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VERASCOPE

RICHARD

Verascope Homeos
Glyphoscope Taxiphote

Brevete's S. G. D. G.

Manufactured by
Societe Anonyme des Etablissements
JULES RICHARD
Paris, France

There are four things about the Verascope Richard which make it a great camera—without equal

THE CHRONOMOS SHUTTER
THE STURDY MAGAZINE
PRECISE METAL CONSTRUCTION
IT'S MANY ACCESSORIES

O. H. SAMPSON

510 North Dearborn Street, Chicago

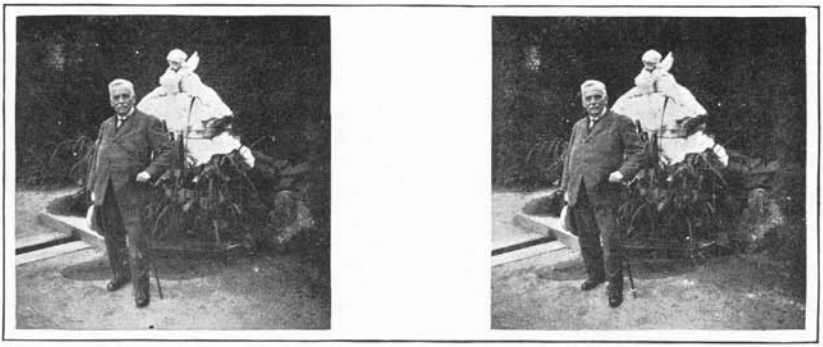
Sole agent for the United States and Colonies

NOTE—*This agency will accept orders for Jules Richard Verascopes and accessories only when they cannot be supplied by a local retail dealer. Correspondence is invited, however, and advice on stereoscopic matters will be gladly given.* PRICES IN THIS CATALOG SUBJECT TO CHANGE AT ANY TIME

¶ As a matter of photographic interest we wish to say that all halftones of apparatus in this catalog are from unretouched photographs by Lee Saylor, Chicago

Stereoscopic Photography

With the Jules Richard Verascope



Jules Richard, inventor of the Verascope

Nature as seen by the eye has three dimensions—length, breadth and depth. Therefore an ordinary photographic print, however perfect from a technical point of view, must fall short of the ideal, as it reduces nature to two dimensions and eliminates the element of distance.

Stereoscopic photography was introduced to overcome this shortcoming. Its aim was to provide the photographer with the means of reproducing nature faithfully in its three dimensions. It restored the element of distance, and preserved natural perspective and relief.

Yet stereoscopic photography failed to win universal popularity. On the contrary, in its early days, it earned for itself an unenviable reputation, and was regarded with disfavor amounting almost to prejudice by large numbers of photographers.

We can imagine some readers, when they discover that this article deals with stereoscopic work, being tempted to put it aside with a sense of disappointment. We ask, however, that they will read on, preserving an open mind. What we have to say on the subject will, we feel sure, prove interesting, and we hope to point the way to new sources of pleasure in photography, to discover for the reader added and more permanent interest in his hobby.

The reason for the unpopularity of stereoscopic work was well founded. The apparatus required was bulky, intricate and delicate. The technical processes were both difficult and tedious. Success demanded patience, leisure and application. The practice of stereoscopic photography was, therefore, confined to a minority of painstaking enthusiasts to whom time and trouble were but secondary considerations.

In spite of these disadvantages, stereoscopic photography did not die. It continued to live for one all-sufficient reason, the results obtained by its devotees were nearer to nature than ordinary photographic prints. Putting aside the difficulties, there was no gainsaying the fact that stereoscopic pictures were more natural, more living, than prints on a flat surface. Subjects devoid of any particular interest from a purely photographic point of view, became intensely interesting when the elements of atmosphere and distance were faithfully reproduced in the stereoscope. A new interest, capable of infinite variation, was given to photography. Most important of all, perhaps, the mental impression experienced when a given subject was seen, was recalled much more faithfully and completely when reproduced stereoscopically, than was possible by ordinary photographic reproduction.

In short, the aim of stereoscopic photography was sound. What was required was simplification, some method of procedure that would make stereoscopic work as simple as ordinary snapshot photography. The apparatus must be simple and reliable. The technical processes must be devoid of all complication. Certain success must be brought within the reach even of the beginner. All the advantages of stereoscopic photography must be retained, all the disadvantages eliminated.

With commendable enterprise the task was undertaken by Jules Richard, of the famous firm of photographic and scientific instrument manufacturers. After long and painstaking research and experiment he succeeded in producing a type of camera, perfectly simple in construction and manipulation, absolutely reliable in action, and, moreover, eminently efficient for stereoscopic photography, and at the same time for general photographic work.

This last point is important. It cannot be too strongly emphasized that the advantages of simplified stereoscopic photography have been gained without any sacrifice in efficiency from the point of view of ordinary photographic work.

The results of all his experiments and research are embodied in the wonderful little camera called

The Verascope

We give a detailed technical description of The **Verascope** in succeeding pages. It is only necessary to state here that the **Verascope** is a tiny little camera sufficiently light and portable to be carried just as conveniently as a pair of ordinary binoculars. It is so simple that it can be used by the beginner with complete success. It is a model of efficiency and convenience for both ordinary and stereoscopic work.

To continue our survey of stereoscopic photography generally. One of the points where most stereoscopic cameras of the old type failed was that they were not sufficiently well built. It is essential that a camera for this work shall be so well constructed as to ensure absolute freedom from warping. Unfortunately, many of the cameras that were sold for stereoscopic work by no means conformed to this condition.

It is sufficient to say that the **Verascope** is constructed of metal throughout in such a manner that warping even to the smallest degree is an absolute impossibility.

Now to proceed to the technical processes involved in the production of stereoscopic pictures. In the old days, immense difficulty was introduced by the necessity for accurate trimming, transposing and mounting of the prints to be viewed in the stereoscope. It was here that the photographer encountered the serious disadvantages that usually drove him somewhat reluctantly to the conclusion that "the game was not worth the candle." It is here also that Jules Richard has scored what may be considered his greatest triumph. To overcome the difficulties he decided, first of all, to use transparencies instead of mounted prints. This removed the bugbear of troublesome mounting. It is as well at this point to utter a word of warning. The mention of transparencies, for some reason, conveys, we have discovered, the idea of complication to the minds of some photographers. Making a transparency is just as easy, and just as difficult, as making an ordinary print. The idea of increased difficulty is entirely unfounded. The next step in the process of simplification was to remove the difficulty of transposing. This was accomplished by providing a simple transposing printing frame. In this frame the registration is carried out automatically. No measurements or calculations of any kind are necessary.

Thus, by a logical and determined effort, has stereoscopic photography with all its obvious advantages, been brought within the reach of the photographer who demands simplicity and reasonable rapidity of production. The difficulties of both apparatus and technique have been attacked and overcome. Every disadvantage has been removed, and every advantage retained.

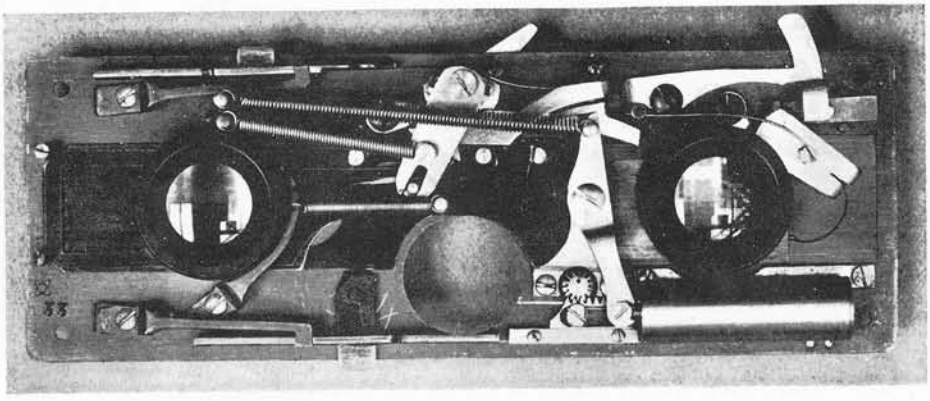
There is no longer any reason for the prejudice against stereoscopic work. In the **Verascope** the photographer has at his disposal a camera which will enable him to continue his successes in the production of ordinary prints and enlargements, and will give him the additional advantage of the ability to produce perfect stereoscopic pictures that come nearest to Nature. Stereoscopic pictures made with the **Verascope** literally live. They give a vivid impression of atmosphere and distance. Sunshine not only looks like sunshine; it actually gives the physical perception of light and warmth. **Verascope** pictures bring you face to face with your subject as you see it. There is no more satisfying record of your experiences, your travels, your holidays, your home or your friends, than a collection **of Verascope** Transparencies.

Technical Description

The **Verascope** is a sturdy little camera designed to give the utmost efficiency both for ordinary photography and for stereoscopic work.

It produces single pictures 45 mm. square, and stereoscopic transparencies consisting of two pictures each of this size.

Although of such small size, the **Verascope** is an instrument of the utmost precision. Being built throughout of metal, absolute freedom from warping, even under the most trying conditions, is assured. The most skilled workmanship and careful supervision is employed at every stage in the manufacture of the **Verascope**, with the result that in spite of its accuracy and delicacy of adjustment, the camera is a model of reliability. Being of the fixed focus type, the **Verascope** is ready for immediate use, all objects from 10 ft. to infinity being in focus. Supplementary lenses, which can be fitted immediately, and which bring objects at 9 ft., 6 ft., 3 ft., or even a few inches from the camera into focus, can also be supplied.



Inside view of Chronomos Shutter

Every movement necessary for general photographic work is fitted to the **Verascope**, but unnecessary adjustments, which would make the camera unduly complicated, have been rigorously avoided. When desired, however, special adjustments can be added to the **Verascope** to adapt it for special branches of photography, such as Color Work, Telephotography, etc. These can be fitted at any time as needed. One great advantage of the **Verascope** is that it will grow with you step by step as your requirements become more exacting.

The **Verascope** is made in two sizes and five different models, which vary in respect to the adjustments fitted.

A wide choice of lenses, the most modern types of anastigmats, are fitted to the **Verascope**, and it should be added that the degree of accuracy of workmanship which is attained, ensures such a wonderful degree of definition in the negative, that enlargements to any reasonable size can be made from the negatives without any appreciable loss in quality. Those photographers interested in speed work will be interested in the Chronomos Shutter, giving actual tested speeds of 1/8 to 1-150 sec., and the new High Speed Chronomos Shutter which, in addition,

gives a guaranteed speed of 1/400 sec. The latter shutter has been used with signal success by many photographers for speed work of the most difficult character, and gives practically everything that a focal plane shutter will give.

The **Verascope** is usually supplied with a reliable changing box, holding 12 plates or flat films. The plates are changed instantaneously by simply pulling out a drawer. Single metal plate holders or roll-holder for daylight loading roll film can also be supplied.

