitish deposit like the bloom which is admired on a ripe peach. In other cases it looks more like a tarnish, while it often assumes a silvery sheen and sometimes shows colors. Its appearance leaves little doubt as to what it is in the majority of cases. Nothing but a sulphide would be likely to produce such effects, but the cause is a little more obscure. If, however, we

have a sufficiently varied number of examples, and know their history, it is not impossible to arrive at a clue.

The facts that we have been able to collect are as follows: The effect is to be met with in negatives, bromide prints, lantern slides, and uranium-toned bromide prints, and occasionally, under special, well defined conditions, is seen in sulphide-toned prints. In the case of negatives, varnishing is an absolute preventive, but unvarnished negatives frequently show bloom, even when kept boxed, if the storing place is in the least degree damp, while its appearance is almost inevitable and fairly rapid if a negative is left exposed for a few weeks to the atmosphere of a dark room,

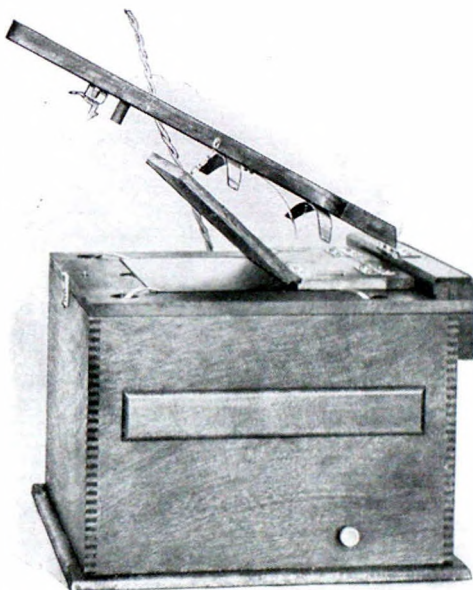
especially a gaslighted one. While boxed negatives may be safe for some years, a few weeks will be enough to produce the effect if the negative is exposed.

In the case of lantern slides the effect is rare, unless an unboxed slide is left exposed for some time. Boxed and finished slides very seldom show it, though they may develop other defects of a peculiar kind, due to their frequent exposure to intense heat. With bromide prints, again, the effect is somewhat uncommon, and we have only met with it in prints that have been framed and exposed to light for a very long time. On uranium-toned prints it is not only common but may be considered inevitable, some time or another, if they are not varnished, and we are not possessed of any proof that even this precaution is a perfect prevention, though if the bloom, having once appeared, is removed, and the print is then varnished, we have never known the defect to recur. The incidental fact that the bloom can be removed is a rather important one, for it shows that the effect is quite superficial. In sulphide-toned prints the bloom sometimes appears on very dense parts of the image, when, so far as we can tell, all the solutions, etc., are in perfect order, while, and this is a very suggestive fact, it can always be produced on such a print by using a strong and stale sulphide bath which contains more than a certain proportion of hypo. All these various items of evidence point to one thing, namely, that the effect is due to light or atmospheric fumes, or the two together, acting on a silver salt of some kind, a certain degree of dampness accelerating the effect. In the case of uranium-toned prints we know that such a salt exists, for the toning naturally tends to produce silver ferrocyanide, while the process, as ordinarily conducted, includes nothing at all likely to remove this compound. It can be removed by various solvents or fixing baths, and in that case the appearance of the bloom is certainly delayed, if not prevented altogether. Such extra baths, however, generally alter the color to such an extent that people do not like using them. Again, in the case of a stale sulphiding bath, we know that hypo exists, and if there is enough of it, is capable of dissolving the silver bromide or chloride image upon which we are working, the result being an immediate deposit of silver sulphide on the surface of the film. In both these cases the existence of silver compound is certain, but in the case of an ordinary negative or plain untuned image the reason of its existence is not so apparent.

