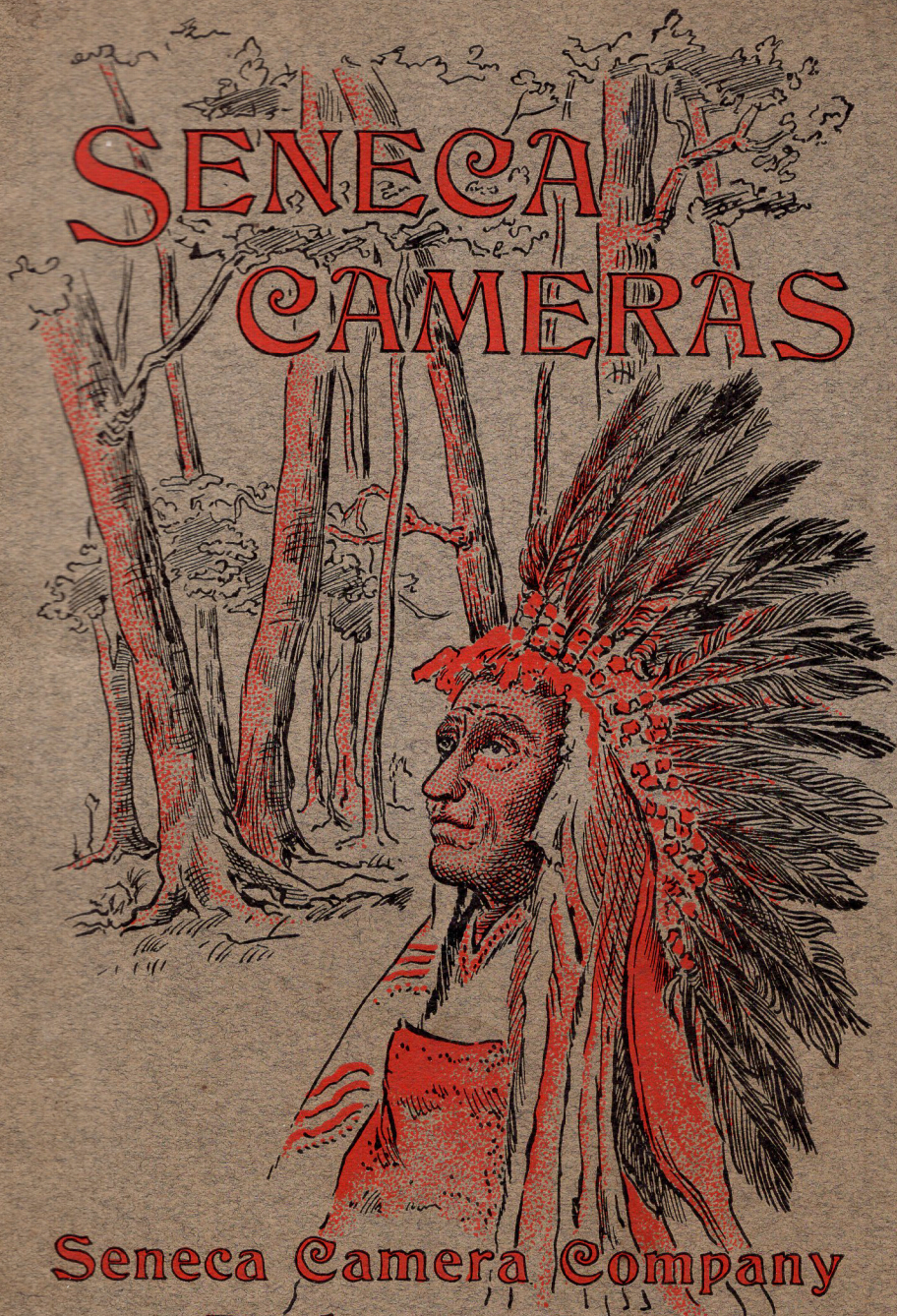


SENECA CAMERAS



Seneca Camera Company
Rochester, N. Y.

Seneca Cameras



1902

Seneca Camera Company

SUCCESSOR TO
SUNART PHOTO CO.
and
BULLARD CAMERA CO.

ROCHESTER, N. Y., U. S. A.



SENECA CHIEF.



INTRODUCTORY



THAT our efforts to give to the public a reliable and unquestionably meritorious Camera have been successful, is attested in a substantial manner by the steady and gratifying increase in the demand for our product during the past year. We believe the *SENECA* to be the embodiment of everything that can be wished for in a camera. The *SENECA* cameras are the result of much thought and practical observation, the object in view being the elimination of all features proven by practice and experiment to be superfluous or objectionable, and the adoption of such only as will facilitate the art of amateur photography, with the greatest economy of time, labor, expense and patience. Careful and painstaking attention to constructive detail, together with their combined features of excellence, including their symmetrical and handsome lines, have earned for the *SENECA* cameras the appreciation and admiration of every amateur photographer.

In the matter of quality and popularity, they occupy an enviable position in the front rank. The veriest novice will find that in compactness, ease and simplicity of operation, and general all-around characteristics, the *SENECA* cameras meet all requirements. The professional or advanced amateur will quickly recognize their points of superiority, and will readily concede our claims for them.

The description of our cameras in the following pages gives a very inadequate idea of their finish and workmanship. The designs are the most popular.

Our new factory is well equipped with the latest and best machinery, and the stock that enters into our goods is the best.

