

Dive

1897

Manual

of

Instructions

VIVE CAMERA COMPANY,

HOME OFFICE - CHICAGO, 153 LA SALLE ST. NEW YORK OFFICE - 621 BROADWAY.

POINTS OF SUPERIORITY.

The VIVE has all the advantages of every other camera, and in many ways is superior to any.

No other camera is so simple and sure.

- No other so inexpensively and readily enables one to use either glass plates or cut films, and in such numbers.
- No other will hold glass plates or cut films so that both can be used at the same time.
- No other camera has combination holders which are at once suited for holding glass plates or cut films.
- No other camera has such simple, light, and universal plate holders, or those which hold any size of glass plates under the regular size for either of the several Vive cameras.
- No other camera is so small and compact for the size of the picture taken.

No other is so easy to understand and manipulate.

No other includes 12 Metal Combination Plate and Cut Film Holders WITHOUT additional cost, as with Vives Nos. 1, 3, 4 and 5, or 24 with No. 2. Do not lay your failures to the Camera if you do not carefully read this

MANUAL.....

HE secret of a practical and inexpensive camera is to have as simple a box as possible, with a first class Achromatic Universal Focus lens, which will meet every requirement. Then with an effective shutter arrangement for making exposures, any one can soon become accustomed to timing the light for a perfect negative, and especially with the aid of the "Vive Exposure Table" given herein.

It is advisable and necessary to go through the operation of opening, filling, closing, and making exposures before the camera is loaded with the very sensitive plates that are required to secure fine negtires, hence we do not ship cameras loaded.

With a simple camera like the Vive, it will be manifest that the first thing to do is to unfasten and turn down the latch and raise up the cover; then taking hold of the little tab which is fastened to the center of the back end of the frame, press the frame slightly toward the front of the camera to release it. and lift it out. The changing cuff being attached to the cover (which forms a most convenient and portable dark room), can then lay back on the same, and the plate holders can be taken from the magazine and examined. Having examined the holders, place them all back in the magazine with the dividing slide at the back; then with the finger nail of the index finger raise up the front holder, slightly drawing back as well (pressing the next holder down with the thumb nail) until the top corners can be taken hold of with the thumb and finger to finish raising. In this way there is no possibility of injuring the cuff with the corners of the holder. Now slightly incline the bottom of the holder to the back of the magazine and slide it down in the space in front of the spring. Do this with each holder until the dividing slide comes to the front, when it will be perceived that there will be nothing for the finger nail to hold to, and this will indicate that all the plates have been exposed. Again fasten the cuff frame, and with the camera under the arm, pull out the open end of the cuff, and holding it closed. let the cover drop down and be held closed by the arm. Slip the hand into the cufi; then hold the cover up so as to have the sides of the cuff smooth between

the cover and the box, and proceed to change the plates from the front to the back as stated. Now *close the cover*, while withdrawing the hand, *fold the open end of the cuff* toward the camera, and the cover can again be raised and the cuff placed back as found. Should the cuff elastic be too loose, a rubber band can first be slipped around the wrist and then over the end of the cuff.

The process is so much more quickly done than told that almost any one would instinctively do it without this explanation.

Having carefully manipulated our wonderful 1897 three time pneumatic finger release shutter as directed in this manual, in order to become accustomed to its use, the magazine can be loaded with glass plates or cut films, and good results will be secured from the first.

When any less than 12 glass plates are to be put into the holders, the cards should be left in until filled with a plate, since the spring at the back of the magazine is adjusted so as to correctly press the number of holders contained in one inch to the front focus ready for exposure.

The socket (or sockets) in the bottom of the camera is for fastening it to a tripod, when desired, in taking time or flash light exposures.

TO FILL THE COMBINATION PLATE OR FILM HOLDERS.