If we consider all the details of the pro-

cedure to which the untuned image is subjected, it would seem that there is only one possible source of a superfluous silver compound, and that is the fixing bath, which, while it is acting, is itself a solution of silver in the form of thiosulphate. The effects of imperfect fixing are often dwelt upon. We are constantly being told of the existence of several thiosulphates, one of which is insoluble in water and can only be removed by the continued action of hypo. But the effects of ordinary faulty fixing are usually fairly obvious and fairly quick. If this is the fault it does not need years to provide the evidence. In a very short time we can see that the image is spoilt, and, further, that the defect is by no means superficial and removable, but, on the other hand, is quite incurable. All the same, there is nothing but imperfect fixing to which we can attribute the trouble of bloom, and the phenomenon suggests to us that quite perfect fixing is an ideal condition that cannot be attained by ordinary methods of working. We know that to remove the hypo from a plate by washing requires repeated soakings in fresh lots of water, and that even after several such soakings a very minute proportion of hypo still remains. Too little to matter, but just enough to be detectable by a very delicate test. In the same fashion it would appear that the complete removal of all silver thiosulphates from the film should require several separate soakings in fresh hypo solution, but generally a plate has only one, and we believe never more than two. The inference is that practically every silver image contains in its film minute traces of silver salts liable to be affected by favorable conditions of moisture, light, and atmosphere. When a silver spoon shows tarnish, as it will do very readily, that effect is due to the formation of silver sulphide. But, even though the spoon may be deeply discolored all over, the actual amount of metal silver that is turned into sulphide is inconceivably minute and practically unmeasurable. In the silver image as ordinarily produced, and after taking all the usual precautions, it is not only possible, but likely, that there is relatively quite as much silver left in the form of unremoved thiosulphate as is affected on the tarnished spoon, and if we consider the thickness of the gelatine film it is probable that there is much more altogether. Any that exists in the interior of the film is, however, protected from outside influences; hence bloom only appears on the surface, for which reason it is readily removed. Baskett's reducer very quickly fetches it off. We have also removed it very

*A convenience
and an economy
for the
printing room.*



The No. 1 Eastman Printer

If you use a large printer for large work, you need the No. 1 Eastman Printer for small work. It is a thoroughly, practical professional printer for all sizes of negatives up to and including 5 x 7. As it burns but two 60 Watt lamps it is economical to operate. Milled head screws permit the lamps to be adjusted to any position, a red lamp furnishes a safe light for adjustment of paper on negatives and an opening on one side of the printer permits a ground glass to be inserted for diffusing the light.

The printer is operated by a hand lever which locks and automatically switches on the lights when contact is made. The printing opening is 8 x 8 inches, the box is strong and substantial.

The price with red lamp, electric cord and plug to fit
any ordinary electric socket, ... \$10.00.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

At your dealer's.

effectively with soap and water applied with a pad of wool, while a dry bromide print can often be cleaned quite perfectly with hard Indiarubber. As pointed out in the case of sulphide toning, the bloom is often more obvious on, and sometimes is confined to, the denser parts of the image, which is just where any silver thiosulphate compound is likely to be retained in the greatest quantity. In bound lantern slides the effect is uncommon, just because the slides are bound, and therefore more or less well protected from the atmosphere. Moreover, they are usually kept shut up in boxes away from the light, and also in a dry place to preserve their binding strips. Still more, they are very thoroughly dried at intervals by being used in the lantern. Bromide prints again are usually kept well protected, and in the few cases we have known of bloom it is quite possible that the fixing was just a little less perfect than usual. But also bromide prints are very often treated to clearing baths, and these may have some effect on the residual silver compounds. In fact, it would appear certain that they must have some effect, though what, is uncertain. Here we may draw attention to another point not

yet mentioned, and that is that we have seen no sign of bloom on any negatives that have been reduced. Such negatives can nearly always be identified by their somewhat shiny surface, and their immunity not only affords confirmatory evidence of the truth of the theory of the cause of bloom, but suggests the advantage of using an extremely weak Farmer reducer as a form of clearing bath. In point of fact, such a bath is often used with positives, and this may in some measure account for their apparent freedom from bloom.

Possibly, however, the most important conclusion to which we can arrive is the benefit of varnishing. Some years ago this was an operation no ordinarily careful photographer neglected; nowadays it appears to be one that only extraordinarily careful ones carry out. There is, however, no doubt whatever that it is an extremely important one. With good dry storage there is, perhaps, little fear of bloom on unvarnished negatives, but we cannot always ensure that ideal storage conditions are fulfilled, whereas the simple conditions of varnishing makes things certain even under most adverse conditions.—*B. J. of P.*

Our Smokes for Sammies Subscription Campaign

HERE is the second list of names, made up ten days before you read this, of those of our readers who have sent in their subscriptions at this time so as to be able to participate in our offer to send a box of smokes to some Sammy "Over There" for each subscription sent to us. Each box contains enough smoking material, tobacco, cigarettes, etc., to last a week and besides, a post card bearing the name of the donor, so that the Sammy getting the box can send back a reply from the front.