The lenses used are especially fine and are made after the most modern formula. We invite a personal inspection of our cameras, and to those who are unable to obtain them at their dealers, we will send C. O. D., upon the receipt of sufficient money to cover express charges both ways, with privilege of examination.





TERMS



THE PRICES listed in this catalogue are net. All goods are boxed and delivered to express or railroad company at Rochester, free.

In ordering goods always give shipping directions, whether by mail, express or freight. If not so stated we will use our discretion.

All orders for goods C. O. D. must in every instance be accompanied with double the amount of transportation charges unless sent through the order and commission officer of one of the principal express offices.

All orders to be forwarded by mail must include postage or they will be sent by express.

Remit by draft on New York, P. O. order, registered letter or express money order. Personal checks from parties unknown to us, unless certified, will be collected through our bank before goods will be shipped. Parties unknown to us and desiring to establish a line of credit will save delay by giving approved reference.

All open accounts must be settled once a month. Claims for errors must be made promptly.

Claims for breakage, damage, etc., must be made against the transportation company, not against us. Our goods are delivered securely packed and in good order to the carrying company.

Write name and address plainly to avoid mistakes in shipping.

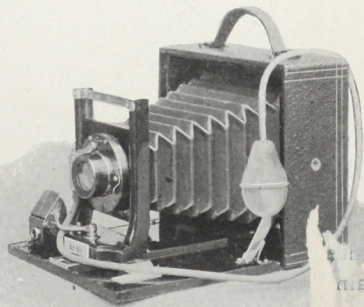
Prices listed are subject to change without notice.





The Koko

An up-to-date cycle camera. Its price is the prime factor, taking into consideration its quality and workmanship. It is made in a thorough manner, all dovetailed together, with metal parts of brass, highly polished and lacquered, covered with best morocco grained leather, with leather handle. It will be found thoroughly efficient, and especially adapted, on account of its compactness, for hand use. It is supplied with two tripod nuts so that it can be attached either vertically or horizontally to a tripod. The finder is reversible and embraces exactly the same angle of view as the camera. The rising and falling front attachment is rigidly clamped in any position by a milled thumb screw. We supply this camera with the pneumatic release and Iris Diaphragm Shutter. With this shutter there is no uncertainty as to whether it is set or not. It is fitted with a high grade R. R. Lens. The price includes one plate holder and carrying case. The case is very durable, and has compartments for camera and five plate holders.

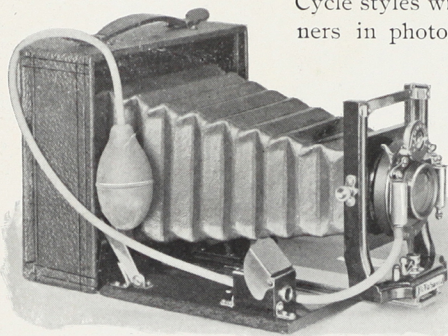


PRICE

Fitted with Single Lens,	-	-	4 x 5	\$7.50
Fitted with Double Lens,	-	-		9.00
Extra Plate Holders,	-	-		.60

Koko Special

One of our latest in the Cycle variety. This camera was designed to meet the demands of a thoroughly first class, up-to-date instrument at a popular price, and as such, has attained a reputation second to none. It is to-day the most popular member of the



Cycle styles with young people and beginners in photography. It is finished in

mahogany, covered with the best seal grain Morocco, and the bellows is made of the very finest red Russia leather. All metal parts are finished in lacquered brass. It is fitted with Unicum or Wollensak regular double valve

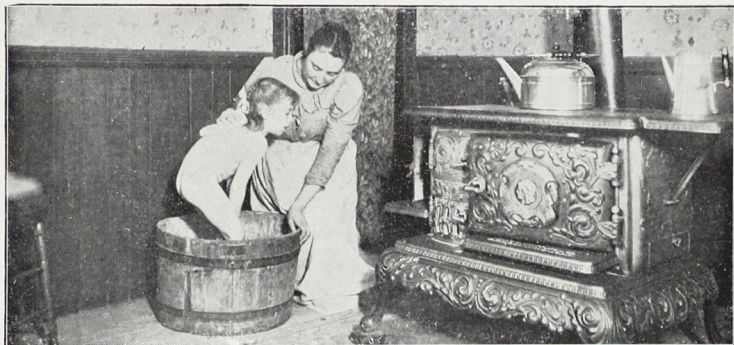
shutter, and our celebrated Rapid Rectilinear lens of double combination, which covers the plate clear and sharp to the corners. It has reversible view finder, rising and falling front, and tripod nuts.

Price includes one plate holder and sole leather carrying case.

PRICE

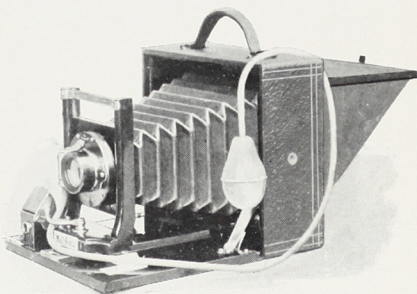
Camera complete,	-	-	4 x 5	5 x 7
Extra Plate Holder,	-	-	\$12.00	\$16.00
			.60	.80





Seneca No. 2

The latest improved design in cycle cameras. This camera is designed to meet the demand for a thoroughly first class instrument at a popular price. It is today the most popular with beginners in photography. The moderate price at which this camera is sold does not mean that it has been slighted in workmanship or material. It possesses all the features of many of the higher grade cameras. It is fitted with our Junior single valve shutter, and a strictly first class Rapid Rectilinear lens, of double combination, and covers sharp corners of the plate, and is also fitted with focusing curtains, which does away with the necessity of carrying a focusing cloth, tripod nuts and rising and falling front. A carrying case and shoulder strap with one plate holder is furnished with this camera.