Take the camera into a perfectly dark room or closet, or in a room at night, without moonlight or lamplight, but with a small ruby lamp. Open the package of glass plates or cut films. After removing the cards, slide the plates into the metal holders. If cut films are to be used instead of glass plates, then do not remove the cards, but slide the films into the holders over the same, since the cards will thus make up the difference in thickness between the glass and bring the cut films into the same plane of focus. If it is desired to multiply the number of films, three can be placed in the space occupied by a glass plate holder, by securing our special cut film holders, thus increasing the number of exposures to 36 instead of 12, being sure to have the dull side out. or in other words the glossy side next to the back of the holder. Having filled the holders, replace them in the magazine, with each plate or film facing the lens and with the notched flange of each holder up. Place the dividing slide, which is to divide between the exposed and unexposed plates, back of the last holder, next to the spring; close the camera; set the shutter, and it is ready for exposing for a negative.

Be sure and avoid exposing the plates to the

ē.

2

slightest white light, for they are very sensitive, and the slightest ray of white light will fog them.

Do not touch the face of the plates or films if it can be avoided, and never with damp fingers.

If our double slide "feather weight" plate holders are used, which come with the *Vive* Special Folding camera, the plates are to be placed in under the flanges of the holder, so that the rubber slide can be easily pushed shut, being careful to have the film or dull side facing out. The film side can be made sure of by moistening the finger and touching the corner of the plate, if in the dark, as it will be sticky.

TO MAKE AN EXPOSURE.

Always be careful to hold the camera *still* and *level* when making "snap shots," so as not to blur the negative by moving, nor distort the objects taken, by the camera not being squared with them.

The nearest object to be taken should be from 8 to 10 feet from the camera to insure sharpness of focus, then if the camera is held still, the finest results of a UNIVERSAL FOCUS will be obtained in the negative, with either our Nos. 1, 2, 3 and 4 Vives. No. 5. and our Special Folding instruments, each have accurate graded scales to govern all exposures. However, many elegant pictures have been taken within four feet of the subject with our No. 1 and No. 2, which indicates the wonderful latitude of the Vive lens.

Never try to hold the camera in your hands or on your knee in making a *time exposure*, for you cannot hold it firm. A *tripod* or some *rigid* rest must always be used to get a clear-cut picture in time work.

Always be careful to point the camera away from the sun, or always away from, instead of toward the light.

The finder lens is only for centering and correctly registering on the plate or film the subject to be taken, but has nothing to do with the focus of the regular lens in the camera which takes the picture.

The Vive Combination Lens Cap and Diaphragm attachment is applied to each of the Nos. 2, 3, 4 and 5 Vives. The advantages that this wonderful little attachment gives are manifold, and entirely unique with the Vive camera. With them much greater depth of focus and sharpness of the objects can be secured in the negative than is otherwise possible, consequently all high priced lenses are mounted with diaphragms.

With the lens cap you can always keep your lens closed from dust, and so that no one can interfere with your plates, if they work the shutter "just to see how it goes." Then, for instance, with the No. 2 Vive, which does not have a focusing magazine attachment, you can work much closer to your subject and get an *enlarged* and *sharper* result by using either of the two smaller stops than with the No. 1 Vive. The time of exposure required for the No. 2 stop is twice that of No. 1, and for the No. 3 twice that for No. 2. But where the time can be given the advantages will always be greatly in favor of the smaller lens openings. Special Letters Patent have been applied for, on both the above, and the

Vive Rack and Pinion Focusing Magazine Attachment, which is placed on each Vive Nos. 3, 4 and 5. With the above two attachments there is not an accomplishment in the photographic art that is not placed within easy reach, and made possible and simple for every owner of a Vive. With the use of the smallest lens stop, and being able to focus sharp, up to within two feet of a person, it has been made possible with a Vive to take very good bust negatives of cabinet size, which, when properly retouched and vignetted, secure a regular gallery effect, with the advantage of posing at home with a background of endeared surroundings.

VIVE 1897 PNEUMATIC FINGER RELEASE SHUTTER.

To set the shutter, push the top lever on the side of the camera as far down as it will go. The blades do not open in setting the shutter so that no exposure can be made by accident and the plate cannot be fogged. The release can be made by the addition of a bulb attachment (which can be applied to any *Vive* front board having this shutter, for \$1.00 additional, including rubber bulb and tubing), or by pressing the lower lever with the finger. After setting the shutter with the upper lever, as stated, and the indicator points to T, the shutter works for Time exposure. The first pressure of the lower lever opens the blades and the second closes them.