These boxes of smokes are really tremendously appreciated by the boys "Over There." Good American tobacco is very hard to get in France and as this little friendly gift costs our readers absolutely nothing, outside of the regular subscription price and a little time to "do it now," we trust that a big lot of our readers will still take advantage of this plan to do their "bit." Notice that several have sent in more than one year's subscription. The Gerhard Sisters today sent in a five years' subscription so that their name will appear on the cards in five boxes of smokes and gladden

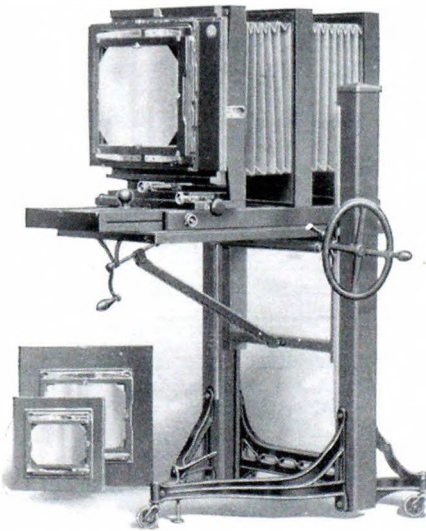
the hearts of five boys at the front. Frank E. Greene, in sending his subscription enclosed an extra amount which was to be used exclusively for smokes so his name goes into seven boxes. We are going to keep this campaign open another week or two and we hope to be able to publish lots more names yet.

C. B. Dakin, New Berlin, N. Y.	E. C. Bovee, Quincy, Mich.
Miss Addie N. Harthan, Worcester, Mass.	Otto A. Vent, Upper Sandusky, Ohio.
Mrs. W. H. Garrett, Omaha, Nebr.	Miss G. S. Locher, Tompkinsville, N. Y.
W. H. Curtin, Utica, N. Y. (2 packages).	Henry L. Osborn, New London, Conn.
Morrall-Hoole Studios, Rochester, N. Y.	Samuel Rabinowitz, Brooklyn, N. Y.
C. L. Myers, Gen. Del. Buffalo, N. Y.	Howard M. Wood, New Bedford, Mass.
O. R. Keil, Milbank, S. Dak.	E. W. Mahaney, Chicago, Ill.
G. W. Kramer, Blacon, N. Y.	Chas. A. Sparleder, St. Louis, Mo.
The Paeszler Studio, Ada, Ohio.	W. P. Greene, Muskogee, Okla.
H. S. Killgore, Eldon, Mo.	R. V. Wagner, Sand Point, Idaho.
Mayo Clinic, Rochester, Minn.	Miss Clara Barton Drew, Ansonia, Conn.
I. N. Townsley, Pauls Valley, Okla.	James E. Meehan, East Douglas, Mass.
Hubert Bros., Buffalo, N. Y. (2 packages).	F. P. Fox, Ambrose, N. Dak.

*The rapidity, smoothness, and precision afforded
in the operation of*

Century Studio Apparatus

are valuable requisites in every progressive studio



Portrait film or Plates may be used in the Double View Holders which fit the 11 x 14, 8 x 10, or 5 x 7 reversible, spring actuated Ground Glass Adapter Backs, interchangeably attached to the sliding carriage.

The operator can make full sized negatives, or by the use of diaphragms and lateral movement of the sliding carriage, two 7 x 11 negatives on the same plate with the 11 x 14 back, or two 5 x 8 negatives with the 8 x 10 back.

The platform of the Semi-Centennial Stand, with camera in position, can be quickly and easily elevated to a height of 49 inches, or lowered to within 14 inches of the floor, and locked in any desirable position.

Send for Professional Catalog

CENTURY CAMERA DEPARTMENT

EASTMAN KODAK COMPANY

ROCHESTER, N. Y.