Important

The question is sometimes asked "Why it is that Messrs. Richard do not fit a focusing mechanism to their 45x107 mm. **Verascope**?" and in order to answer this definitely, we quote the makers' actual explanation.

"*A focusing adjustment both from a practical and theoretical point of view is quite unnecessary on a camera of this description, owing to its small size, and to the great depth of focus obtainable with the short focus lenses fitted, and secondly, to the fact that no mechanical device, however well constructed, is sufficiently precise to permit of the two accurately paired objectives travelling backwards and forwards in dead true alignment with any degree of certainty.*

"*It is well known that the shorter the focus lens the greater the precision necessary in fitting them to the camera, and when it is stated that the lenses used on the 45x107 mm. Verascope are adjusted to within 1/1000 part of an inch, the importance of this point will be appreciated.*

"*The short focus lenses used on the 45x107 mm. Verascope allow of very near subjects to be taken without resort to focusing. With the 7x13 cm. model Verascope it is different, as the lenses are considerably longer in focus. Where, however, it is desired to photograph subjects with the 45x107 mm. Verascopes, nearer than 9 ft., we recommend the use of the supplementary lenses which replace a focusing adjustment where such is required.*

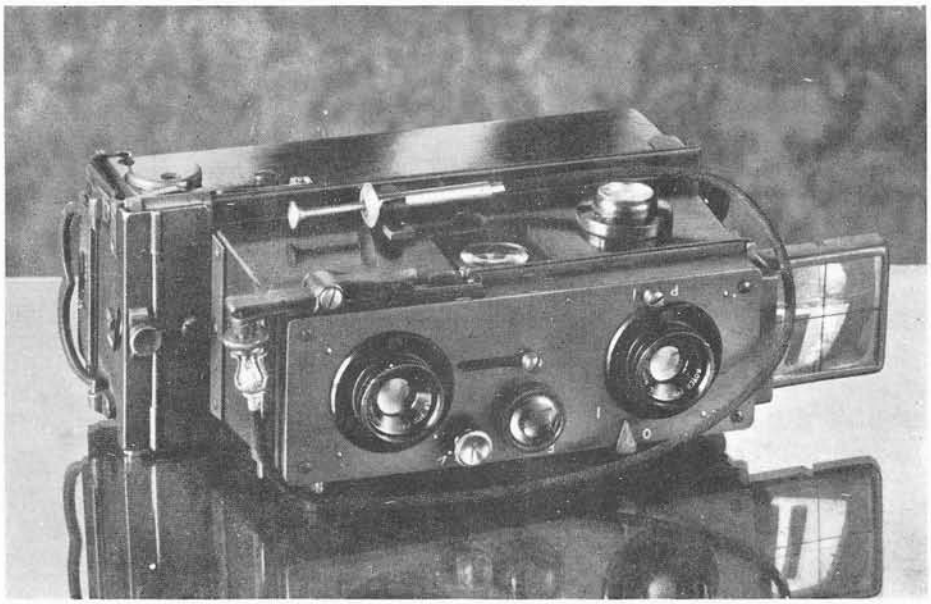
"*During the period of manufacture of the Verascope, which goes back 25 years—this question has been studied from all points of view, and if we have refused to supply a Verascope with focusing adjustment in the 45x107 mm. size, it is because we realize that the disadvantages are greater than the advantages if there are any.*"

Messrs. Richard have arrived at this conclusion not only after many years of experience, but after having actually carried out experiments and constructed several experimental models.

That the **Verascope** has been for the last 25 years the most popular camera of its kind is in a great measure due to the simplicity of the instrument, and to the fact that it is a fixed focus camera—a practical instrument, and one that is always ready for use—even in unskilled and inexperienced hands.

Verascope

Model 4. 45x107 mm.



Model 4 Verascope showing Saphir f.8 lenses

This camera is offered to supply the need for a simple, moderately priced apparatus, and is constructed with the same care and accuracy as the more costly models. It is the same in every way as the Model 6 and Model 7 **Verascopes,** with the exception of the lenses and shutter.

The lenses are the well known Saphir anastigmats with diaphragm openings of *f*/8 and *f*/16, accurately matched and capable of the finest work. The shutter is of the same steel leaf construction as the Chronomos with adjustable speeds from about 1/25 to 1/100 of a second, as well as time exposure.

Other features of this model are the No. 104b plate magazine holding twelve plates, Richard Antinous Release, Richard Prism Finder, direct view finder, two spirit levels, tripod socket and rising front.

DESCRIPTION	PRICE
Model 4s—Saphir *f*. 8 Anastigmat lenses, sole leather case	$145.00

Note—This camera may be equipped with roll-holder instead of plate magazine at an extra charge of $10.00.

Verascope

Model 6. 45x107 mm.

Model 6 Verascope showing Saphir f.4.5 lenses

This model is an improvement over the Model 4 and is fitted with the new Chronomos Shutter, with automatic speeds from about 1/5 to 1/150 of a second, as well as time exposure.

There are six settings of instantaneous speeds on each camera and a card is furnished with each outfit showing the exact tested speed at each setting. These speeds are also marked on the shutter plate opposite each setting of the indicator, similar to the following—1/6, 1/12, 1/23, 1/55, 1/90, 1/145.

This is the only shutter manufactured where the exact speeds of the shutter are measured and furnished, after the shutter is on the camera. It is of the greatest importance where an exposure meter is used, to know that the shutter will actually produce the speed desired.

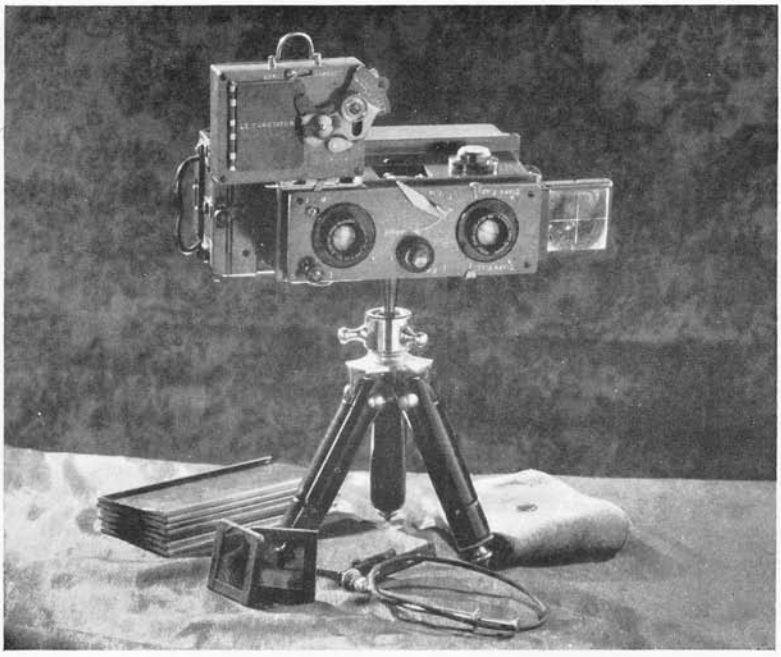
The price includes the camera with one model 104b magazine, a Richard antinous release, two lens caps, a transposing printing frame No. 505 and a sole leather carrying case with shoulder strap.

DESCRIPTION	PRICE
Model 6a—Tessar *f.* 6.3 lenses	$215.00
Model 6s—Saphir *f.* 6.3 lenses	165.00
Model 6b—Tessar *f.* 4.5 lenses	225.00
Model 6s—Saphir *f.* 4.5 lenses	175.00

Note—Any of the above models may be had equipped with roll-holder instead of plate magazine at an extra charge of $10.00.

Verascope

Model 7. 45x107 mm.



Model 7 Verascope showing Cunctator in place and Autochrome outfit. The No. 811 Tripod shown is not included

Here is the Stereo Supreme, a precision instrument of which the owner may be proud. Completely equipped for all kinds of work, with the simplicity of operation and beautiful construction which may only be had in the Jules Richard apparatus.

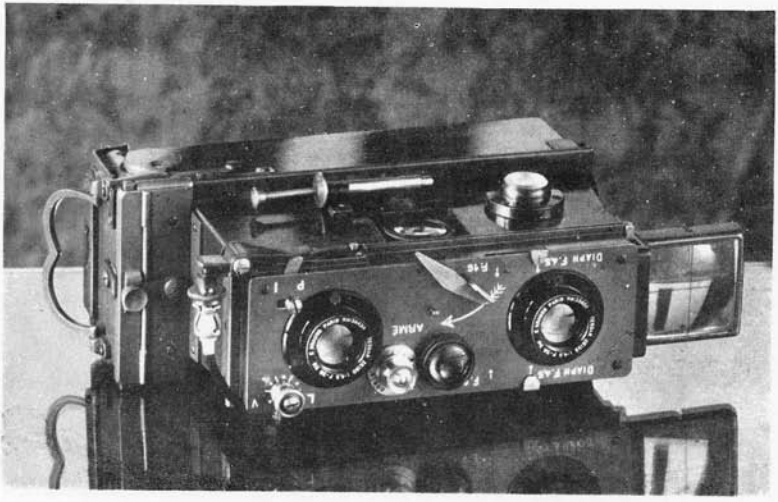
This camera is exactly the same as Model 6 but has the following equipment added—A Richard Cunctator which fits on the camera in the same place as the antinous release, automatically releasing the shutter for all instantaneous exposures and time exposures of one to thirty seconds. Also a complete outfit for Autochrome color plate work, consisting of a pair of filters with holders inside the box of the camera and eight septums for holding color plates in the magazine.

DESCRIPTION	PRICE
Model 7a—Tessar *f.* 4.5 lenses	$250.00
Model 7s—Saphir *f.* 4.5 lenses	200.00

Either of the above models may be equipped with roll-holder instead of the plate magazine at an extra charge of $10.00.

Verascope

Model 8. 45x107 mm.



Model 8 Verascope showing Tessar f.4.5 lenses

After the Chronomos shutter was introduced in the **Verascope,** many requests were made for a shutter of higher speed, so that the most extreme motion could be stopped. To satisfy this demand Jules Richard added a simple mechanism to the regular shutter which produces an *actual* speed of 1/400 of a second in addition to the other regular speeds.

As a result, the motion stopped by this shutter is fully equal to that of a focal plane shutter at 1/1000 of a second, using a lens of seven-inch focal length.