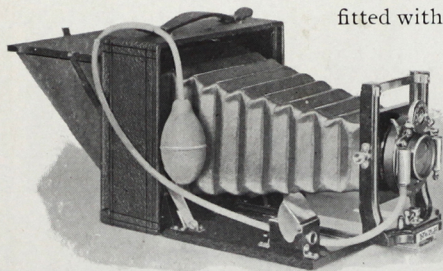


PRICE

Camera complete	-	-	-	4 x 5	\$10.00
Plate Holders,	-	-	-		.60

Seneca No. 2a

This camera is similar in design to Seneca No. 2. It is cycle style, and made of solid mahogany, dovetailed together, with metal parts of brass, highly polished and lacquered, and is covered with selected Morocco grain leather. It is fitted with focus scales, reversible hooded



view finder, rising and falling front and reversing back. It has the Wol-lensak regular double valve shutter and the best quality Rapid Rectilinear lens of double combination, and will cover the

entire plate sharp to the corners, and with focusing curtains which does away with the necessity of carrying a focusing cloth. A sole leather carrying case and shoulder strap with one plate holder is furnished with each camera.

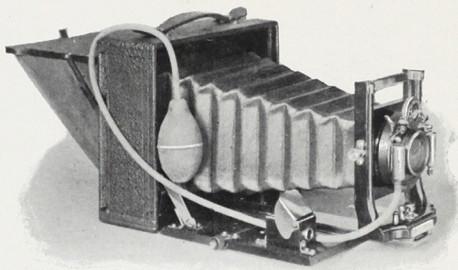
PRICE

Camera complete,	-	-	4 x 5	5 x 7
Plate Holders,	-	-	\$14.00	\$18.00
			.60	.80



Seneca No. 2 Special

Still another style of the cycle variety, built on the lines of Seneca No. 2. Its features of lightness and compactness are not equaled in any other camera made. It is designed especially for hard service, and is equipped with the Wollensak regular double valve shutter, and our celebrated Symmetrical lens, well known for its optical perfection. It has Iris diaphragm, finger and pneumatic release, with bulb and hose attachment, rising and falling front, reversible hooded view finder, two tripod nuts, rack and pinion, and focusing curtains. A sole leather carrying case and shoulder strap with one plate holder is furnished with each camera.



PRICE

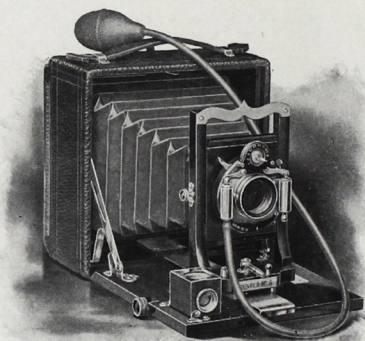
		4 x 5	5 x 7
Camera complete,	-	\$14.00	\$18.00
Plate Holders,	-	60	.80



Seneca No. 5

This is one of our most popular cameras built in cycle style. The wood parts are of solid mahogany, highly polished and dovetailed together. All metal parts of highly polished and lacquered brass, and when open, the camera presents a very handsome appearance. It is covered with the finest quality seal-grain morocco leather, and has a reversing back, which can be attached all four ways; ground glass door has curtains on either side, which are of great advantage when focusing without a cloth. This door is held in place by a brace, and when opened, is sufficiently rigid to support any focusing cloth. The rising and falling front has great latitude of adjustment and is held securely in position by a milled screw. There is a fine rack and pinion device for focusing, and although this camera was not designed as a long focus, the bellows is of ample length and permits of focusing on objects only 18 inches distant. The finder is a reversible brilliant of the latest design. Fitted with either the Unicum or Wollensak Automatic shutters, which make exposures from one second to one one-hundredth of a second. Fitted with a lens that

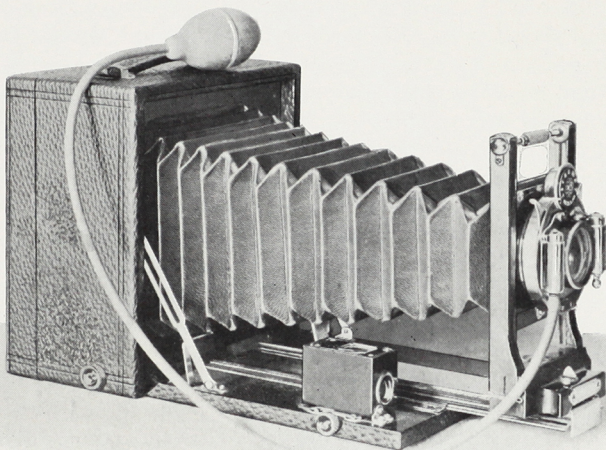
is perfectly rectilinear, and we will guarantee every lens capable of making clear cut negatives. This camera is built for business and any camerist will find it a most perfect instrument for general work. A sole leather carrying case, shoulder strap and one plate holder with each camera.