Likewise if the indicator is at Q and the shutter is set, on pressing the lower lever, the shutter will remain open, but only as long as the lever is held down, and so a very "Quick Time" can be given by releasing the pressure at will.

When the indicator is at I and the upper lever is pushed down the shutter is set for an Instantaneous or "snap shot" exposure, and one pressure of the lower lever completes the exposure.

In setting the shutter be sure the upper lever is pushed down as far as it will go.

TIMING AN EXPOSURE.

Bright sunshine, especially in winter, is always necessary for "snap shot" exposures, although hazy sunlight in summer is even stronger; otherwise more time is required; all the way from $\frac{1}{2}$ to 3 seconds. The only way to correctly determine time, as with interior work, is with a little practice. Slight under or over timing can be somewhat remedied with careful developing.

All plates work faster in warm weather and with warm developer.

Interior Views should be given from ¼ to 5 minutes, according to the nearness of the object to the light, or the general light in the room. The camera should never be pointed toward a window, but always with the light rays, unless our Non-Halation plates are used.

In taking flash light negatives the camera should be placed in position, then, when the flash is ready to be made, open the shutter as for a time picture. Gas or lamp light should be burning in the room where persons are to be included, since it does away with the stare otherwise possibly manifest in the expression. Immediately after the flash close the shutter.

VIVE EXPOSURE TABLE.

For use from November to April, north of the Latitude of St. Louis. South of this Latitude time exposures may be one-third shorter, and snap shots made more freely by fair sunlight.

OUT-OF-DOOR TIMING.

Winter snap shots can be secured only when object is in bright, clear sunlight between 11 A.M. and 2 P. M.

Light, fleecy clouds, or 8 to 11 A.M., and 2 to 4 P.M. give quickest possible time exposure.

Medium gray clouds, or bright sunshine with subject in shade, 1 to 2 seconds.

Dull, heavy clouds, 2 to 3 seconds.

With snow on ground and sunshine, snap shot.

With snow on ground and clouds shorten time exposures one half.

INTERIOR TIMING.

Bright sunshine outside, well lighted room, 11 A. M. to 2 P. M., 15 seconds.

Light clouds, well lighted room, or sunshine with medium lighted room, 20 seconds.

Medium clouds, weak light, 25 to 30 seconds.

Dull gray clouds, or rainy, dim light, 1 to 11-2 min. Dark, slightly lighted rooms, 11-2 to 5 minutes. VIVE Flash Light Powders are the only ones put up in Paraffine papers. This makes them especially handy for use, since all that is required to make a flash light exposure with a *Vive* camera in an ordinary way is to place one powder on a tin pie plate, set on the top of the camera. Unfold the paper which holds the powder and place it (the paper) on the back side of the tin. When ready to make an exposure light the corner of the paper with a match and the paper will gradually burn in until it sets off the flash.

The great advantage of the Vive Flash Light Powder over any other is that it is perfectly safe. It will not ignite by friction. There is less smoke than with any other, and it is dustless and not offensive in the slightest. It produces the indigo ray in combination with the white, and so gives the perfect actinic rays of sunlight. If the room you are taking is large, or the principal subject to be taken is some distance from the camera, two powders can be used together on one piece of paraffine paper. We think anyone who once uses the Vive Flash Light Powders will use them ever afterwards in preference to any others.

Price of 12 powders,

50 cents.

NON HALATION PLATES.

These are called "multiple emulsion plates" by the English. Their advantages are little understood by most amateurs, and so we add a few words about these valuable plates. Where *time* can be given and fine details are desired in any kind of a subject they are always preferable. Especially where light and shade is excessive, or where a window light would otherwise destroy the negative by over-exposure in that part. In fact there is such latitude to the exposure of a non halation plate that almost any time can be given within reason, and decided over-timing will better tend to destroy the halation of light than otherwise. For instance, in a room where you would give, say 30 seconds, with a regular Special Rapid Vive plate or cut film, with a non halation plate you could point your camera toward the window and give from five to ten minutes, and probably have the best result on the ten minute exposure.

The developing should be carried darker, and the plate should be left in the clearing and finishing bath much longer, on account of the double coating of these plates. If tried a few times their uses will be found indespensible for many subjects.