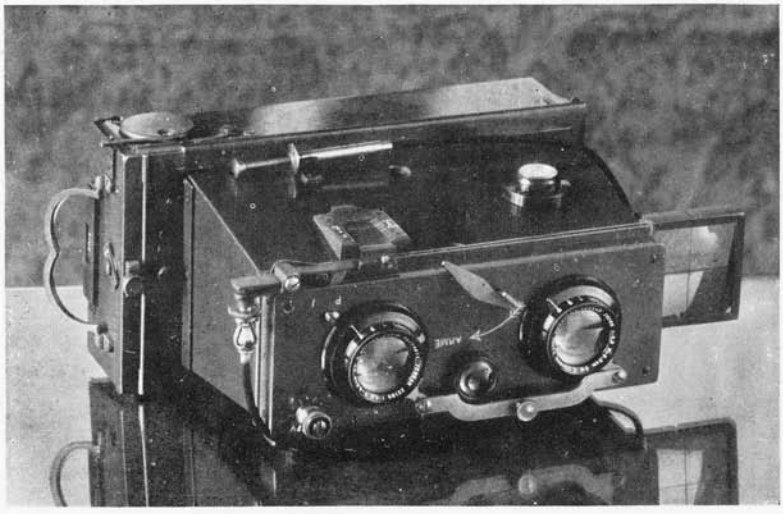
In every other way this model is the same as Model 6 and is furnished with the same equipment. No Cunctator or Autochrome accessories are included, but if desired, they may be purchased separately.

DESCRIPTION	PRICE
Model 8a—Tessar *f.* 4.5 lenses	$250.00
Model 8s—Saphir *f.* 4.5 lenses	200.00

Either of the above models may be equipped with roll-holder instead of the plate magazine at an extra charge of $10.00.

Verascope

6x13 cm. 7x13 cm.



7x13 cm. Verascope showing Tessar f.4.5 lenses and focusing front

The 7x13 cm. **Verascope** has been designed for those who desire a larger negative than the 45x107 mm. **Verascopes** produce. Two advantages are gained by this; first, a contact print 2¼" x 2½" can be made from half of the negative, and second, when Autochrome pictures are taken the grain and defects in the plate are less noticeable, as the area of the plate is almost four times as great as the 45x107 mm.

This camera is also fitted with a very rigid focusing front as the lenses are too long in focal length (85 mm.) to be used in fixed focus. The diaphragms are of the Iris type and are operated by a bar which keeps both openings at the same diameter. In all other respects this model is the same as the Model 6, excepting as to size and weight.

The magazine is made to take 7x13 cm. septums and is furnished with twelve of this size. If it is desired to use 6x13 cm. plates or Autochromes, septums may be had which fit in the same magazine.

It may be said regarding this camera that Jules Richard strongly favors the 7x13 cm. plate over the 6x13 cm. His reason is that the 7x13 cm. finished positive consists of two *square* pictures while the 6x13 cm. prints are somewhat wider than they are high. The square stereoscopic print is by far the more pleasing one to view.

Verascope

6x13 cm. 7x13 cm.

Weight	3 pounds and 13 ounces
Size	6¼" x 4½" x 3"
Weight of extra magazines	2 pounds
Weight of roll-holder	27 ounces

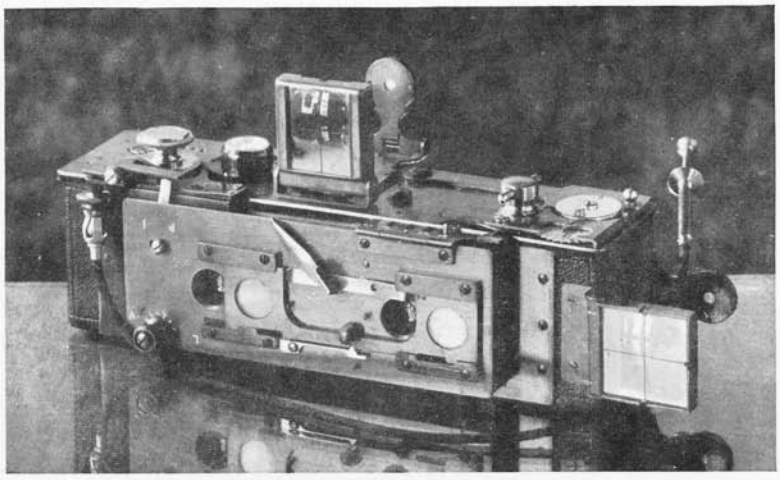
NUMBER	DESCRIPTION	PRICE
4451	—**Verascope** 7x13 cm. Tessar *f*. 4.5 lenses	$285.00
4452	—With Roll-Holder instead of magazine	300.00

Accessories

4504	—Magazine, fitted with Automatic Counter, Block System, Note Holder and Indicator showing whether magazine is empty, loaded or exposed	40.00
4505	—Roll-Holder, using Eastman No. 116 film producing five and ten stereoscopic exposures on six and twelve exposure film	55.00
4514	—Black sole leather case holding camera and one magazine	10.00
4515	—Tan sole leather case holding camera and one magazine	10.00
4517	—Black sole leather case holding camera and two magazines	16.00
4518	—Tan sole leather case holding camera and two magazines	16.00
4519	—Tan Pig Skin case holding camera and two magazines	25.00
4519a	—Black sole leather case holding camera roll-holder and one magazine.	18.00
4521	—Magazine septum 7x13 cm., non rusting white metal	.30
4522b	—Magazine septum 7x13 cm., Autochrome non rusting white metal	.30
4525	—Magazine septum 6x13 cm., non rusting white metal	.60
4527	—Magazine septum 6x13 cm., Autochrome non rusting white metal	.80
4528	—Metal fitting to hold 6x13 cm. single plate holder on camera	4.00
4532	—Autochrome filters, compensating, per pair	10.00
4536	—Single plate holder for 6x13 cm. plates	1.00
4538	—Single plate holder for 6x13 cm. Autochrome plates	1.00
4540	—Leather lens caps, per pair	.40
4549	—5X Orthochromatic filters, per pair	6.00
4560	—Transposing printing frame for 6x13 cm. and 7x13 cm. positives	6.00
4565	—Light tight box to hold extra set of loaded septums	.50
4572	—Filing box for 50 plates, waxed teakwood	3.00
4575	—Envelopes for holding plates, each	.01
4580	—Porcelain developing dish with three compartments	1.50
4581	—Glass fixing box for 12 plates	2.00
4585	—Zinc wash box with faucet, for 12 plates	2.75
4586	—Zinc wash box with faucet, for 24 plates	4.00
4620	—Metal frame for mounting cut Autochromes 6x13 cm. or 7x13 cm.	.12
4630	—Frame and guides, with diamond for cutting Autochromes	6.00
4708	—Stereoscope of mahogany with double achromatic lenses for both 6x13 cm. and 7x13 cm. positives or Autochromes	25.00

The Homeos

For Stereoscopic Pictures on Cinematograph Film



The Homeos with both finders erected and shutter open

How often have we heard it said, "Oh that camera is too heavy and the plates take up too much room." When on a long hunting trip or while traveling, these two points become very important and again Jules Richard has come to the front with the answer. A radical departure from the **Verascope,** and yet incorporating its most important points, the Chronomos Shutter and solid metal construction.

The new **Homeos** is scientifically and mechanically perfect. The two lenses of Tessar formula are only ⅜ths of an inch in diameter including the mount, yet they are perfect anastigmats giving most critical definition over the entire field at the full aperature of *f.* 4.5. They are perfectly paired and their stops can be set simultaneously to the aperatures of *f.* 4.5, *f.* 6.3, *f.* 8, *f.* 10 and *f.* 20. No focusing is necessary, but if it be required to photograph an object as close as 18 inches, a pair of suitable auxiliary lenses fitted permanently on the front of the camera can be brought into position immediately.

The dimensions of the camera are 6½" x 2¼" x 2¼" and the weight is only 26 ounces. Regular motion picture film is used on brass spools which may be loaded in daylight. Each spool is sufficient for 27 stereo or 54 single exposures. *Enough film for* 1,600 *stereo exposures weighs only three pounds and takes up a space of* 3" x 6" x 4½"!

Thus the weight and size question has been solved with no important sacrifice in the quality of the resulting pictures and the cost per picture is exceedingly low. We will not presume to claim that the results of this camera are quite as fine as the pictures taken with the 45x107 mm. or 7x13 cm. **Verascopes,** nor will the negatives stand as great an enlargement as do the larger ones. However, perfect enlargements up to 5″ x 7″ can be made and the positives on motion picture film are marvels of depth and detail.

The film is easily inserted and removed from the camera in any light. Each section of film is brought into position behind the lenses by a winding key which automatically registers the number of pictures taken. During the exposure the film is pressed into contact with a piece of optically flat glass to insure perfect register.

The exposed film, which is about one yard in length, can readily be developed by means of the tray or daylight developing tank and produces a continuous band of 52 perfect little negatives. The printing machine is also a marvel of Richard workmanship. Not only can the exposure be readily adapted to any possible variation in the density of the negatives, but each pair of pictures is automatically transposed in the printing operation.

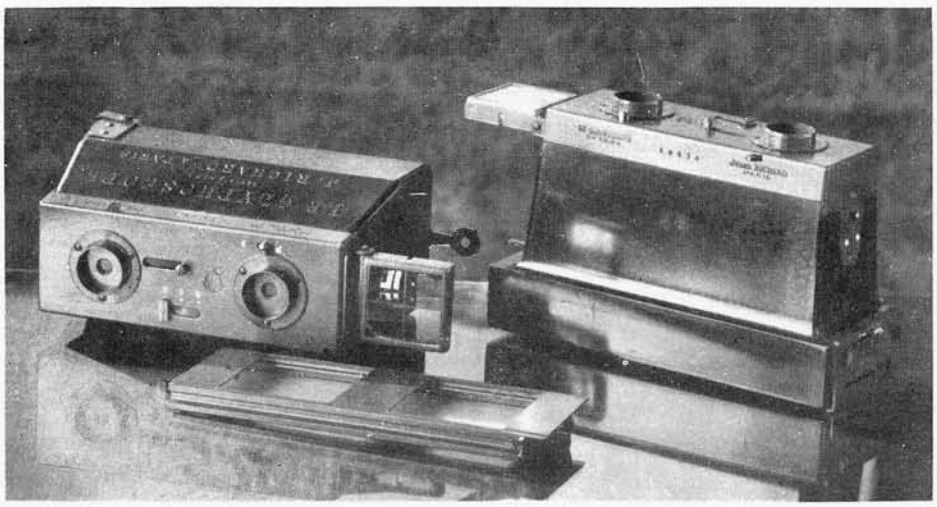
It must not be supposed for a moment that because the pictures are so small they are in any way deficient when viewed in the stereoscope. To the contrary there is a most surprising realism, with wonderful suggestion of modeling and solidity, space and distance, light and shade.

This brief description of the **Homeos** camera is sufficient to suggest that it is quite unique. It is adapted for every kind of hand camera work; for use on a tripod, for the production of perfect and portable stereoscopic pictures, lantern slides and enlargements. It is not, and could not be, a low priced instrument but it is remarkably reasonable considering the workmanship, material, lenses and the unique character of the results it produces. Light weight and convenience are its chief characteristics.