	PRICE	
	4 x 5	5 x 7
Camera complete,	\$16.00	\$20.00
Plate Holders,	.60	.80

Seneca Special

To the amateur as well as professional, Seneca Special offers a perfect photographic instrument, made in the most compact cycle form. Still they are complete in every detail, and perfect in construction. This camera has all the adjustments that our best compact cameras have and it is destined to become very popular

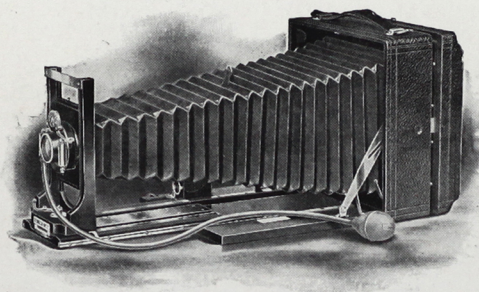


with all classes, not only for its many valuable features, but on account of its extremely low price. The wood parts are solid mahogany, highly polished and dovetailed together; all brass work is polished and lacquered. It has a reversible back, enabling the operator to change the position of the plate from horizontal to perpendicular without disturbing the camera when once adjusted. The swing back with which it is fitted is only found on the better grade of instruments, permitting the operator to so adjust the plate that all objects whether high or low will be shown without distortion. It has Brilliant reversible view finder, is fitted with either the Unicum or Wollensak double valve shutter, with our best quality symmetrical lens, Iris diaphragm, finger and pneumatic release, with bulb and hose attachment, rack and pinion, rising and falling front, detachable lens board, tripod nut and focusing curtains. A sole leather carrying case with shoulder strap and one plate holder goes with each camera.

	PRICE	4 X 5	5 X 7
Camera complete,	- - -	\$20.00	\$24.00
Extra Plate Holders,	- - -	.60	.80

Seneca No. 7

The beautiful finish, fine workmanship and many fine adjustments, make this an instrument which will meet the requirements of the most advanced amateur who wishes a camera that will adapt itself to any and all conditions. Perfect in design, and compact in form, this instrument has attained a reputation as a first class, all around business camera. It can be depended upon to produce the best results under all circumstances. The great focal length of this camera increases its value for purposes of general photography. The increased draw is manipulated by a fine rack and pinion focusing attachment on the bed, assuring perfect adjustment. The back is reversible, and can be attached all four ways. This back is held in place by inside fastenings. The bellows, made from the finest red Russia leather, on the 4 x 5 size has an extension of 15 inches, and 18 inches on the 5 x 7



size. On account of this long draw, it is suited for work with the Tele-Photo lenses, so much used at present for architectural detail and views from an extreme distance. The double swing back adds nothing to the bulk or weight of this camera, and is

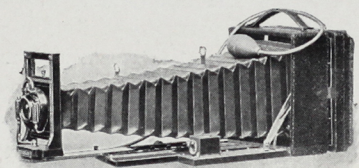
easily adjusted for either vertical or horizontal swing, and can be securely locked in any position. The rising and falling front has great latitude of adjustment. Finder is the latest style Brilliant reversible. It has curtains on the ground glass door, which are of great advantage when focusing without a cloth. It also has detachable lens board, and is fitted with either the Unicum or Wollensak double valve automatic shutter. It has an Iris diaphragm, and makes exposures from one second to one one-hundredth of a second. With this shutter, the question never arises whether it is set or not. The lens is the Seneca Convertible, and every one is guaranteed capable of making clear cut to the extreme edge of the plate. A sole leather carrying case, shoulder strap and one plate holder, with each camera.

PRICE

Camera complete,	-	4 x 5	5 x 7
" " with extra quality Convertible Lens,	-	\$22.00	\$26.00
" " " Seneca Anastigmat Lens,	-	28.00	34.00
Extra Plate Holders,	-	56.00	65.00
		.60	.80

Tele-Photo Cycle A

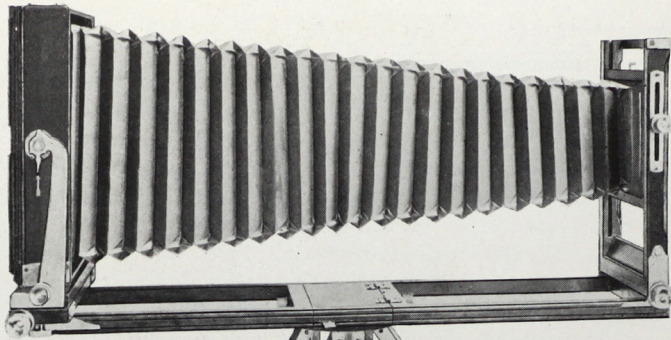
This camera is designed for the use of lenses of more than one focus, and for all photographic work where double and triple focuses are required. Our Tele-Photo Cycle A, will be found to be everything that could be desired for scientific work. It is made from solid mahogany, all metal parts highly polished and lacquered, the bellows being made from the very finest Russia leather. It has an unusually long draw, the bed being made in three sections, supplied with a rack and pinion, and clamping device, which makes the camera the most rigid and strongest on the market. By this device the operator is secured against any chance of the bellows slipping back after the camera has been focused. Tele-Photo Cycle A is preferred by advanced photographers who are desirous of securing particularly fine results. It is used where great detail and fine definition are required, and has proved its work in mechanical photography, where a camera becomes an indispensable part to the sales department of large manufactories. It has a reversing back, so that when views are desired either vertical or horizontal, the change can be made in an instant from one position to the other, without changing the



focus of the camera. The swing back is optically perfect, being operated by two covered buttons at the side, and can be adjusted at any reasonable angle, and held securely in that position. It has a rising and falling front, removable lens board, and a very finely adjusted Brilliant view finder. The ground glass door is fitted with focus curtains, doing away with the necessity of carrying a hood. It is fitted with either the Unicum or Wollensak latest improved automatic shutter, and with our celebrated Apoplamat three focus lenses. With this combination the front lens may be removed, and the rear used alone, which nearly doubles the size of the image, or the rear combination can be removed and the front used, which gives a still larger image. A sole leather carrying case, with shoulder strap, and one plate holder is furnished with this camera.