They should never be used for "snap shot" or "flash light" exposures.

EIKONOGEN DEVELOPER.

This is one of the finest developers made. It can be used on any brand of dry plates or films with perfect success, and also for developing lantern slides or positive films by adding a few drops of bromide of potassium.

BROMIDE SOLUTION.

Every person developing negative plates or films, positive celluloid films, *Vive* carbon positive paper or lantern slides, should have a small bottle of bromide of potassium at hand. This is prepared by simply dissolving *1-2 oz. of bromide of potassium in* 5 oz. of water. A few drops in all new developer acts as a retarder, like old developer, and keeps the shadows clear from fog, which is caused by over-development.

TO PREPARE DEVELOPER.

The No. 1 and No. 2 powders in the "Vive Developer Powders," may either be mixed in 16 ozs. (1 pint) of boiling hot water, so as to readily dissolve the same, and then when cold be used as a stock solution, or used in small powders. A good way is to divide the contents of No. 1 and No. 2 into 12 equal parts each, put up, and numbered, to be used as required. If a small balance scale is handy, the powders can be weighed out by taking 10 grains for each No. 1 and 25 grains for each No. 2. For use, thoroughly dissolve one each of these 10 and 25 grain, No. 1 and No. 2, powders in 3 oz. of hot water, by stirring with • a strip of glass, and then add 3 ozs. of cold water and cool before using. The latter is a very handy way for using the *Vive* Developer Powders if traveling, or to always have fresh developer on hand if long intervals occur between developings. If the 16 oz. of stock solution is made, it should be kept well corked in an amber colored bottle in a closet or dark room.

HOW TO DEVELOP.

Either Glass Plates or Cut Films.

To develop a full timed negative before having any old developer on hand, take half developer and half water and add 3 to 5 drops of the bromide solution. When old developer is at hand, then use $\frac{1}{2}$ old and $\frac{1}{2}$ new, without the bromide. Lay one or more negatives in the developing tray with the dull or film side up, and pour on the developer, being careful not to let any bubbles form on the negative, which will make small round transparent spots in the negative when cleared. If the negative has been properly timed, as indicated in in the Vive Exposure Table, the image should begin to appear from one half to one minute, and the deep shadows should hold clear and white, until as the development proceeds the full details of a strong, clear picture are shown. If taken from the developer too soon, the negative, when taken from the Vive Clearing Bath, will be too thin, and not of sufficient contrast to make a brilliant print, so it should be left in the developer until it begins to be quite dark all over, and when held up to the Ruby light it will show a deep and well defined picture, and if rightly timed the image can be seen through the back of the plate without holdding it up to the light.

If the negative is over-timed it will develop too fast and quickly appear and turn black all over. Even then it is best to carry the development quite full, since there will often be a fair image by so doing when it is cleared. However, as soon as it is seen to be over-timed the negative should be at once rinsed in clean water, and only old developer used to continue development by adding also a few drops more of bromide. If no old developer is on hand more water and bromide can be added. If the negative is undertimed the image will come up slow and not develop out the details, and finally begin to turn dark from long development and be weak when cleared. As soon as this is discovered, fresh, and in some cases, full strength new developer should be us d. Most "Snap Shot" or flash light negatives should be developed with more new than old developer.

"Old Developer," or that which has been used to develop with one or more times, is the best to use for most negatives, by adding about $\frac{1}{2}$ new. Have a bottle plainly marked "Old Developer" to keep it in, and as it accumulates throw out the old, and keep about $\frac{1}{2}$ a pint of the freshest on hand at all times.

TO CLEAR AND FIX THE NEGATIVE.

As soon as the negative is developed as above stated, rinse it off with water and place it, film side up, in the tray to hold the "Vive Negative Clearing Bath," which should have been previously prepared by dissolving the contents of the package of crystals in one pint of cold water. This bath can be used until it becomes too dirty, or until it will stain and frill the edges of the negative film. All solutions to work best should be from 65 to 70 degrees Fh. Warm weather and warm solutions greatly accelerate devolopment.

TO PRINT PHOTOGRAPHS.