NUMBER	DESCRIPTION	PRICE
5500	—**Homeos,** Tessar *f.* 4.5 lenses, Antinous Release and morocco carrying case holding the camera and extra film rolls	$225.00
5510	—Glass plate for film register opening	1.00
5521	—**Homeos** printing machine	50.00
5530	—**Homeos** metal folding stereoscope	5.00
5531	—**Homeos** Mahogany stereoscope	12.00
5532	—**Homeos** Mahogany stereoscope with variable ocular distance	18.00
5535	—Enlarging cone for post card size enlargements (see page 30)	40.00
5543	—Cloth covered box holding 20 positive rolls	2.50
5544	—Cloth covered box holding 12 positive rolls	2.00
5545	—**Homeos** roll film, 25 to 27 exposures	.75
	Developing **Homeos** film, per roll	.30
	Printing **Homeos** film, per roll, black tone	1.50
	Printing **Homeos** film, per roll, sepia tone	2.00

The Glyphoscope

45x107 mm.



Glyphoscope Plate and Film Pack Model showing positive holder for Film Pack Model

The **Glyphoscope** is a simplified form of the **Verascope** designed for those who wish to secure the advantages of the improved method of stereoscopic photography at the lowest possible cost. Although comparatively inexpensive it is an instrument of absolute reliability. Constructed with the usual Richard care, of an extremely hard composition and oxidized brass, it is very solid and perfectly rigid.

The lenses are of the finest Double Achromatic type, giving fine definition and covering power. Three diaphragm openings are fitted and the camera is fixed focus.

The shutter is both instantaneous and time. A brilliant direct view finder with sight is attached to the left hand end of the box.

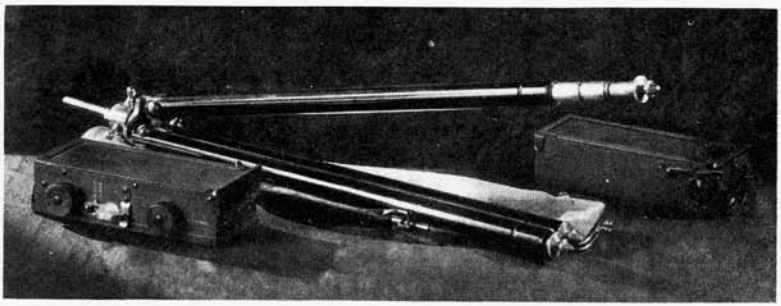
The plate model is adopted for either ordinary or Autochrome work.

NUMBER	DESCRIPTION	PRICE
5001	—**Glyphoscope** with six single plate holders and metal frame with ground glass for viewing positives through the lenses of the camera .	$14.00
5001a	—Richard **Glyphoscope** fitted for film packs only	20.00
5011	—Black sole leather case for camera and six plate holders	4.50
5012	—Tan sole leather case for camera and six plate holders	4.50
5020	—Black sole leather case for camera and twelve plate holders . . .	5.00
5021	—Tan or black sole leather case for Film Pack **Glyphoscope** . . .	4.50
5110	—Antinous release	2.50

Note—All finishing accessories, single plate holders and close lenses or filters for the Verascope 45x107 mm. may be used for the Glyphoscope.

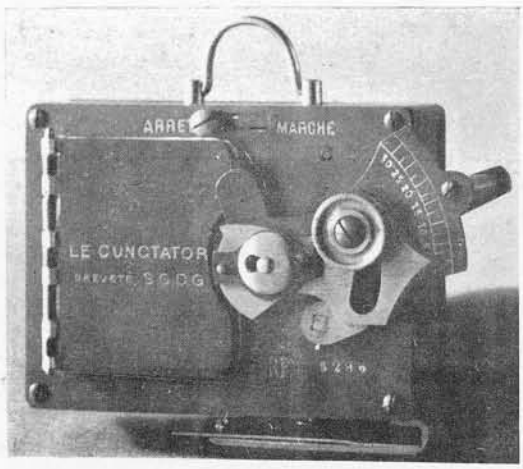
Verascope Accessories

45x107 mm.



Roll Holder No. 105 Tripod No. 801 and Plate Magazine No. 104b

NUMBER	DESCRIPTION	PRICE
104b	—Plate magazine, fitted with Automatic Counter, Block System, Note Holder and Indicator showing whether magazine is loaded, empty or exposed	$35.00
105	—Roll Holder, using Eastman **Verascope** film producing six stereoscopic exposures	45.00
105a	—Eastman **Verascope** film, six stereo exposures per roll	.35
106	—Extra glass plate for Roll Holder	1.00
116	—Magazine septum, non rusting white metal	.20
118	—Black box for holding set of loaded septums	.40
120	—Long slide for Magazine or Roll Holder	.75
121	—Short slide for Magazine or Roll Holder	.75
122	—Plug for septum opening in Magazine	.75
129	—Metal lens shades, per pair	3.00
132	—Leather lens caps, per pair	.40
133	—Leather lens caps, fastened on aluminum bar	1.50
135	—Metal fitting to hold single plate holder on camera	2.50
142	—Single plate holder of non rusting white metal	.75
160	—Steel die for re-forming bent septums	2.00
321	—Richard Antinous release complete with plate for holding the release on the camera	5.00
321a	—Ditto, without camera plate	4.00
321b	—Ditto, cable and end screw only	2.00
321c	—Ditto, release plate only	2.00
330	—Indicator for taking complete panoramic circle of exposures, fitting on the tripod through the top of the tripod socket on the camera	2.00
801	—**Verascope** Tripod of brass in 5 sections, weight 28 oz. in case	8.00
811	—Pocket tripod with ball and socket top, in two sections, height of camera with tripod extended, 8 in. Weight 12 oz.	5.00
820	—Ball and socket top to use **Verascope** on any tripod	2.50
911	—Richard flash lamp of brass, with Antinous release	6.00



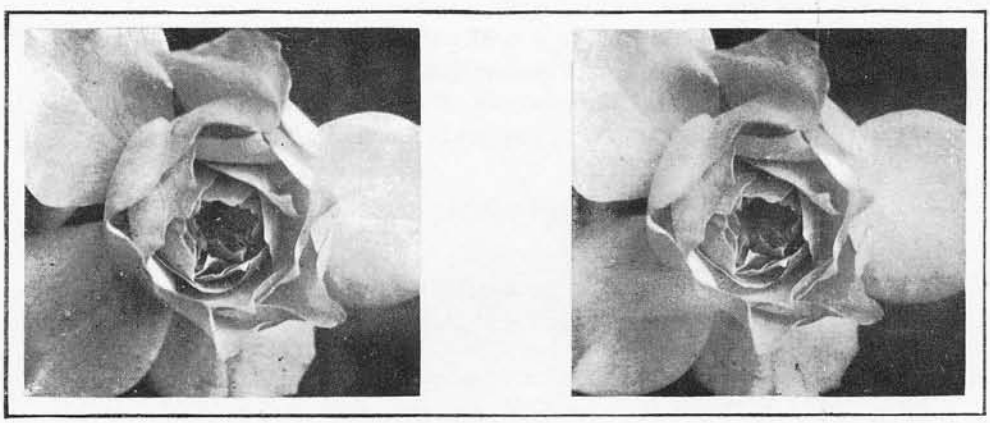
Cunctator set for one second exposure

Many times, has the amateur photographer desired to include a figure in the picture to give animation to the scene and through lack of a companion, has been sorry that he has not been able to place himself in position to be included in the view.

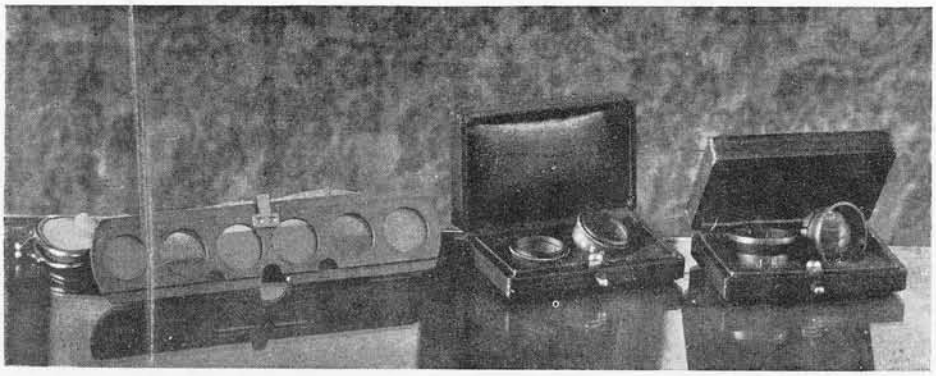
This small apparatus, whose name signifies to delay, or to defer, is mounted on the **Verascope** in place of the Antinous Release and operates the shutter thirty seconds after it has been set. This gives the operator sufficient time to place himself in the desired position in the photograph. About three seconds before the shutter is released a small red plate flies open, denoting that the exposure will shortly take place. After the exposure is complete the red warning is replaced by a white one, showing the operator that the exposure has been completed.

NUMBER	DESCRIPTION	PRICE
181	—Richard Cunctator for instantaneous and time exposures from 1 to 30 seconds, in leather pouch	$15.00
182	—Ditto, 2 to 60 seconds.	15.00

Note—The Cunctator may be used with either the 45x107 mm. or 7x13 cm. Verascopes, but not with the Glyphoscope. The Cunctator is included in equipment of the Model 7 Verascope.



White rose, photographed with the Richard Banc



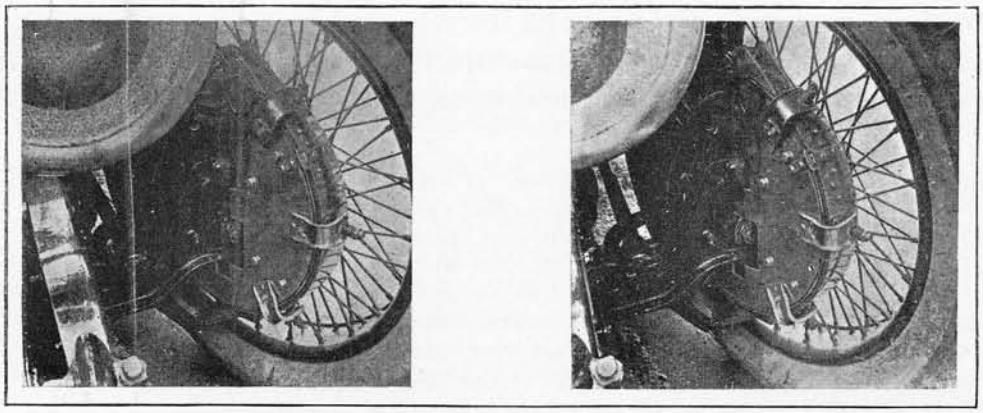
Left to right Nos. 215, 201 and 200 Auxiliary Lenses

Auxiliary Lenses and Orthochromatic Filters

Photographs of very near objects can be made with the **Verascope** by means of special lenses which are placed over the regular lenses. With these lenses, pictures at one half, one, two and three meters (about 19″, one yard, two yards and three yards) may be successfully obtained. They are supplied in two forms; in pairs or three pairs in one sliding mount.