- Tooker Latting, New York City.
 E. E. Reynolds, Rutland, Vt.
 Miss T. A. Jarvis, Calumet, Mich.
 Wm. F. Gable & Co., Photographic Studio, Altoona, Pa.
 G. J. Weaver, Cleveland, Ohio.
 Harry M. Chang, Oakland, Calif.
 Lawrence Smith, Erie, Pa.
 E. Abbott, Little Falls, N. Y.
 E. P. Griffith, Newport News, Va.
 Geo. F. Coan, St. Paul, Minn.
 G. W. Barton, Troy, O.
 Charles Burrows, New York City.
 C. W. Clauser, Newton, Iowa.
 E. L. Bullock, Hazelton, Pa.
 F. Richter, Wenatchee, Wash.
 H. B. Cale, Lynden, Wash.
 Frank E. Green, Tecopa, Inyo Co., Calif. (7 packages).
 Wm. H. Ridings, Methuen, Mass.
 F. L. Gibbs, Hudson, Mass. (2 packages).
 Young & Carl, Cincinnati, Ohio.
 O. C. Henry, Pittsburgh, Pa.
 C. S. Bateham, Norwalk, Ohio.
 S. H. Stumpf, Tonawanda, N. Y.
 J. B. Nelson, Austin, Minn.
 C. Tomlinson, East Aurora, N. Y.
 C. E. Shorey, Battleboro, Vt.
 E. Anderson, Bryant, S. Dak.
 G. Kramer, Buffalo, N. Y.
 A. J. Cunningham, Utica, N. Y.
 Boris Scheinin, Baltimore, Md.
 Irwin A. Becker, care Michael Reese Hosp. Chicago, Ill.
 Mrs. Harry L. Sherman, Poultney, Vt.
 A. J. McKenna, Los Angeles, Calif.
 G. H. Gifford, Fayette, O.
 Geo. E. Capwell, Cottonwood Falls, Kans.
 J. B. Gissy, Weston, W. Va.
 Albert Koukalik, Chicago, Ill.
 H. P. Stoner, Ft. Dodge, Iowa.
 J. T. Aitken, San Jose, Calif.
 Royal Studio, Wilmington, Del.
 Ben Larrimer, Marion, Ind.
 B. A. Whitney, Little Valley, N. Y.
 W. Manewal, Hoboken, N. J.
 John C. Beck, Corry, Pa.
 J. M. Maurer, Galveston, Texas.
 L. F. Dworshak, Duluth, Minn.
 F. C. Schroeder, Kenosha, Wisc. (3 p'kgs).
 Harry A. Wallace, Cincinnati, O.
 B. Bromberg, New York City.
 D. E. Runtun, Sheffield, Iowa.
 L. E. Westberg, Duluth, Minn.
 Frank W. Ouradnik, Owatonna, Minn. (2 p'kgs).
 Gerhard Sisters, Olive St., St. Louis, Mo. (5 packages).
 W. Neal Walden, Evansville, Ind.
 Ray's Studio, Burke, S. Dak.
 Hanson Studio, Montevideo, Minn.
 Elias Goldensky, Philadelphia, Pa.
 W. J. Hosett, St. Paul, Minn.
 Mrs. M. E. McGill, Central City, Nebr.
 D. D. Spellman, Detroit, Mich.
 H. Crosby Ferris, Denver, Colo.
 E. R. Bliss, Jr., Chicago, Ill.

In Answer to Mr. R. E. Ford

(Who criticized the publication of Mr. Hantz's picture)

I CANNOT agree with your views. The pictures published are not necessarily a standard of high grade work and I am sure that Mr. Abel does not consider them as such.

A Standard in photographic work does not exist. Photography is an artistic profession—you can make any pose, any composition, any light effect, and if it is good, it maintains a standard of its own. You can break all existing art rules and still have a high standard.

I recall the following, which I read some-

Bargain List No. 20

You will exclaim at the low prices quoted in our latest list. Everything in cameras and lenses at lowest prices. We buy, sell and exchange the highest grade of foreign and domestic cameras, lenses and equipment. Headquarters for Cyko and all other photographic papers, plates, etc.

Write for a free copy today

New York Camera Exchange
109 Fulton St., New York

Special Materials Company

Manufacturing Chemists, Importers

Office: 15 East 26th Street :: New York City

Specializing in

Rare Metals and Salts Photographic Chemicals

Methylparamidophenol-Sulphate

Paramidophenol - Hydrochloride

Paramidophenol-Sulphate Methylol

Methylol-Quin Diamidophenol

Sold only through Exporters, Manufacturers and Dealers.

Prices and samples on application.

Liberal samples sent to photographers giving names of Stock Houses through whom they purchase goods.

"CALCARD MOUNTINGS"

ARE MADE BY

CALIFORNIA CARD MFG COMPANY

SAN FRANCISCO, CALIFORNIA

STYLE

QUALITY

WORKMANSHIP

"CALCARD MOUNTINGS" stand for "EXCLUSIVENESS"

**EASTERN
REPRESENTATIVES**

M. M. FREY - - Le Moyne Bldg., 180 N. Wabash Ave., CHICAGO, ILL.
 H. L. BURD - - - 3735 Grand Central Terminal, NEW YORK, N. Y.
 W. A. LEONARD - 3735 Grand Central Terminal, NEW YORK, N. Y.

Three Books You Need

Practical Studio Advertising

By the Abels

A complete advertising campaign for you for the coming year. One hundred advertisements, all new and original, ready set up for use, together with circular letters, reading notices, and many other valuable suggestions for printed advertising matter.

\$2.00
Per Copy
Post-paid

The Balance of Light and Shade in Portraiture

By Wm. H. Towles

46 pages, profusely illustrated, bound in cloth. Contains the substance of Mr. Towles' well known lecture before many conventions.

A valuable addition to your library, and a book that though small, has received most favorable comments from the photographic press of this country and England.

\$1.50
Per Copy
Post-paid

Croughton's New Book on Coloring

FINISHING PRINTS IN BLACK AND
WHITE, AND COLORS

THE ESSENTIALS OF RETOUCHING

PRICE \$1.50

For Sale by All Dealers or from the Publishers

Abel Publishing Company

401 Caxton Building

Cleveland, Ohio

where. One of Rembrandt's pupils asked him how to make an artistic portrait and the Master answered—Make the right light effect, put the right color value on the right place, that is all—but how long an experience this would take, the Master did not say.