PRICE

		4 × 5	5 × 7
Camera complete,	- -	\$28.00	\$32.00
Extra Plate Holders,	- -	.60	.80



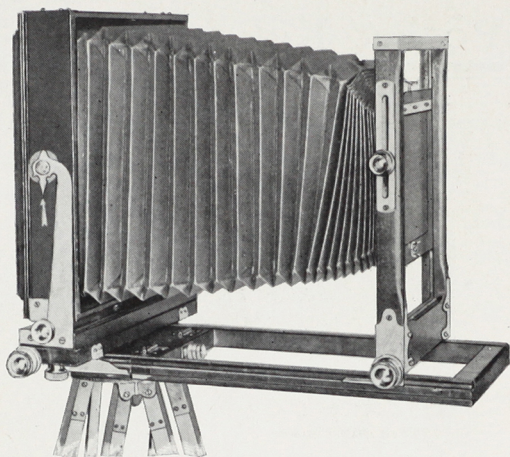
The Seneca

View Camera

Made from the finest mahogany by the most skilled workmen. All of the metal parts are of highly polished and lacquered brass. The bellows made of the very finest material, lined with gossamer cloth, making it absolutely impervious to light. In getting out this camera, we have spared neither time nor expense, and feel safe in saying that we have by far the best and finest adjusted view camera made. The most careful attention has been given to every detail, not only the best raw materials enter into the construction, but the lumber, brass, leather and all other parts are handled by the very best of skilled mechanics. We invite the most careful examination and comparison of the Seneca View Camera with any other view camera made at any price. Its equal has never been produced.

The special features are : 1. An up-to-date coming device, which secures perfect rigidity in every part in any position. 2. The focus may be adjusted by moving the front or back as preferred, both operating by a rack and pinion. 3. It has a reversible back so that pictures may be taken in either a horizontal or vertical position without disturbing the camera. 4. It has a rising and falling front, operated by rack and pinion which gives a very finely adjusted instrument without any possible chance of moving the slightest fraction of an inch. 5. Three-section bed, giving great focal capacity. 6. The focus may be adjusted by moving the front or back as preferred, both operating by rack and pinion. 7. A double grooved bed which allows the front and back to be placed together for short focus lenses. 8. Both horizontal and vertical swings operating at the center with rack

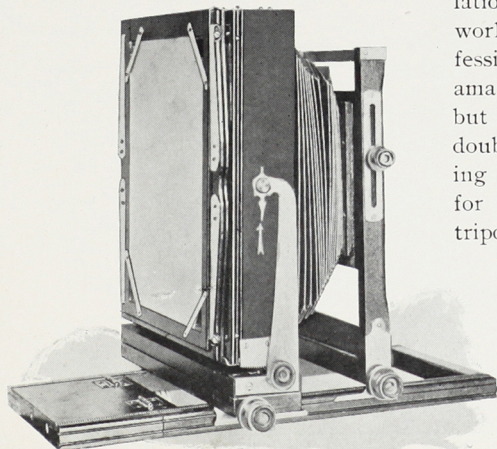
and pinion and clamping device. Two side swings operated by rack and pinion. 9. Extra long brass arms of latest model at either side, supporting front and back, giving a smooth and easy motion when focusing, and rendering the camera absolutely rigid whether partly or fully extended. 10. Extra large lens board to accommodate extra large flange inside.



11. Automatic lock, which prevents the back from racking beyond the edge of the bed.

On account of the extreme length of bellows, for copying, enlarging, tele-photo and other work requiring long focus lenses, the $6\frac{1}{2} \times 8\frac{1}{2}$ Seneca View, when fully extended, has a draw of 25 inches, and the 8×10 , 31 inches. A greater focal capacity than any other view camera made. There is no question but what the Seneca View Camera fully meets the demand for an instrument combining the highest degree of convenience, strength, compactness and ease of manipulation,

for the wide range of work coming before the professional, and which advanced amateurs often attempt with but little satisfaction. One double plate holder and carrying case with compartment for five extra holders, and tripod, are included without extra charge.