NUMBER	DESCRIPTION	PRICE
200	—J. R. Supplementary lenses, a special strength for including all subjects seven feet to seventy-five feet from the camera	$ 6.00
201	—Auxiliary lenses, for subjects one-half meter from the camera	5.00
201a	—Ditto, for subjects one meter from the camera	5.00
201b	—Ditto, for subjects two meters from the camera	5.00
201c	—Ditto, for subjects three meters from the camera	5.00
215	—One, two and three meter lenses in one sliding mount	10.00
225	—Orthochromatic filters increasing the exposure five times	5.00
235	—Ditto, three pairs in one sliding mount increasing the exposure two, five and fifteen times	12.00

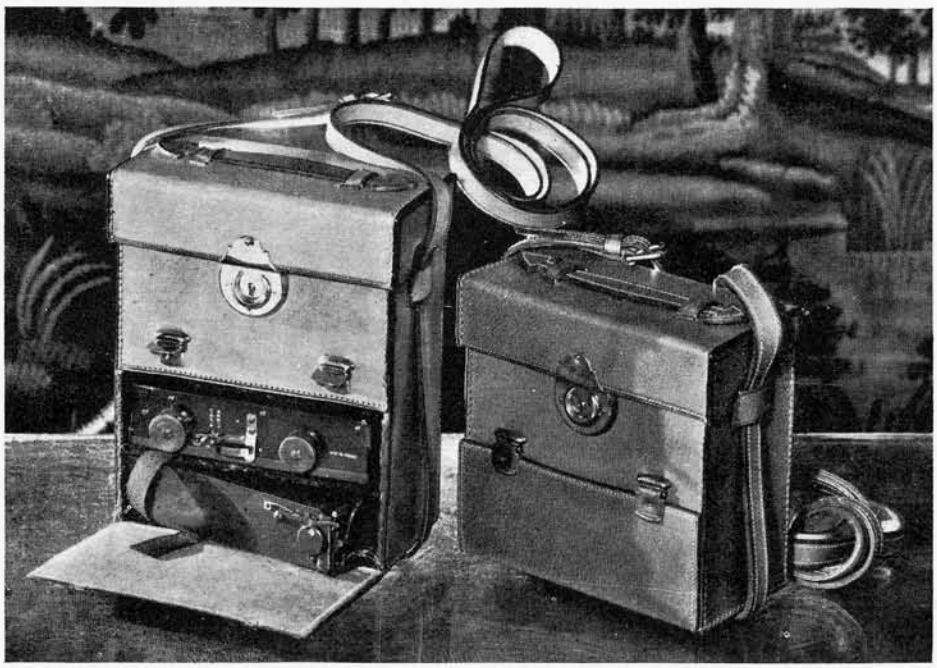
Note—All lenses are in cases and purses as illustrated. Any of the above lenses or filters will fit either the 45x107 mm. Verascope or the Glyphoscope.



Hydraulic four wheel brake, photographed with the No. 215 Auxiliary Lenses

Carrying Cases

45x107 mm.



Tan sole leather, three compartment case No. 272 and pig skin two compartment case No. 263

When one or two extra magazines are to be carried it is rather inconvenient to carry them separate from the outfit. These cases have been designed for this purpose as well as to protect them from dust and accidents. The extra compartment is also convenient for carrying extra equipment or plates. The leather used is of the best quality of heavy cow hide and the workmanship is of the finest. The pig skin cases are extremely durable and are lined with brown suede leather.

NUMBER	DESCRIPTION	PRICE
251	—Black sole-leather case for camera and one magazine	$ 7.50
252	—Tan sole-leather case for camera and one magazine	7.50
253	—Tan pig skin case for camera and one magazine	14.00
261	—Black sole-leather case for camera and one extra magazine	14.00
262	—Tan sole-leather case for camera and one extra magainze	14.00
263	—Tan pig skin case for camera and one extra magazine	18.00
271	—Black sole-leather case for camera and two extra magazines	16.00
272	—Tan sole-leather case for camera and two extra magazines	16.00
273	—Tan pig skin case for camera and two extra magazines	23.00

Natural Color Photography

With the Verascope

The **Verascope** and **Glyphoscope** are admirably adapted for color photography using the well known Lumiere Autochrome plates. The resulting pictures are uncanny in their depiction of nature as we see it with our eyes, combining the stereoscopic effect with the natural colors.

Special Autochrome screens are supplied, either in square form with metal holders which are attached inside the box behind the lenses, or in mounts which slip over the outside lens mount. Either style of screen displaces the image to the correct focal plane necessary to this make of plate. A pair of these screens and a set of eight special septums for the magazine is all that is needed for the taking of color pictures, the rest of the operation being exactly as for ordinary work excepting that the exposure for Autochromes is more prolonged.

For those who desire to use single plate holders, a special holder for Autochrome plates is furnished. The metal frame No. 135 must be used to hold the single plate holder on the camera.

The letter "G" indicates that the item may be used either for the **Verascope** or **Glyphoscope.**

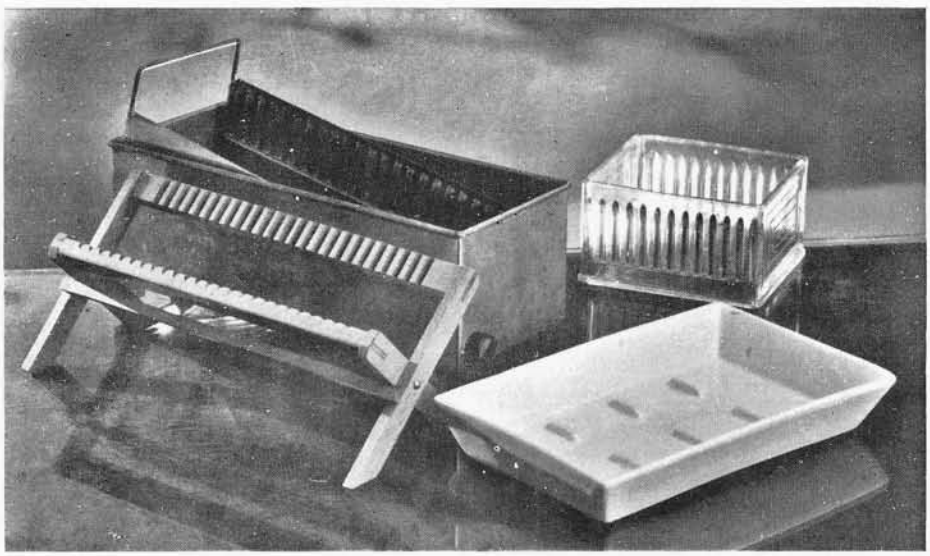
NUMBER	DESCRIPTION		PRICE
401	—Metal filter holders and filters for the inside of the camera		$6.00
402	—Compensating filters in metal mounts for the outside of the camera (close lenses cannot be used with this style)	G	8.00
403	—Filters only, for inside mounts		2.00
404	—Inside mounts only		4.00
405	—Inside filters only, for use with Perchlora flash powder		2.00
412	—Magazine septum for Autochrome plates, each		.20
412a	—Ditto, set of eight (**Verascope** magazine holds eight)		1.60
135	—Metal frame for holding single plate-holder on magazine		2.50
422	—Single Autochrome plate-holder of non-rusting white metal	G	.75
425	—Frame with gauges and diamond, for cutting Autochromes	G	5.00
430	—Metal frame for holding cut and transposed Autochromes	G	.10

Note—No. 401 and No. 412a are included in the equipment of the Model 7 Verascope.

Accessories for Finishing

45x107 mm.

In all classes of work and artistry it is very necessary to have the proper tools to achieve the best results. To this end Jules Richard has provided the most complete line of stereoscopic accessories obtainable, making the finishing of stereoscopic pictures a pleasure. These accessories are constructed with the same care as the cameras and the amateur is assured that he may produce the finest results with ease when using them.

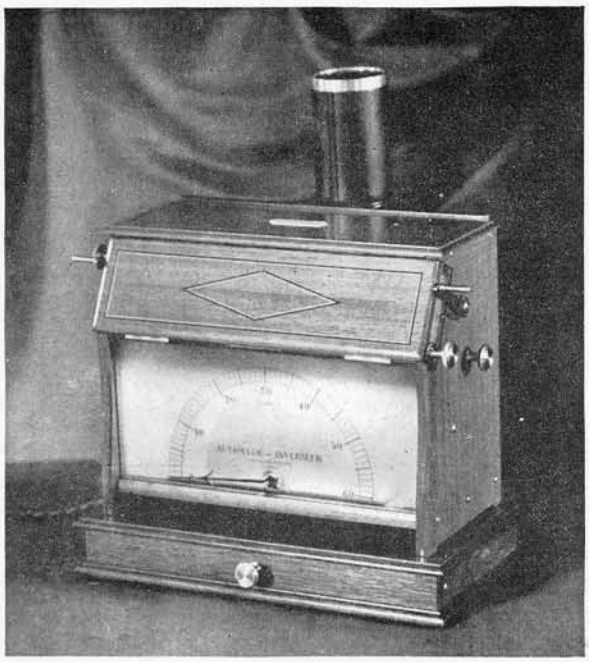


Drying Rack No. 530, Wash Box No. 543, Tray No. 515 and Fixing Box No. 518

NUMBER	DESCRIPTION	PRICE
505	—Transposing printing frame of Ambroine composition	$ 3.50
508	—Frame for printing one side of stereo on post card	2.50
509	—Transposing printing frame for roll film, of wood consumption	5.00
515	—Porcelain developing tray, four compartment	1.25
518	—Glass fixing box holding 24 plates back to back	1.50
530	—Wood drying rack for 24 plates 45x107 mm. or 7x13 cm.	.50
541	—Zinc wash box with brass faucet, for 12 plates.	2.75
543	—Zinc wash box with brass faucet, for 24 plates.	3.50
550	—Wire tongs for handling plates in developer	.20
610	—Teakwood box for filing 50 negatives, with index card	2.50
630	—Envelopes for negatives or positives, each	.01
701	—Lantern safe light for developing, with ruby, orange and white lights. electric or candle illumination	9.00
731	—Automatic Printer (see page 23 for description)	60.00
731a	—Automatic Printer (see page 23 for description)	65.00
734	—Automatic Printer 7x13 cm. (see page 23 for description)	55.00
736	—Automatic Printer 6x13 cm. (see page 23 for description)	55.00

Automatic Printer

45x107 mm. 6x13 cm. 7x13 cm.