So, Mr. Ford, if you are looking for instructive examples of what might be termed "standard," go in your vacation (as I do) to New York and visit the Metropolitan Art Museum. *There* is your standard, or drop into Garo's place in Boston.

I am a foreigner and an employe in a very good studio. I have examples of work of my own perhaps better than any ever published in Mr. Abel's Weekly, but I do not seek to have them published. Many good photographers like them and that is good enough for me.

J. A. GROEN,
Albany, N. Y.

Just a word to you, Mr. Editor, in regard to the article so kindly sent in by Mr. R. E. Ford.

THERE are some people who don't like to vary from the Old School, and the Old School is a grand Institution at that and there are some who like to do things in their own way and I like to see such. In following the Old School one is merely a copyist. In following one's own inclinations, yet at the same time trying to produce their very best efforts, shows to the whole world that that individual is at least thinking, hence, learning something. I am not here to judge Mr. Hintz nor his class of portraiture. There is too much connected with the preparation, the getting together of all the parts before the bulb was pressed that I don't know anything about. Neither do I care to judge Mr. Ford. But to me, of the two, Mr. Hintz and his photograph and Mr. Ford and his article, I choose the former. Mr. Hintz has thought out something. It's his own. He hasn't offered it for sale. With

all due respect to Abel's Weekly (and it's my Pet Magazine) I have seen Portraits in it I don't like and I don't feel that I am buying them. There is enough other good matter in *every* issue that more than pays the small subscription price. Mr. Hintz wasn't thinking of us other fellows when he produced this composition.

Would that there were more of us photographers who would try as hard as Mr. Hintz evidently has to produce something out of the ordinary.

How it must hurt to criticise so harshly as has been done in the issue of December 22nd. We are all Brothers and Sisters—one Big Family of Photographers and because one can't produce the same kind of work as another and "get by with it" we shouldn't say such spiteful things.

RAY LEWIS.

Bottles which contain retouching medium very soon become sticky, unless the necks are carefully wiped every time a portion of the liquid is poured out. Wiping, however, is likely to be forgotten when a bottle is used twenty or thirty times a day. Here is a good dodge for avoiding the trouble. Don't use a bottle at all; use a sewing-machine oil can, and apply the medium by dropping it on the plate in the same way as you would drop oil into the machine.

RETOUCHING

I respectfully solicit the work of a few good studios. Conscientious work, prompt delivery, reference "Abel's".

MURRAY 98 Lonsdale Road
BUFFALO, N. Y.

LOOKING FOR BARGAINS?

THEN SEND AT ONCE FOR A FREE COPY OF OUR
BARGAIN BOOK and CATALOGUE

in which you will find listed hundreds of used and new Cameras, Kodaks, Lenses and supplies of every description at remarkable saving prices.

Every item sold is backed by our

**10-DAY FREE TRIAL GUARANTEE OR
MONEY BACK IF UNSATISFACTORY**

If you have a Camera or Lens and you wish to trade same for some other, consult us, as we may have just the outfit you want.

CENTRAL CAMERA CO.

124 S. Wabash Ave., Dept. A-W-1, Chicago, Ill.

HALLDORSON PORTRAIT FLASH LAMPS

Write for full information today

The Halldorson Company
1770 WILSON AVE. CHICAGO

**The ONLY
SILENT
STUDIO
SHUTTER**

**CONLEY
CAMERA CO.**
Rochester, MINNESOTA

**FOR SALE BY
ALL DEALERS**

In the Test Laboratories of All
Other Dry Plate Manufacturers

CRAMER CROWN PLATES

MAY ALWAYS BE FOUND: **WHY—
THINK IT OVER**

FOR OVER THIRTY YEARS
AMERICA'S STANDARD PORTRAIT PLATE

G. CRAMER DRY PLATE CO.

NEW YORK

ST. LOUIS

CHICAGO

SELL LARGE PORTRAITS
AND MAKE MORE
MONEY

H. D. BRIDLE

THE PHOTO-ENLARGER

1034 Arch Street Philadelphia, Pa.
Over 20 years at the same address

CLARK & FREED

Quality Enlargements
Write for Booklet

4 East 8th St. NEW YORK CITY

THE WELCOME ASSISTANT

to the advanced Studio man is **Blum's Photo Art Shop**, the only studio of its kind in America. —Write for Booklet Four today and hear all about Luminous Portraiture, Porcelain miniatures, Ivories, high-class Water Colors, Sepias, Oilpaintings on canvas, Bichromate Art Work, Gums, Carbons, etc., etc. — Be different from yesterday and the "other fellow."