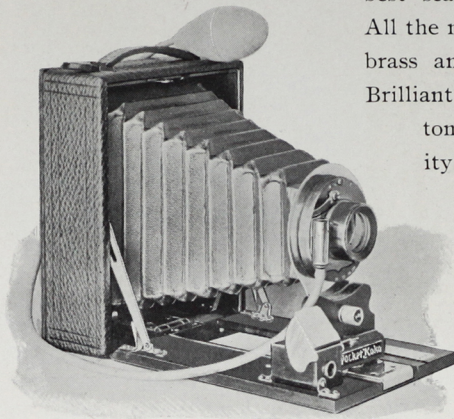


PRICE

	$6\frac{1}{2} \times 8\frac{1}{2}$	8×10
Complete,	\$20.00	\$24.00
Plate Holders,	1.25	1.50

Pocket Koko

The Pocket Koko is a decided innovation in the cycle style of cameras. It is so small and light that it may be carried in your coat pocket, it is made entirely of mahogany, covered with the



best seal grain Morocco leather. All the metal parts are of polished brass and lacquered, and it has a Brilliant reversible view finder, automatic shutter with best quality R. R. lens. It takes a picture

4 x 5, and is the only camera on the market that takes a picture of this size that fits the pocket. The Pocket Koko meets the requirements of the beginner as well as

the advanced amateur, and will be found very handy when out on excursions and picnics.

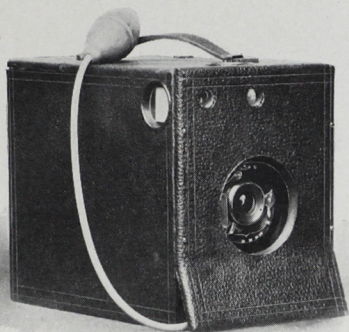
PRICE

Camera complete,	- - - - -	4 x 5	\$8 00
Plate Holder,	- - - - -		.40
Carrying Case for Camera and six Holders,	- - - - -		2.00
Carrying Case for 12 Holders,	- - - - -		1.75



The Busy Bee

This camera was originally designed and constructed by us. In the Busy Bee, we give the very best material in the lens and shutter mechanism, and we put in a good substantial box covered



with real leather, and no fancy ornaments. The lens is achromatic, no focusing is required, the focus being fixed at from eight feet to any distance so accurately, that there is no possibility of any object photographed being distorted. The shutter is the self-acting, always ready, automatic, pneumatic

release, and adjusted for snap shots, bulb or time exposures. It has the celebrated Iris diaphragm, operated by index lever, enabling one to open it to suit any degree of light. The camera is $5\frac{1}{2} \times 7 \times 8\frac{1}{2}$ inches outside, and put together with the care that gained for this factory its success. It is fitted with two finders and two tripod nuts, so that it can be adjusted on the tripod or by hand, for either perpendicular or horizontal pictures. There is room in the back to carry three plate holders. So simple a child can use it.

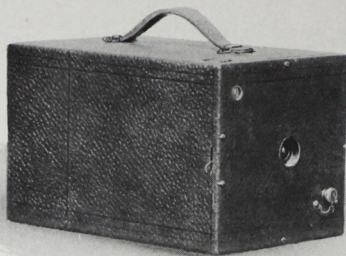


PRICE

Camera complete,	-	4×5 \$4.50
Extra Plate Holders,	-	.60

Kao Jr. and Sr.

In the production of this camera we have endeavored to furnish a first class, practical instrument, possessing the advantages in ease of manipulation and results of many cameras selling for several times its price. Its manufacture is on the same high class order that distinguishes our other lines, being neat, compact and thoroughly equipped, covered with the best of seal grain leather, with leather handle for carrying purposes. The Kao Jr. makes a picture $3\frac{1}{2} \times 3\frac{1}{2}$ inches square, and the Kao Sr. 4×5 inches. They are well adapted for portraits, landscapes, interiors or flash-lights. They carry three double plate holders, with a capacity of six dry plates. Each camera is provided with a Brilliant square finder, for accurately locating the view, and two sockets or plates for use with a tripod. They are equipped with our specially constructed Automatic shutter, for time, instantaneous and snap-shot exposures, one button answering for both purposes. The lens is the high grade Meniscus combination, of universal focus, requiring no



focusing attachment, as it is applicable for any distance from six feet to any greater interval. It has a wonderful depth and definition, fully covering the plate without distortion. The fine results obtained with this camera are due to its superior lens and perfection in construction. All complicated adjustments have been dispensed with, enabling the youngest amateur to manipulate it with ease and precision. One plate holder included in the outfit.

PRICE

		$3\frac{1}{2} \times 3\frac{1}{2}$	4×5
Camera complete, Kao Jr.,	-	\$2.00	
" Kao Sr.,	-		\$2.50
Plate Holders,	-	.40	.50

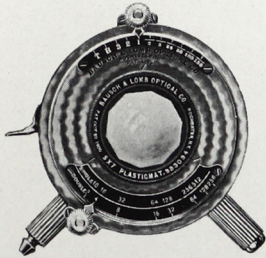


SHUTTERS



THE VOLUTE SHUTTER Heretofore it has been impossible to produce an Iris Diaphragm Shutter, rapid enough for photographing athletes, race horses, etc., satisfactorily. In the new Volute Shutter an absolute speed of one one-hundred-and-fiftieth second has been attained, rapid enough

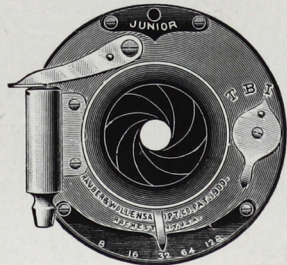
for all kinds of fast work with images of reasonable size. The shutter is opened and closed with one lever. Whatever the duration of the exposure of the shutter is to be, the shutter opens instantly and closes instantly, after remaining open the desired length of time, thus giving the maximum exposure. At the same time all the advantages of the older construction have been retained, and in addition the entire mechanism rendered dust proof, all the parts being enclosed in the highly polished case. We can only compare this shutter in appearance and workmanship to a watch. It can be fitted between the combinations of regular lenses, and of Plastigmat *f*-6.8.