Place the glass negative in the printing frame with the film side up, then lay the printing paper face down, so that the film on the negative and the coating on the paper will come in direct contact. Then expose to the sun until the paper has been printed several shades darker than is desired when the picture is toned, or finished ready for the card mount, since the toning and washing will otherwise make it too light. A good guide is to print until the purple cast has all disappeared from the paper. The deep shadows will then be a dark red brick color in most print paper.

Printing Frames are so made as to hold one side of negative and paper securely in place while the other is examined. Regular print paper can be operated in subdued light, while putting in and taking from the frame, then the printing frame should be placed in position to receive the direct rays of the sun and avoid shadows of any kind. If the paper is moved out of position in the slightest during contact with the negative it will of course cause a blurred print.

Cut Film Negatives are printed in the same manner as glass plates, except that a piece of *clean clear* glass must be placed in the printing frame to lay the film on. The glossy side must then be laid down against the 'glass, so that it will come in contact with the paper to be printed.

The *Vive* Gold Toning Bath is so simple that any one can use it and get any desired tone by following the directions. (See next page).

POSITIVE CELLULOID FILMS

are different from Negative Cut Films in that the sensitive emulsion surface to be printed on and developed, is placed on an opaque white celluloid body. instead of a transparent, and so is only used for making finished positive pictures to be printed direct from They are very beautiful when properly a negative. made, since they give the white porcelain effect. When once printed, by being exposed only to artificial light, in a dark room, they have to be developed just as a negative film would be, and cleared and washed in the same manner. The main difference being that the development should be slow and plenty of old developer and Bromide used so as to get as strong black tones in the deep shadows as possible, and not carry the high lights to a dirty white, rather than the desired clear whites.

DIRECTIONS

For Toning Photographic Prints

--WITH--- VIVE

Gold Toning and Clearing Solutions,

which can be used with any Albumen or Gelatin Print-out Paper on the market.

TO PREPARE FOR TONING.

The best plan is to have hard rubber, glass or fibre trays, labeled and use only for this purpose. If this plan is not followed, then the tray or dish to be used must be thoroughly cleansed by rubbing the inside with slightly wet common table salt, and then rinse well, so as to be sure that all trace of hypo-sulphite of soda or *Vive* Clearing Bath or Developer of any kind is eradicated from the same.

When ready to tone from 12 to 25 4×4 prints, put 1 pint (16 oz.) of water into the tray, and pour into it $\frac{1}{2}$ oz., or one-quarter of the contents of the *Vive* Gold Toning Bath bottle. Then place a small piece of the red litmus paper in the water, and add a very small pinch of the white powder contained in the paper attached to the gold toning bottle, and stir in with the fingers. If, after thoroughly dissolving the powder, the paper remains red, add another small pinch, or enough to begin to slightly turn the paper blue.

Note.--In all Vive toning operations the prints to be toned should be kept in subdued light until taken from the clearing and fixing bath.

WASHING THE PRINTS.

The toning bath being prepared as above, let it stand while washing the prints. Take the prints to be toned from the dark box, in which they should have been kept after printing, and place them face down in pure cold water, turning them until thoroughly washed, and avoid touching the film side, turning as lightly as possible.

Washing the prints sufficiently is the most important part of successful toning. They must be very thoroughly washed in 10 or 12 changes of water, or until all of the milky appearance in the water disappears, before placing in the gold toning bath. If this is not done the prints will not tone the desired shade. Water that has considerable iron in it, will change the milky appearance to a reddish color and should not be used.

Granite Iron Trays must not be used for washing

or toning, if clean clear prints, without metallic spots are to be produced. Use only Rubber, Fibre or Porcelain Trays, since iron in the water or trays will ruin toning results.

TONING THE PRINTS.

The prints should now be taken from face down in the water and immersed in the toning bath face up. Tone a half dozen at a time, turning them as while washing, until toned the shade required, and then again place them face down in fresh water. Repeat this operation until the batch of prints are toned. Then throw away the old toning bath, since a fresh bath should be used for each new batch of prints, to get the best results. If the prints have not been properly washed they will remain a dull reddish or dirty yellow.

CLEARING AND FIXING THE PRINTS.