EDUARD BLUM

The Photo Art Shop in the
Service of the Profession

32 SO. WABASH AVE., CHICAGO

TARCOLE

TRADE MARK
REG. U. S. PAT. OFF.

A Photographic Developing
Agent

High Quality Economical

NOT a Metol product. NOT a substitute.
Proven by months of usage to be superior.
We ask you without comparison or prejudice
to try "Tarcole".

The low selling price is no criterion of the
high quality of Tarcole but merely an
added factor in its claim for attention from
all Photographers and Amateur Finishers.

One-Ounce Bottle . . .	\$0.75
Four-Ounce Bottle . . .	2.75
Eight-Ounce Bottle . . .	5.25
Sixteen-Ounce (1-lb) Bottle	10.00

Packed in original bottles by

The Chilcote-Sargent Co.

733-735 Prospect Ave.

Cleveland, Ohio

CLASSIFIED ADVERTISEMENTS

SITUATION WANTED: Under 30 words, two insertions, free; further insertions, 30c each; over 30 words, first two insertions, 30c each; further insertions, 50c.

HELP WANTED: 50c per insertion.

FOR RENT and MISCELLANEOUS: Under 30 words, 50c per insertion; over 30 words, \$1.00 per insertion.

STUDIOS FOR SALE: Under 50 words, \$1.00 per insertion; over 50 words, 2c per word.

If answers are to come in our care, add 10c to cover forwarding.

SITUATION WANTED

SITUATION WANTED: Permanent position by a good all-around man, experienced in operating, retouching, printing, working in back-grounds, enlarging and copying. Good habits and appearance. References furnished. Married. Salary 25. Address H., care of this journal. 1-5-6

SITUATION WANTED: Manager Home and Studio operator, also excellent retoucher, will be open for position by Feb. 1. Best of references; young, energetic. High-class studio only. Would consider managing branch studio. Address Samuel Sax, 11th and Peach Sts., Erie, Pa. 1-5-3

POSITION WANTED:—Experienced all-round photographer and artistic operating and retouching; 14 years' experience. Would prefer in high grade studio near sea shore; real ability and a worker. Best of references. Actually keeping a studio. Would accept position only first of March. Address Box C6, Abel's Weekly Bulletin. 12-29-6

SITUATION WANTED:—Position by first-class retoucher who is also a good operator. Sober, reliable and experienced. Central States. Salary \$25.00 per week. P-1 care of this journal. 1-5-3

SITUATION WANTED:—Retoucher of negatives. Address Miss Agnes Howell, 718 E. Fellows St., Dixon, Ill. 1-5-4

SITUATION WANTED:—First-class printer and retoucher or general assistant desires position with up-to-date studio. Address S-2 care of this journal. 1-5-3

SITUATION WANTED: Thoroughly capable and reliable all-around workman wishes a position in a first-class studio at once. Married and age thirty-five. Must be permanent. State of Illinois or Iowa preferred. Address W. H. Brown, 241 South 6th St., Marmouth, Ill. 1-5-6

SITUATION WANTED:—Position wanted by photographer of many years of experience, principally in retouching and operating and with some commercial experience also. Would prefer running a studio or home photography. Address B-2, care of Abel's Weekly. 12-8-4

DEALERS WHO WANT YOUR TRADE

ATLANTA, GA.—Glenn Photo Stock Co., Eastman Kodak Co., 117 Peachtree St.

BOSTON, MASS.—Robey-French Co., Eastman Kodak Co., 38 Bromfield St.

BOSTON, MASS.—Ralph Harris & Co., 22-26 Bromfield Street.

CEDAR RAPIDS, IA.—Camera Shop, 306 Second Ave., East.

CLEVELAND, OHIO.—Fowler & Slater, 806 Huron Road, S. E.

CHICAGO, ILL.—Sweet, Wallach & Co., Eastman Kodak Co., 133 North Wabash Avenue.

DALLAS, TEX.—C. Weichsel Co.

DENVER, COLO.—Denver Photo Materials Co., Eastman Kodak Co., 626 16th Street.

DENVER, COLO.—The Ossen Photo Supply Co., 415 16th Street.

DES MOINES, IA.—Des Moines Photo Material Co., Eastman Kodak Co., 517 Locust Street.

DES MOINES, IA.—W. P. Henry, 819 Walnut Street.

GALESBURG, ILL.—Osgood Photo Supply Co.

INDIANAPOLIS, IND.—The H. Lieber Company, 24 W. Washington Street.

INDIANAPOLIS, IND.—Lyman Brothers, 223-225 East Ohio St.

JACKSONVILLE, FLA.—H. & W. B. Drew Company.

KANSAS CITY, MO.—Kansas City Photographic Supply Co., 1010 Grand Avenue.

LOS ANGELES, CAL.—Howland & Pewey Co., Eastman Kodak Co., 510 South Broadway.