PRICE

		Fitted to Planatograph, Plastigmat or Zeiss.		Fitted to Lenses of other manufacture	
4	x 5,	Size of largest diaphragm	1 in.,	\$17.00	- - - \$18.00
6½	x 8½,	"	1½ in.,	18.50	- - - 20.00
8	x 10,	"	2 in.,	20.00	- - - 22.00

THE JUNIOR SHUTTER The Junior is a self-setting or automatic shutter, always ready for use, being set and released by a single pressure of the bulb. It is arranged for instantaneous, time, and bulb exposures. Fitted with iris diaphragm, operated by an index at the bottom. This is without question the best moderate priced shutter in the market.

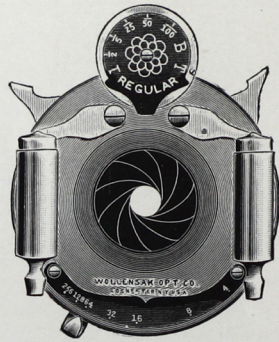


PRICE

Fitted for Single Achromatic Lens, opening 16 mm., or ⅝ in.,	\$2.00
Fitted for Rapid Rectilinear Lens, opening 16 mm., or ⅝ in.,	2.50

REGULAR DOUBLE VALVE SHUTTER Our Regular Double Valve

Shutter is without question one of the very best designs for general use yet placed on the market. The ease of adjustment, perfect working of all parts, compactness, and attractive appearance are noticeable features. The Double Valve Shutter has triplicate movement, operating for instantaneous, time, and bulb exposures. It is also fitted with both a finger and pneumatic release. On a dial at the top the various degrees of speed are indicated in fractional parts of seconds, and exposures of different lengths are secured by simply turning a milled head to the right or left. This adjustment is very much easier made in the Double Valve Shutter than many others, for the dial revolves with great smoothness, and can readily be moved by a slight pressure of the finger. The shutter blades are so formed as to give the most even illumination possible. Just behind the blades we fit the iris diaphragms, operated by an index at the bottom. The scale is marked in accordance with the U. S. system.



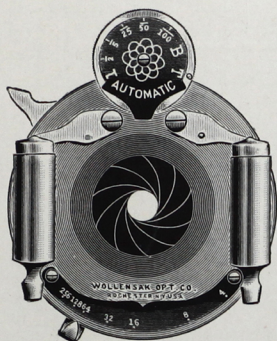
By means of the valve, or retarding device, at the right, freedom from jar and accuracy of time are secured. The Double Valve Shutter has had an extensive sale, and its ever increasing popularity fully attests its merits.

PRICE

4 x 5 Regular Double Valve Shutter, opening 22 mm., or $\frac{7}{8}$ in.,	\$ 6.00
5 x 7 " " " " " "	7.00
$6\frac{1}{2}$ x $8\frac{1}{2}$ " " " " 30 mm., or $1\frac{3}{10}$ ins.,	8.00
8 x 10 " " " " 40 " " $1\frac{9}{10}$ "	10.00

AUTOMATIC SHUTTER Our Automatic Shutter with re-

tarding device, or speed regulator, is decidedly a twentieth century novelty. It is the result of many experiments and years of study, but we feel justified in the effort, for the new Automatic is without question the most ingenious shutter in the market, and its many new features will strongly appeal to both amateur and professional photographers. It has triplicate movements, operating for time, instantaneous and bulb exposures. The mechanism is so arranged that after an exposure is completed the shutter automatically sets itself for the next picture. There can never be a



question as to "whether the shutter is set"—it is ready at all times, being released and set simultaneously by either the finger or bulb.

A dial at the top contains various degrees of speed marked in fractional parts of seconds, and to regulate the shutter it is only necessary to revolve the dial until the speed desired is opposite the index.

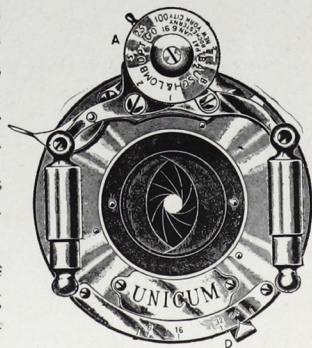
The shutter blades are manufactured of a special material not affected by variations in temperature. They are so shaped as to give an even illumination. Back of the blades we fit the iris stops, which are operated by a lever at the bottom. Scale is marked in the U. S. system.

PRICE

4 x 5 Automatic, opening 22 mm., or $\frac{7}{8}$ in.,	-	-	\$10.00
5 x 7 " " " " " "	-	-	11.00
6½ x 8½ " " 30 mm., or $1\frac{3}{16}$ ins,	-	-	12.00
8 x 10 " " 40 " " $1\frac{9}{16}$ "	-	-	14.00

BAUSCH & LOMB UNICUM SHUTTER The Unicum Shutter is intended

to meet the demand for a well made and durable shutter at a low price. The case is of highly finished bronze metal, and the actuating mechanism is well protected from dust and injury. The shutter blades are so shaped as to give the most even illumination possible with two blades only. Back of the shutter blades there is an Iris diaphragm, operated by the index lever at the lower margin of the shutter, by which any desired size of stop can be obtained. This shutter gives automatic exposures from one one-hundredth of a second to one second, and has, in addition, a bulb exposure. It also has regular time exposure, the blades being opened by pressure of the bulb, and remaining open until closed by again pressing the bulb.