Automatic Printer No. 731a with drawer

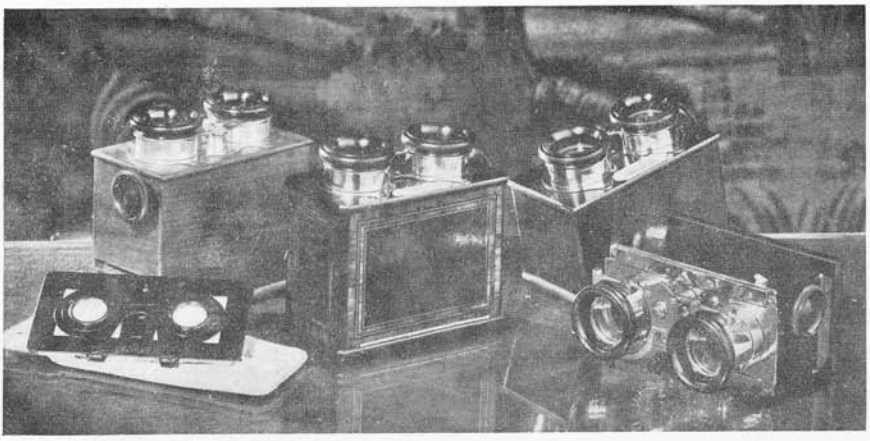
The Automatic Printer is a printer of stereoscopic transparencies, so contrived that the transposition of the positive plates is done automatically, in the most rapid manner.

The cut illustrates the general design of the printer, which is constructed of inlaid mahogany and metal working parts in the usual incomparable Richard manner. The stereoscopic negative is laid on the inclined bed of the machine, over two exposure apertures and is held in place by a strong clip. The positive plate is laid on a carrier to the left hand of the printing bed where it falls into place for the first exposure. Then simply by drawing out to the full distance the knob seen on the right hand of the printer, the plate is carried over to the other side of the bed, and on thrusting the knob back again is placed in position for the second exposure.

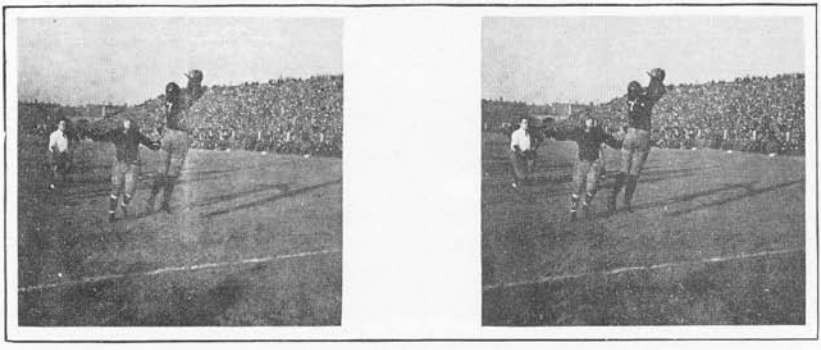
The exposure is made by turning the rear knob on the right hand end, thereby lowering a ruby screen placed in front of the light source, which is a 25 watt electric globe. The act of lowering this screen starts the second hand of the clock for timing the exposure, the orange dial of which is illuminated by the light source. Closing the ruby screen after the exposure releases the clock hand which returns to zero ready for the second exposure. The orange clock dial may be used to illuminate the dish while the prints are being developed.

The 45x107 mm. printer is made in two styles, No. 731 without drawer, and No. 731a with a four compartment drawer for holding the exposed and unexposed positive plates while working.

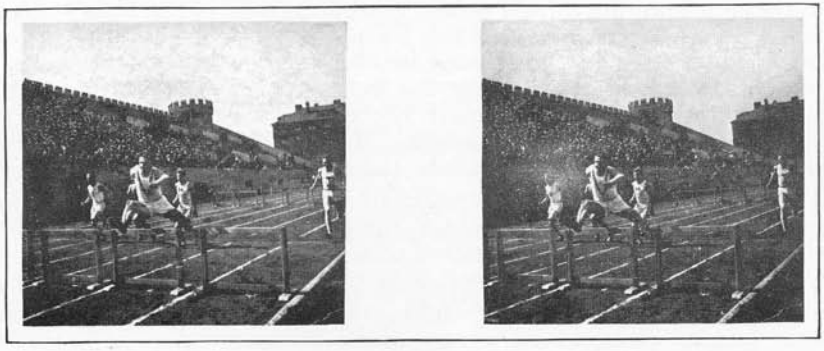
The 7x13 cm. and 6x13 cm. printers are slightly different from the 45x107 mm. in the mechanism and are constructed of dull finished walnut instead of inlaid mahogany. Both of the larger sizes have the positive drawer below.



Left to right Nos. 1023, 1003, 1007, 1010 and 1013 Richard Stereoscopes



A completed forward pass, Pyott to Lampe. Chicago-Indiana game 1923. Verascope No. 7, 1/150 second



Photographed with the Model 8 Verascope 1/400 second

Richard Stereoscopes

45x107 mm.

Just as important as a good camera, is a good stereoscope. There are several makes of stereoscopes on the market, some very good, and some that are sold mostly for appearance and large profits, without having the optical and scientific construction that is so important to comfortable and correct viewing.

Every genuine Richard stereoscope is optically and scientifically perfect, from the lowest to the highest priced model. Special attention has been paid to the Achromatic lenses, which are of the finest quality, to the correct centering between the lenses and to the smooth working, rigid construction. All models may be used for either ordinary positives or Autochrome natural color plates, although the short focus models tend to magnify the grain of the Autochrome color screen rather more than is desirable for this size of picture.

NUMBER	DESCRIPTION	PRICE
1003	Medium focus, waxed walnut with dull nickel fittings	$ 7.50
1005	Medium focus, mahogany with polished nickel fittings	13.00
1007	Medium focus, De Luxe model of selected mahogany inlaid with panels of rose-wood with brass and ebony borders	22.00
1008	Same as No. 1007 with nickel plated front and fitting to vary the distance between the lenses from 58 mm. to 75 mm. centers	18.00
1010	Short focus, giving life size image. Double Achromatic lenses, mahogany box with polished nickel fittings	15.00
1012	Short focus De Luxe model, same as No. 1007	25.00
1013	Short focus adjustable oculars, same as No. 1008	22.00
1020	Mahogany folding model, ordinary focus, in pouch	18.00
1023	Metal folding model, in pouch	4.00

Reversing Stereoscope

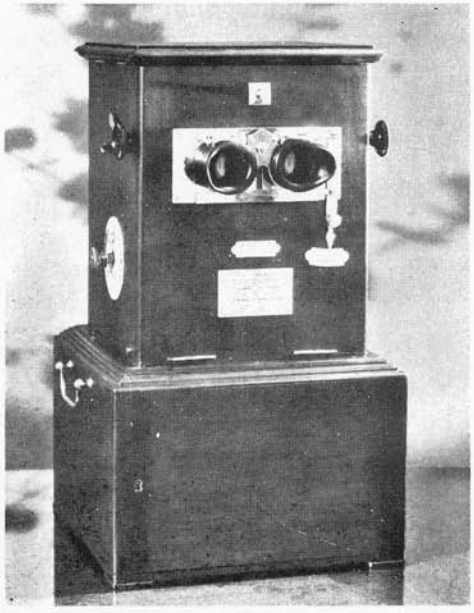
This model is constructed with two optically perfect reversing prisms in front of the lenses which allow the viewing of an image which has not been transposed in printing. It is especially recommended for viewing Autochrome plates which have not been cut and transposed, or for the viewing of negative plates, to form some idea as to how they will look when printed.

NUMBER	DESCRIPTION	PRICE
1040	Richard Prism Reversing Stereoscope, mahogany and nickel	$55.00

The Taxiphote

45x107 mm.

Taxiphote No. 2003



The **Taxiphote** is an instrument which has been designed for viewing, classifying and storing stereoscopic transparencies made with the **Verascope, Glyphoscope** and all other makes of stereoscopic cameras which take the same size pictures.

The handsome cabinet encloses a mechanism which receives an Ambroine tray holding twenty-five positives, and, by the simple pressing of a lever or the turning of a small crank, each positive is raised in its turn, to where it may be viewed through the lenses.

After the entire tray of pictures has been viewed it is a simple matter to remove it and place another set in position. By this method of viewing it is never necessary to touch the positives with the hands, thereby protecting the emulsion of the plates from scratches and finger marks.

On each **Taxiphote** is a button or lever, which when pushed, allows the viewing of the clear central portion of the positive where the title of the picture may be written. This, of course, does not apply to the 6x13 cm. or 7x13 cm. positives, as there is no space for writing between the two pictures.

The lens equipment is of the finest and all models have the **Richard** metal pupilary adjustment to insure comfortable viewing and avoiding eye strain.

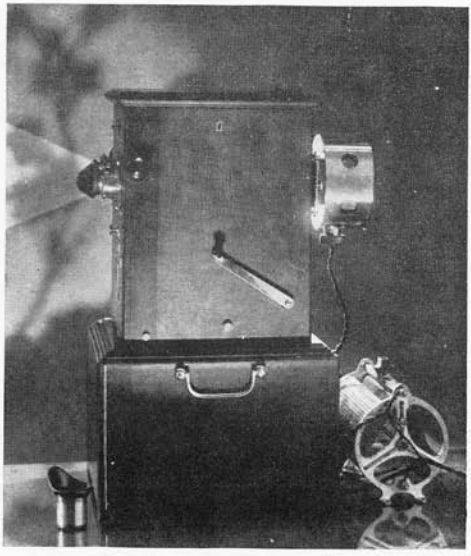
With the aid of the **Richard Projector** the **Taxiphote** may be used for projecting either the right or left side of the positives on a screen. This is a very ingenious device which is instantly attached

to, or detached from, the back of the **Taxiphote,** and can be operated from the ordinary house lighting circuit.

For those who require more storage space for their positives or who wish a stand to match the appearance of the **Taxiphote,** the **Taxiphote Cabinet** is advised. This is a well made column containing drawers holding four Ambroine trays each. Thus, the cabinet for the No. 2003 **Taxiphote,** having ten drawers, holds one thousand positives and the cabinet for the No. 2066 **Taxiphote,** having twelve drawers, holds twelve hundred positives. These cabinets place the **Taxiphote** in a position for comfortable viewing when seated.

Special Models

Any Richard **Taxiphote** may be had, on special order only, finished in fancy and carved wood cabinets. This includes mahogany, carved walnut, rose-wood inlay, etc. The Mechanical model also may be ordered specially, with two sets of lenses and one set of prism inversers for viewing uncut Autochromes. We will be pleased to furnish further particulars and prices for any special model desired.