Now, having previously dissolved 1 oz., or 1-4 of the *VIVE* Clearing Bath crystals in one pint of pure cold water, in another tray, place the prints, without further washing, in this clearing bath and turn them from 15 to 20 minutes. They will then be cleared and fixed so that they will not fade, when all the clearing bath solution is thoroughly washed out of the paper. This requires another 10 or 12 changes of water, or the leaving of them in running water for an hour or more. If the prints have been previously trimmed they can then be taken from the water and laid in a pile face down, and the water pressed out, and pasted and mounted, or they can be squeegeed on one of our heavy Ferrotype plates for polishing.

Note.-The slightest trace of the Vive clearing solution on the fingers or coming in any way in contact with the gold bath will stain the picture. Also remember that all negatives or prints will fade out, and turn yellow in time, if the clearing and fixing bath solution is not thoroughly washed out.

Our heavy 10×14 Ferrotype Plates are especially fine for use in polishing prints before mounting same, either in our *VIVE Album*, or on cards, in connection with our *VIVE Photo-Mounter*. The Rubber Mounting Roller is used to roll the wet prints down smooth on the Ferrotype Plate, where they are left until perfectly dry, and can then be peeled off with a high polish, as per Ferrotype Plate directions.

Price of the VIVE Gold Toning and Clearing Bath, for 64. oz solutions, - = \$ 40 Ferrotype Plates, 10x 14, extra heavy, each, = 25

	/	and the second s			
Rubber	Mounting	Squeegee	Rollers.	- 10, 10, = - 10, -1	25

VALUABLE HINTS.

PROMPT DEVELOPMENT OF NEGATIVES.

To secure the very best results, both glass plates and films should be developed as soon as possible after making the exposure. Where parties are traveling abroad and using films, each magazine full of exposed films should be mailed to some photographer for development, or developed by the amateur without holding longer than can be avoided.

PACK NEGATIVES FACE TO FACE.

Both glass plates and cut films should be carefully packed *face to face*, for shipping or mailing, the same as before placing in the holders, since they will be better preserved, whether packed in the holders of not. This applies to developed plates or films fully as much as to undeveloped, as any finger marks on the back of one plate or film coming in contact with the ememulsion surface of the next one will be sure to cause transparent and opaque markings, especially if there is any dampness or trace of hypo or developer on the fingers.

Great Cleanliness is absolutely essential in photography. This applies to the hands as well as to all vessels used. Chemical changes are liable to otherwise take place, and then you wonder what has caused failure.

Temperature. Uniform results are unattainable without uniform temperature. Formulas will always be apparently at fault if the solubility of chemicals at different temperatures is not considered. The simple addition of a small quantity of boiling water, more or less, or a lump of clean ice, to the water used in diluting the developer will readily control the temperature of the solutions. Heat accelerates chemical action, cold retards it; therefore developing solutions should be kept reasonably cool in summer, and used more dilute, and the reverse in winter. Always use sufficient developer to cover the plates well.

Slow Developing gives finer details, so do not try to force the development of a negative.

Foggy Negatives are caused mostly by overtiming the negative, or by using too strong developer, or a dusty lens. If more old developer were used finer printing negatives would be secured. A dusty lens is one of the worst causes of a foggy negative.

Thin Negatives are either from over-timing or under-timing, or not carrying development far enough to secure sufficient density. A good strong print can only be secured from a good strong negative. Of course too dense development results in slow pr.inting and destruction of fine details. **Transparent Spots and Pin Holes** are mostly due to dust on negatives and bubbles in developing. Remedy—Dust your plates with a camel's hair brush before and after exposure, and be sure no bubbles are on the negative during development. A lot of small quill pushes held together with a rubber band makes a good brush. Be gentle in dusting, else the electricity will draw more dust than you take off.

Negatives that are thin from not having been developed long enough can be strengthened by the following:

Intensifying Solution.==

No. 1.

60	grains	Bichloride of Mercury.
60	grains	Bromide of Potassium.
61/2	ounces	Water ·
		No. 2.

^{1/2} ounce.....Sulphite of Sodium. 4 ounces.....Water.

Place the negative in solution No. 1 until bleached, then rinse and place in solution No. 2 until entirely cleared, after which the plate must be well washed. This operation may be repeated if sufficient density is not gained by first treatment.