MILWAUKEE, WIS.—Milwaukee Photo Materials Co., Eastman Kodak Co., 427 Milwaukee Street.

MILWAUKEE, WIS.—Henry Reimers, 238-240 West Third Street.

NEW ORLEANS, LA.—Standard Photo Supply Co., Ltd., Eastman Kodak Co., 125 Baronne Street.

NEW YORK CITY.—George Murphy, Inc., 57 East 9th Street.

NEW YORK CITY.—New York Camera Exchange, 109 Fulton Street.

NEW YORK CITY.—Obrig Camera Co., 147 Fulton St., near Broadway.

NEW YORK CITY.—Willoughby, Inc., 110 W. 32nd Street.

OMAHA, NEB.—The Robert Dempster Co., Eastman Kodak Co.

PHILADELPHIA, PA.—John Haworth Co., Eastman Kodak Co., 1020 Chestnut Street.

PITTSBURGH, PA.—W. S. Bell & Co., 412 Wood St.

ST. LOUIS, MO.—Hyatt's Supply Co., 417 N. Broadway.

ST. LOUIS, MO.—W. Schiller & Co., 6 South Broadway.

ST. PAUL, MINN.—Zimmerman Bros., Eastman Kodak Co., 380 Minnesota St.

SALT LAKE CITY, UTAH.—Utah Photo Materials Co., 423 Main Street.

TOLEDO, OHIO.—George L. Kohne, 602 Summit Street.

How do you care for portraits in *your* home?
Sell yourself a portrait album and you will have
no trouble in selling your customers.



EASTMAN PORTRAIT ALBUMS

in the homes of your patrons will increase your business by stimulating the interchange of photographs. An album that will hold forty-eight photographs will create a demand for forty-eight portraits to fill it.

The way to sell albums is to have them in stock, show them and explain their practical usefulness. Eastman Portrait Albums are adaptable to 87% of the sizes of portraits now made by photographers.

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

At your dealer's.

SITUATION WANTED: Wanted permanent position as receptionist or all round assistant in good studio. Address M-9, care of this journal. 12-22-3

SITUATION WANTED: Position wanted Jan. 1st by lady operator, receptionist, home-portrait photographer; 12 years' experience in best studios. Salary \$25.00. Address Miss F. Stern, 2229 Ashland Ave., Indianapolis, Ind. 12-22-3

HELP WANTED

WANTED AT ONCE: Six view men. Circuit operators preferred. \$25.00 per week and 5 per cent. Send five letters of reference with application. The Miller Studio, 1368 Broad St., Augusta, Ga.

HELP WANTED: Printer, one that can also help retouching. Good salary to the right party, steady work. Address Harbeck Studio, 219 Main St., Pawtucket, R. I. P. S. This city is a part of Providence, R. I. 12-22-3

WANTED: A coupon man. One who can sell a dollar ticket and can get the people. References required. A good opportunity. Address M-10 this journal. 5-1-2

HELP WANTED: Wanted an all round assistant. Must be a good retoucher and fair operator. W. R. Loar, Grafton, W. Va. 1-5-3

HELP WANTED: Retoucher and etcher, young man, thoroughly competent, also to assist in operating. In first letter state experience, salary, age and any other information. Position permanent. Address Elias Goldensky, 1705 Chestnut St., Philadelphia, Pa. 1-5-1

HELP WANTED: Retoucher; lady or gentleman. Permanent position and good salary to the right party. Address Layton Studio, 417 E. Broad St., Richmond, Va. 1-7-2

HELP WANTED: Retoucher for permanent position. Lady preferred or an all around man. Must be able to turn out good clean work, and willing to help in other departments when necessary. Up-to-date studio. Write fully with photograph of yourself if possible. Address C. W. Gale, Beatrice, Nebr. 1-5-4

HELP WANTED: Frank Scott Clark of Detroit wants a first class retoucher to do nothing but retouch. Inexperienced persons need not reply to this ad. You must know your work to work for me. There must be some one in need of a good position that can do rapid and splendid work. Will give such a man steady employment. State salary expected. Frank Scott Clark, 970 Cass Ave., Detroit, Mich. 5-1-2

FOR SALE: Good kodak agency, one studio, two dark rooms, outfitted up to date, at Palm Beach, Florida. Best winter resort, near three big hotels. Owner wishes to retire. Price, \$4,000. Rent each season, \$500.00. Will also sell the building and ground if desired. Write to Albert Guionnaud, Main St., Palm Beach, Fla. 2-18-18

STUDIOS FOR SALE

FOR SALE: Notices do not mean much if the goods and business are not there to back them up. That's just what we have in our northern California ground floor, fully equipped studio with four modern living rooms. Immediate population 2,000 with 15,000 to draw from. No competition. Good railway and stage service to all near-by towns. Eight miles from ocean. Fine climate the year round. Will invoice nearly \$1,000.00; will sacrifice for quick sale at \$500. Full list on application. Address C. C. Boslaw, care Y. M. C. A., Oakland, Calif. 1-5-2