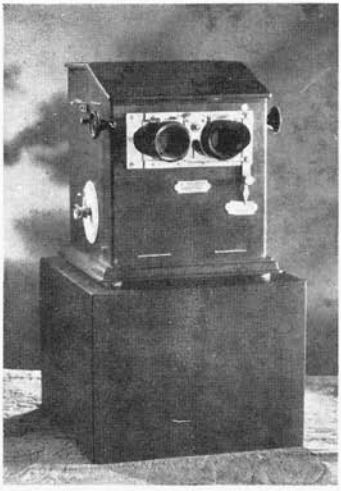
Taxiphote No. 2003 with Projector attached

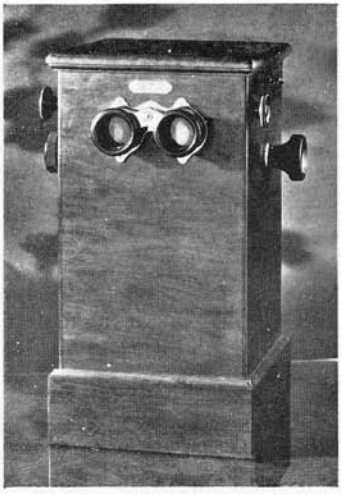
NUMBER	DESCRIPTION	PRICE
2003	**Taxiphote,** ordinary focus, of waxed walnut with cabinet below the mechanism to hold 300 positives	$150.00
2031	**Taxiphote,** Mechanical Model short focus. This model is made so that the mechanism raises the positive from the tray and brings it forward to the correct distance from the lenses. In waxed walnut with cabinet below for 300 positives	215.00
2041	**Taxiphote,** Optical Model. Fitted with two optical blocks which, when raised behind the lenses, change the size of the picture to the short focus or life size dimension. In waxed walnut with cabinet below for 300 positives	200.00
2043	**Taxiphote,** Mechanical Model with two sets of lenses and mechanism adjustable for viewing either ordinary or short focus. In waxed walnut with cabinet below for 300 positives	225.00

The Taxiphote

Left
Taxiphote
No. 2066

Right
Chain
Stereoscope
No. 1051





The Simplified Model **Taxiphote** has the same optical equipment and interpuilary adjustment as the more expensive models but the mechanism is somewhat less intricate and is operated by a crank motion. Nor has it any storing space for extra boxes of positives. The cabinet rests on an empty wooden box included with the outfit, placing the eye pieces on a level with the eyes when the **Taxiphote** and box are on an ordinary table.

NUMBER	DESCRIPTION	PRICE
2066	—**Taxiphote,** Simplified Model of waxed walnut	$ 80.00
2066a	—**Taxiphote,** Simplified Model of waxed walnut with base No. 2101 to hold 300 positives	100.00

The Chain Stereoscope

This stereoscope was designed for use where the positives are not to be changed frequently. The positives are held by springs in metal frames and the 25 frames revolve on a chain and cog when the large knobs on either side of the box are turned, bringing the slides before the lenses for viewing. The Chain Stereoscope is particularly recommended for commercial use at conventions and in show rooms when it is desired to show photographs of products in stereoscopic form.

NUMBER	DESCRIPTION	PRICE
1051	—Richard Chain Stereoscope, 25 capacity of waxed walnut . . .	$50.00

The Taxiphote

6x13 cm. 7x13 cm.

The **Taxiphote** for the pictures taken with the **Verascope** 7x13 cm. or other makes of cameras of similar size, is exactly the same as the smaller model No. 2003, excepting as to size and storage capacity. The base of this model is fitted with two drawers holding four Ambroine trays each, or 200 positives.

NUMBER	DESCRIPTION	PRICE
3102	**Taxiphote** 6x13 cm. in waxed walnut	$175.00
3004	**Taxiphote** taking 6x13 cm. or 7x13 cm. positives, in waxed walnut with cabinet below holding 100 positives	175.00

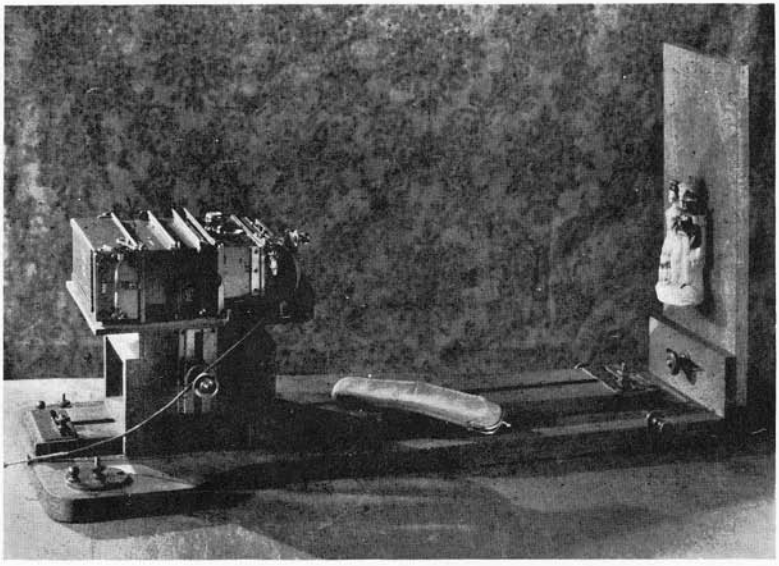
Pedestals and Accessories

45x107 mm. 6x13 cm. 7x13 cm.

2101	Pedestal in waxed walnut for **Taxiphote** No. 2066, holding 300 positives. Without Ambroine positive trays	$25.00
2111	Pedestal in waxed walnut for **Taxiphotes** Nos. 2003, 2031, 2041 and 2043, holding 1,000 positives. Without Ambroine trays.	70.00
2116	Pedestal in waxed walnut for **Taxiphote** No. 2066, holding 1,200 positives. Without Ambroine trays.	75.00
3108	Pedestal in waxed walnut for 6x13 cm. and 7x13 cm. **Taxiphotes** Nos. 3102 and 3004 holding 700 positives. Without Ambroine trays	75.00
740	Claire Soliel lamp. This is a triangular metal box, fitted on the inside with three mirrors which reflect the light of an incandescent globe through the back of the **Taxiphote,** illuminating the positive. Four colored glasses slide into the open side of the lamp giving the effect of viewing the positive by daylight. For all 45x107 mm. **Taxiphotes,** including lamp cord and socket	10.00
4590	Claire Soliel lamp for 6x13 cm. and 7x13 c.m. **Taxiphotes**	12.00
2155	Ambroine box for 45x107 mm. **Taxiphotes** (25 capacity)	.75
3155	Ambroine box for 6x13 cm. and 7x13 cm. **Taxiphotes** (25 capacity)	1.00
4301	Richard Projector (see description and cut, pages 26-27) for all 45x107 mm. **Taxiphotes.** Outfit includes lamp house and condenser lenses, rheostat, one bulb and projection lens which fits in the mounting of the viewing lens. For 110-15 volts	60.00
4302	Ditto, for 220 volts	65.00
4310	Ditto, for 6x12 cm. or 7x13 cm. **Taxiphote,** 110-15 volts	70.00
4311	Ditto, for 6x13 cm. or 7x13 cm. **Taxiphote,** 220 volts	75.00
4315	Bulb only for all projectors	1.00

The Banc

45x107 mm.



Richard Banc in operation with three extensions between camera and magazine

For the stereo-photography of very close subjects Jules Richard has designed the Banc, or Bench. With this apparatus, in connection with any 45x107 mm. **Verascope,** stereoscopic pictures of jewelry, small mechanical parts, crystals, flowers, fractures of metal, insects, etc., may be taken.

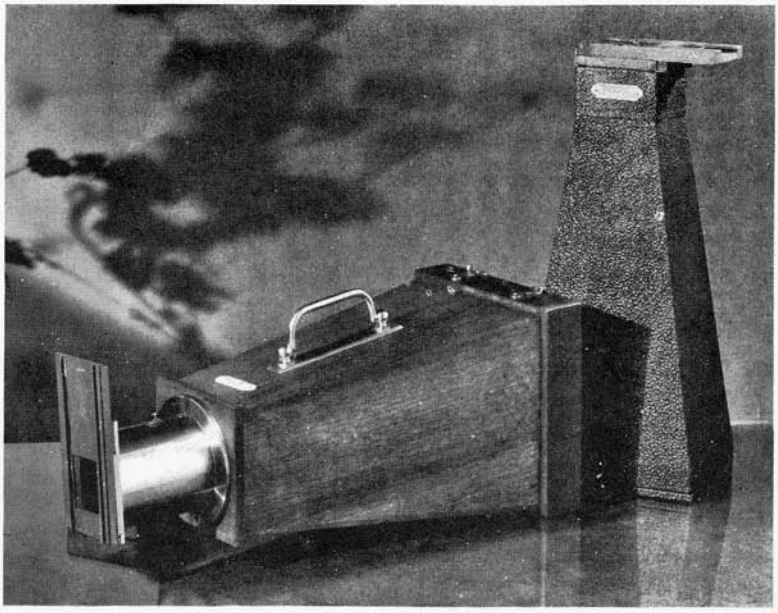
NUMBER	DESCRIPTION	PRICE
4400—Complete Richard Banc with instructions	. . . . .	$75.00

Enlarging Cones

To enlarge on paper from the **Verascope** negatives we offer the Richard enlarging cones. These enlargers are made of solid walnut, with brass fittings to hold the enlarging lens, shutter and negative.

No focusing is necessary. The operation consists simply of sliding the negative in the brass fitting, placing the paper in the holder and for making the exposure by opening and closing the shutter. The light enlarging may be either daylight or an electric globe of 75 watts or more.

NUMBER	DESCRIPTION	PRICE
4005—For enlargements 3⅜″ x 4″	. . . . .	$30.00
4020—For enlargements 3¼″ x 5½″ (post card)	. . . . .	35.00
4021—Simple model, of light wood, imitation leather covered for enlargements 3¼″ x 5½″ (post card)	. . . . .	9.00



Enlarging Cones Nos. 4005 and 4021

Telephotography With the Verascope

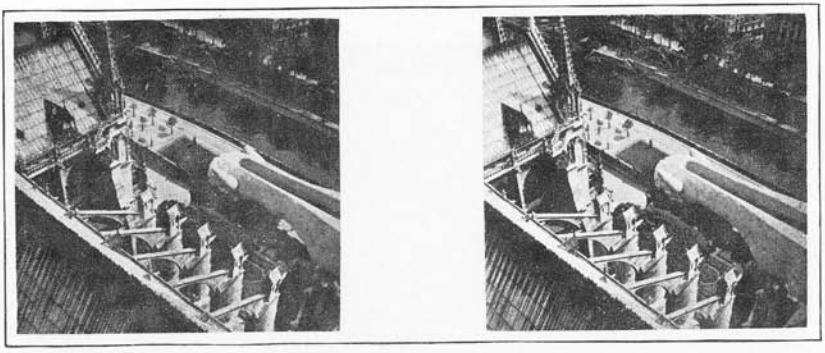
Telephotography is possible with the **Verascope** 45x107 mm. by using a pair of 6x Prism Binoculars in connection with a stand, or small table, holding the **Verascope** and binoculars. This stand may be placed on a strong tripod. If it is desired to purchase this apparatus it is necessary to send your **Verascope** to the manufacturers, as the binoculars must be fitted to the camera before using. If purchasing a new **Verascope** and the Telephoto attachment is desired, it is advisable to order the entire outfit from the factory to save time.