Likewise too strong development may be reduced again by the following:

Reducing Solution.=*

No. 1. No. 1. Water

1 ounce	Ferricyanide	of	Potassium.
	No. 2.		

16 ounces..... Water.

Test your Ruby Light by taking a piece of film or negetive plate at night in perfect darkness, and placing it between the leaves of a blank book, light your ruby lamp, then draw out about an inch of your film or glass and expose for 3 minutes to your light, then draw it out a little more for 2 minutes and then more for one minute and then develope it, and the contrast can readily be determined between exposed and unexposed. More orange tissue or post-office paper between light and development will remedy.

Weights and Measures .- Apothecaries' Weight.

SOLID MEASURE.

20 grains	-	1 scruple	a 🕳	20	grains.
3 scruples		1 drachm	-	60	"
8 drachms	-	1 ounce	-	480	
12 ounces	-	1 pound		5760	"

FLUID MEASURE. 60 minims = 1 fluid drachm. 8 drachms = 1 ounce. 16 ounces = 1 pint. 8 pints = 1 gallon.

The above weights are those usually adopted in formulas.

All chemicals are usually sold by avoirdupois weight, in which there are 437½ grains to the ounce, and 16 ounces to the pound. This is the ounce used in all published formulas (437½ grains).

The precious metals, such as silver and gold, are sold by troy weight, containing 480 grains to the ounce.

POINTS TO BE CAREFULLY NOTED IN USING THE VIVE CAMERA.

The Plate Holders should be slightly pressed from the front to the back so as to avoid the possibility of scratching the plates in raising or lowering the same to make the change from the front to the back of the magazine after each exposure. Keep the backs of plate and film holders wiped dry and perfectly clean and free from finger marks. Any trace of finger marks is liable to work injury to your plates. With care and cleanliness, as in every other part of photography, there will be no trouble.

Always Dust the face of the *plates* and *back of the holders* after sliding in the plate or film, before placing them in the magazine. Also dust the face of the plate before developing, so as to avoid pin holes. This can be done with a soft piece of cotton or a camels hair brush. Also be sure no bubbles remain on the face of the plate while developing.

The Sides of the Cuff should always be carefully drawn into the center of the camera so as to avoid pressing wearing creases in the material by reason of the cover shutting down too tight.

The Cufi Frame should always be bowed out on the sides so as to always press closely to the sides of the camera to exclude light. **Two Dozen Tin Strips** will be forwarded free to any *Vive* purchaser requesting same, if desiring to use plates smaller than our regular size, as indicated by the sample holder sent with the camera.

The Elastic End of The Cuff has been made an average size, but in case of a child or very slight person the wrist night be so small as to admit light. In this event we will be pleased to mail a rubber band free, which can be slipped over the hand easily and at the same time be sufficiently close on the wrist to shut out the light.

The Spring that holds the plate or film holders against the focusing point, or sides of the magazine, should always be so adjusted that when the holders are filled with glass plates they *will not sag back* and so fail to give a sharp picture.

The Lens is frequently taken out to examine and clean by parties receiving the camera, and then reversed n placing back. Care must always be taken to replace it with the convex side to the back of the camera, otherwise it will fail of its purpose. Too much cannot be said about keeping the LENS free from dust, or bright sharp negatives cannot be taken. Dust on the lens will fog the plates.

Extra Cuff Material. A small piece of the cuff material can be placed on the *inside* of the cuff with the use of a little rubber cement, to cover any accidental puncture. A puncture can easily be discovered by holding the cuff to the sunlight and looking through from the inside. Mailed free on application.

A piece of Black Felt glued at one edge to the slanting board, in front of the plate holders, and then wide enough to reach to the back of the magazine will be founed especially valuable to save friction if carriny camera on a Bicycle. We have secured a lot of the proper kind anp zise that we will mail a peice to parties, post paid, on recept of 5 one cent stamps.

The Focusing Magazines in Vives Nos. 3, 4 and 5 each, have a small piece of wood between the magazine and the back of the camera to insure keeping the magazine at *universal focus*, and to prevent sliding the plates or films down behind the magazine instead of between the spring and the holders. When desiring to focus closer than universal focus as indicated by the scale on the side of the camera, simply insert the hand in the cuff and lift up the wooden piece and lay it on the slanting front board while making the exposure, and then replace after exposure, to insure the plates always being at universal focus for regular use.