FOR SALE: Studio in the beautiful Ozarks country newly equipped. Eastman Century Complete. Oklahoma & Kansas oil fields surveyed by oil geologists to within one mile—now conceded the future Missouri oil city. Five year lease at \$12.00 per month. Come to the Ozarks for health. Address W. R. Starr, Greenfield, Mo. 1-5-1

FOR SALE: Studio established six years. Good north light, best location in town. Rent \$18.00. Population of town, 11,000, Eastern Indiana. Manufacturing town, and factories are immense. Trade is the medium priced, such as \$6.00. For particulars address G-1, care of this journal. 12-8-8

FOR SALE: Eastman four-man printer, complete with Cooper-Hewitt light, extra tube and extra shifter, almost new; cost, \$153.00. Present new price, \$215.00. Will sell for \$115.00. Will ship C. O. D. with privilege of examination. Address The Elizabeth Novelty Co., 215 Broad St., Elizabeth, N. J. 12-8-4

FOR SALE: One 11x14 Ansco Studio Camera; double bed. Fitted with one 11x14, one 8x10, one 5x7 back and holders. All in perfect condition. One Folmer & Schwing Sky Scraper. Four double holders and carrying case—good as new, not a scratch on the outfit. One 11x14 Ross Wide Angle Lens. One 11x14 Goerz Dagor Volute Shutter. One 11x14 Versar Portrait and View—new. One 5x7 Goerz Dagor and Shutter. One 4x5 B. & L. Zeiss Tessar 7.2 M.M. Series 1c—new. Three heavy tripods for 11x14 and larger view camera—new. John T. Selby, 113 W. Lexington St., Baltimore, Md. 12-15-3

FOR SALE: Big opening for a good photographer. Gold-mining, farming, lumbering and live-stock country. City of 10,000, additional 10,000 territory to draw from. Only two competitors, both women. Only ground floor studio, big plate glass show-windows, low rent, excellent location. Well equipped and furnished new. Best of reasons for selling. Fine climate, away from storms and blizzards. Address Box 282, Baker, Oregon. 10-27-5-tf

FOR SALE: One of the finest opportunities in the south. Studio located on one of Atlanta's most popular corners, center of the most important retail section of the city. Also second studio on same floor. Both to be sold together. Inventory cost \$5,000. Business done last year in one studio alone amounted to \$12,500.

Can be bought reasonable, one-half of purchase price to be cash. Balance arranged to suit parties. This would be an excellent chance for two young men who will do the work themselves, one managing, etc., and one operating, printing, etc. Business was started 1910, and has a first-class reputation. Present owner wishes to retire, owing to ill-health. For further particulars address L. 4, care of this journal.

SPECIAL

SPECIAL: Retouching for the trade. Frank Lovelace, Box 133, Indiana, Pa. 12-8-10

STUDIO WANTED: I wish to buy a studio with good skylight. Ohio city preferred. Price must be right for cash. Will consider any sized city. Address Photographer, 809 1/2 Madison Ave., Toledo, O.

MAGIC GOODS: Exchange for Photograph Goods. Have complete professional Magic outfits for stage work. No toys, all up to date and very best. I want studio apparatus. What have you to trade. C. O. Lorenz, 2502 Proctor St., Port Arthur, Texas. 12-22-4

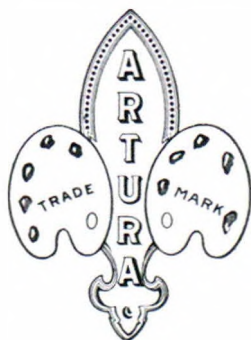
FOR SALE: A Halldorson Giant Flash Machine, used one day for few exposures. First check for \$25.00 gets it. Address Erixon Studio, Henrietta, Texas. 1-5-1

FOR SALE: One 8 x 10 portrait camera, in good condition. List \$27, net \$10. One 8 x 10 magit camera stand. List \$16, net \$6. H. J. Birkholz, Warsaw, Mo. 1-5-1

There are as many prospects for enlargement sales as there have been soldiers photographed.

ARTURA CARBON BLACK

enlargements have the contact
quality that makes sales easy.



ARTURA DIVISION,
EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.

At your dealer's.

The big advantage of

EASTMAN PORTRAIT FILM

is the superior quality of film results.

Lightness, compactness, flexibility, etc., are also big advantages. While not affecting results, they are none the less appreciated by the workman.

*Your dealer stocks
Portrait Film.*

EASTMAN KODAK COMPANY,
ROCHESTER, N. Y.