Richard Positives

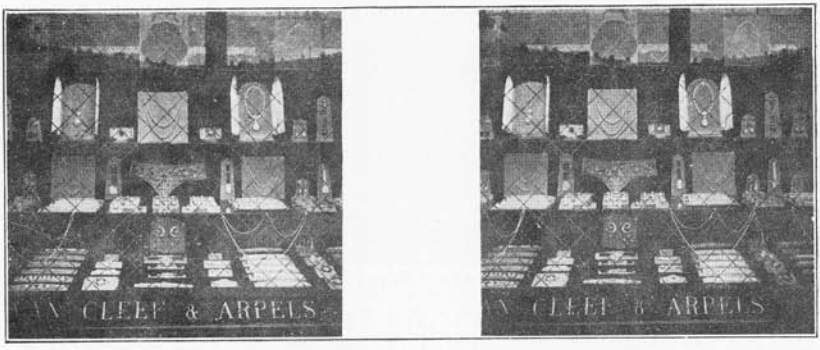
Jules Richard has accumulated a wonderful library of Stereoscopic views from every country in the world. A limited number of subjects are carried in stock at the United States Agency for sale and we would be pleased to receive orders for them direct. The credit for these sales will be given to your local dealer if he carries the Richard line.

A catalog of the entire library of views is kept at hand and will be mailed to you for the selection of views if returned promptly.

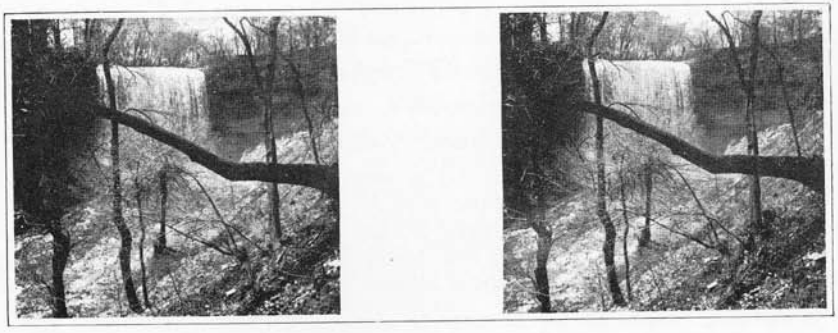
Prices and further information for items on this page will be furnished on request. Views not in stock will take about one month for delivery.



The Seine from top of Notre Dame Cathedral, Paris



$1,000,000 window display, Place de la Concorde, Paris
No. 201b Auxiliary Lenses used.



Minnehaha Falls, Minneapolis

Dry Plates for Stereoscopic Photography

Manufactured by Grieshaber, Freres & Cie, Paris, France

After testing many different makes of dry plates with special attention to their adaptability to stereoscopic work, the Grieshaber "Ace of Clubs" plates were selected without hesitation. They are offered to you as the finest product of their kind in the world; a worthy medium for recording the impressions of the **Verascope.**

"Ace of Clubs"

REPORTER—The only plate manufactured with all the following advantages. 500 H&D (1/12 B&W), Anti Halation, Orthochromatic and Self Screened. The Anti Halation backing is between the emulsion and the glass and disappears during development. A wonderful plate for speed work early or late in the day when the light is yellow and ineffective on the *non*-orthochromatic plate, regardless of its speed.

RED LABEL—A fast non-orthochromatic plate with a speed of 300 H&D (1/8 B&W), with remarkable latitude, fine grain and perfect gradation. The stereo worker may use this plate at an exposure of 1/50 of a second at *f.* 8 for all sunlight snap shots and be assured of fine average results.

ANTI HALO—The finest all round plate manufactured for stereo work. Highly orthochromatic and Non Halation with a speed of 250 H&D (1/6 B&W). Negatives made with this plate are snappy and clear as crystal.

INTEGRUM—H&D 100 (B&W 1/2). A slow, Self Screened, Orthochromatic, Non Halation plate with extremely fine grain and wonderful gradation, for photographing interiors and subjects which may be given slow exposures. A perfect plate for use with the Richard Banc and for still life pictures where fine grain is essential.

DESCRIPTION	PRICE		
	45x107 mm.	6x13 cm.	7x13 cm.
REPORTER—Per dozen, thin glass . . .	$0.70	$0.90	$1.10
RED LABEL—Per dozen, thin glass . .	.60	.80	.90
ANTI HALO—Per dozen, thin glass . . .	.65	.85	1.00
INTEGRUM—Per dozen, thin glass . . .	.65	.85	1.00

General Suggestions

For Good Stereoscopic Results

Handle your camera, accessories and plates with care. They are finely made, sensitive products and will respond to good treatment.

Dust the plates with a camel hair brush while loading the camera, as well as just before putting them in the developer. Keep the outside and inside of the camera free from dust by cleaning it before using.

The most important point in the composition of a stereoscopic picture is *foreground*. Always have some object in the near foreground when distant views are photographed. Remember that the stereoscopic effect in objects over forty feet away is greatly reduced unless there is some object in between the camera *and* the subject. A good rule is to always try to get more terra firma than sky. This will keep the camera down so that something *will* be in the foreground.

Hold the camera steady when making the exposure. Press the release slowly and take plenty of time in composing your pictures.

Do not expect to get beautiful pictures when the light is poor. The fast lenses and plates will enable you to get *full exposures* but they will also faithfully record the dull, flat lighting.

Always look to see that the plate is changed and that the shutter and diaphragms are properly set. (*We once took twelve beautiful(?) snapshots with the shutter set for time exposure.*)

It is not possible to get good results when finishing pictures with slip-shod developing and printing methods or accessories.

Use a real safe light in your dark room and be sure the room *is* dark.

Never touch the emulsion of the plates or films with the fingers.

Pay the strictest attention to the strength of the developer, the temperature and the time of development.

When the plates or films are removed from the wash water, hold them in running water and wipe the surface of the emulsion gently with a piece of wet absorbent cotton.

We read in a manual on stereoscopic photography that stereoscopic negatives should be contrasty. This is *absolutely wrong*. The most beautiful results are produced from *soft* negatives. With this in mind, if your developer is producing contrasty negatives, use the solution slightly more diluted or, shorten the time of development until the contrast is eliminated.

And, *most important*, use a Richard camera and accessories.

Developers

For Stereoscopic Finishing

These formulas are the result of many years of experience in the finishing of stereoscopic pictures and are furnished in the hope that they will enable those who do their own work to achieve the best results possible.

STEREO M. Q. (concentrated liquid universal developer)

	AVOIRDUPOIS	METRIC
Metol or Elon	90 grains	6.00 grams
Hydroquinone	300 grains	17.50 grams
Sodium Sulphite (desiccated)	2½ ounces	71.00 grams
Caustic Solution (see foot note)	1 ounce	28.50 ccs.
Potassium Bromide crystals	50 grains	3.50 grams
Water to	16 ounces	455.00 ccs.

The Caustic Solution is prepared by dissolving 1 part of Caustic Potash in water to 2 parts, i.e., 4 ounces of Caustic Potash and *add water up to* 8 ounces. Dissolve the Metol and Hydroquinone in about 14 ounces of hot water and add the Sulphite. A white precipitate will form. Stir well for a short time and add the Caustic Solution, which will clear the precipitate. Then add the Bromide and water up to 16 ounces.

	AVOIRDUPOIS	METRIC
To develop negative plates, take, Developer	1 ounce	or 28.50 ccs.
Water	11 ounces	or 313.00 ccs.

Time for development, about 4 minutes at 65° F., Tank or Tray.

For black tone positives, lantern plates, gaslight or bromide papers, this developer is unexcelled and should be used about 1 to 16. (One ounce of developer to 15 ounces of water.)

STEREO PYRO (three solution negative developer)

		AVOIRDUPOIS	METRIC
"A"	Pyro	1 ounce	28.50 grams
	Potassium Metbisulphite crystals	70 grains	4.50 grams
	Potassium Bromide crystals	25 grains	1.50 grams
	Water to	16 ounces	455.00 ccs.
"B"	Sodium Sulphite (desiccated)	1¾ ounces	49.50 grams
	Water to	16 ounces	455.00 ccs.
"C"	Sodium Carbonate (desiccated)	1¼ ounces	35.50 grams
	Water to	16 ounces	455.00 ccs.

To develop, take, 1 ounce of each solution and water to make 12 ounces.
Time for development, about 7 minutes at 65° F., Tank or Tray.

Developers

For Stereoscopic Finishing

ILFORD ALPHA (Richard formula for Ilford Alpha positive plates)

		AVOIRDUPOIS	METRIC
"A"	Sodium Sulphite (desiccated)	1 ounce	28.50 grams
	Hydroquinone	150 grains	9.50 grams
	Water to	10 ounces	284.00 ccs.
	(Dissolve the Hydroquinone first, in hot water.)		
"B"	Sodium Carbonate (desiccated)	2 ounces	56.50 grams
	Water to	10 ounces	284.00 ccs.

To develop, take, 1 ounce each of "A" and "B," 8 ounces of water and 30 to 60 drops of a 10% solution of Potassium Bromide solution. Temperature about 70° F. This strength, with normal exposure, will produce Brown or Red Brown tones. For Sepia tones, use less water and shorter exposure. For Red tones use more water and longer exposure.

PYRO-AUTOCHROME Developer

		AVOIRDUPOIS	METRIC
"A"	Water	4 ounces	113.50 ccs.
	Sodium Bisulphite (saturated solution)	2 drops	.12 ccs.
	Pyro	1 dram	3.50 grams
	Potassium Bromide crystals	1 dram	3.50 grams
"B"	Water	3 ounces	85.00 ccs.
	Sodium Sulphite (desiccated)	3 drams	11.50 grams
	Ammonia (26%)	4 drams	14.00 ccs.

To develop, take 2½ drams each of "A" and "B" and make up to 3 ounces with water. Time for development, 2½ minutes at 60° F.

This is the developer which is used by Jules Richard in developing all of their stereoscopic Autochromes. They find that it gives more brilliant colors with less chemical fog than any other formula. It is *very important* that fresh Autochrome plates be used to get perfect results, and that the temperature of the developer, reversing solution and wash waters be kept below 65° F. while working.

AUTOCHROME REVERSING SOLUTION (concentrated solution)

	AVOIRDUPOIS	METRIC
Potassium Bichromate	60 grains	4.00 grams
Water	16 ounces	454.50 ccs.
Sulphuric Acid (C. P.)	6 drams	21.50 ccs.

Use this solution 1 part to 3 parts of water.

For Second Development use Amidol, Rytol or any good Metol Hydroquinone developer.

All genuine Richard products bear this trade-mark