CARBON POSITIVE PAPER.

This paper is almost as sensitive as plates or films and should be opened in a dark room or closet and placed in the printing frame, and then kept covered and taken to the light for the exposure.

If the negative to be printed from is one of average density, with good clear shadows, the exposure, a few feet away from north window light, should be about one second, or about five minutes at a distance of one foot to six inches away from a bright

A good way to test it is to take a small strip of the paper and print it first, so as to get the correct time, since several exposures can thus be made with the use of only *one sheet* of the paper. Place the prints after exposure in a dark box until ready to develop. *No image will appear* until brought out by the development, like a negative plate or film. The difference being that the "*Vive* Carbon Positive Paper" develops up the opposite of a negative and so makes a positive.

TO DEVELOP.

Dissolve the contents of one No. 1 Vive Carbon Positive Developer Powder in 2 oz. of hot water and then add 2 oz. of cold water, and when cool pour over the properly exposed print, and develop until the image is a good strong black in the shadows. It is always best to add a few drops of a solution of ½ oz. Bromide Potassium to 5 oz. water so as to give more clearness to the picture. When the desired strength is secured then rinse the print and immerse in the clearing and fixing solution, as follows:

CLEARING AND FIXING SOLUTION.

Place the contents of the three papers of the No. 2 package in 16 oz. (1 pint) of water and thoroughly dissolve, **then add 1 oz. of acetic acid**, which can be gotten of any druggist. The prints should be turned in this bath for 10 to 15 minutes, then washed in 10 or 12 changes of water, or leave in running water for about an hour, and they will be ready to mount as may be desired.

Remember that all negatives or prints must be thoroughly washed after taking from the clearing and toning solution bath or they will soon turn yellow and be of no value; also that fine results can only be had from good strong contrasty negatives. Flat negatives will always produce flat prints on any paper.

The No. 2 clearing solution can be kept in a bottle and used over again until too weak and impure.

	ONE	GROSS	CARBON	PAPER,		1	\$2.00
DDICE	ONE	DOZ. SI	HEETS	12.12.12.12.1	1.1.1.1.1.1.	1 2 4 16	20
FRICL	1 PK	G. VIVE	CARBON	DEVELOPER	& CLEAR	ING BATH	. 60
	1 0	Z BROM	IDE POT	ASSIUM,		· · · · · · · · · · · · · · · · · · ·	15

VIVE.....

Metol Single Developer powder.

The 12 Vive Metol Developer Powders and Clearing Bath which are herein contained are to be used in so far as manipulating the development is concerned, the same as the 12 powders of our regular "Vive Single Solution Eikonogen Developer,"as mentioned under the heading "To Prepare Developer." excepting that each powder of the Metol Developer is complete in itself, to be dissolved in 3 ounces of hot water, as stated for the Eikonogen Developer, and after being dissolved, add 3 ounces of cold water, and then add a few drops of Bromide solution, unless snap shot negatives are to be developed, and use when cool.

"Faithful at Every Turn."

EUGENE, ORE., April 2, 1897.

One of our apprentices received one of your \$5.00 Vive instruments a short time ago, and we are all pleased with it. It has been thoroughly tested, and proved itself faithful at every turn. It has more than paid for itself already.

EUGENE PHOTO CO.

NEBRASKA CITY, NEB., March 30, 1797. Your \$5.00 Vive was received, and in good order. Am highly pleased with same; would not part with it for double what I paid for it. CHAS. C. BRANT.

MATTEAWAN, N. Y., March 27, 1897. Last October I purchased a "Vive No 1" of you and think it no more than right that I should write and tell you of my success with it, and how much I think of it. Being a photographer's daughter, and brought up in the midst of cameras and chemicals, I had an idea that anything in the shape of a camera for five dollars was an impossibility, but I sent for one, and have had success from the first. My father is a landscape photographer, has been in the business forty-seven years, and he pronounces my lens a perfect little gem. I am always ready to speak a good word for my little friend the Vive.

MRS. GEO. VREDENBURG,



1897 \$5.00 VIVE.