PRICE

		Fitted to Plastigmat	Fitted to Lenses of other manufacture
4 x 5, Size of largest diaphragm, $\frac{3}{4}$ in.,	-	\$6.50	\$7.50
5 x 7, " " " " " "	-	7.50	8.50
6½ x 8½. " " " " " "	-	8.50	9.50

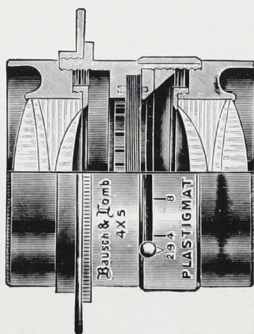


LENSES



BAUSCH & LOMB PLASTIGMAT LENS $f: 6.8$ The

objects attained by this lens are : highest optical correction, simplicity of construction, permanence of material, great rapidity, compactness, portability, and adaptability to the various shutters used between lens combinations. The front and back combinations of the Plastigmat are



similar, and composed of four lenses each. The glass employed is of the famous Jena manufacture, extremely transparent and absolutely permanent. The heavy flint glass used in most lenses has been avoided, and thus speed is increased to an appreciable amount, and the tendency to deterioration removed. The foci chosen for the various sizes of the series are longer than have been customary heretofore, in order to obviate the exaggerated perspective always obtained with short focus lenses. The plate for

which the various foci are rated is perfectly covered with the full opening of the lens, a working speed of $f: 6.8$.



Taken with a 5 x 7 Seneca Camera No. 7, with B. & L. Plastigmat Lens.

The separate systems possess anastigmat and spherical corrections of the highest order.

The rear system may be used separately, as an objective, and, having twice the focal length of the doublet, will give images twice as large at the same distance from the object.

PRICE					
No.	Size of Plate.	Equiv. Focus.	Diameter.		
1	$3\frac{1}{4} \times 4\frac{1}{4}$	$5\frac{1}{4}$ in	$\frac{1\frac{1}{8}}$ in		\$34.00
2	4 x 5	$6\frac{1}{4}$ "	$\frac{7}{8}$ "		40.00
3	5 x 7	$7\frac{1}{2}$ "	1 "		48.00
4	5 x 8	$9\frac{1}{4}$ "	$1\frac{3}{8}$ "		55.00
5	$6\frac{1}{2} \times 8\frac{1}{2}$	11 "	$1\frac{5}{8}$ "		75.00
6	8 x 10	13 "	$1\frac{7}{8}$ "		90.00
7	10 x 12	15 "	$2\frac{1}{8}$ "		120.00

SENECA APOPLAMAT LENS This is one of the optical

successes of the year. It involves new principles in lens making and is far in advance of any lens on the market for the general purposes of photography. It is adapted to landscape, architectural and instantaneous work, and is of the double symmetrical type. The great freedom from any trace of astigmatism and the complete correction of the spherical and chromatic aberrations constitute the superiority of Apoplamat.

The lens is strictly corrected for actinic light at any aperture, hence the superior photographic results obtained. The Apoplamat is free from internal reflections and produces a brilliant image on the ground glass, with equal illumination of the field and covers the plate most admirably.



PRICE					
Size	Diam of Lens.	Equiv. Focus.	Back Focus.		
$3\frac{1}{4} \times 4\frac{1}{4}$	1 in.	6			\$ 8.00
4 x 5	1 "	$6\frac{1}{4}$	$5\frac{3}{4}$		10.00
5 x 7	$1\frac{1}{8}$ "	8	$7\frac{1}{4}$		12.00
$6\frac{1}{2} \times 8\frac{1}{2}$	$1\frac{1}{2}$ "	11	$9\frac{3}{4}$		15.00
8 x 10	$1\frac{3}{4}$ "	13	$11\frac{1}{2}$		18.00

B. & L. ZEISS CONVERTIBLE ANASTIGMAT Series VIIa.

which each of its systems is a perfectly corrected anastigmat of moderate speed, and when used together form a doublet of extreme rapidity, unexcelled optical excellence, and large angle. Every professional photographer recognizes the necessity of lenses of different foci for various subjects. In the Convertible the maximum of compactness and portability is combined with the greatest variety of foci. A doublet combination consisting of two systems of different foci, gives three distinct lenses; a short focus, extra rapid doublet, a longer



focus lens, giving more magnification, at a speed of $f:12.5$, and a still longer focus lens, better adapted for portrait use and long distance work. The addition of one more system, which may be used in the same barrel, will give three doublet lenses of different foci and three longer focus lenses, also of different foci, while one more system added will give a total of ten lenses.

This is the embodiment of the optician's highest aims: the production of a lens in

PRICE						
No.	Size of Plate covered with Full Aperture	Focus of Front Lens	Focus of Back Lens	Combined Focus	Speed	
3	4 x 5 in.	11½ in.	7¼ in.	5 in.	F:7-7	\$59.50
5	4¼ x 6½ "	11½ "	9 "	5¾ "	F-7	63.00
8	5 x 7½ "	14 "	11½ "	7 "	F-7	75.00
9	5 x 8½ "	16½ "	11½ "	7½ "	F:7-7	87.50
11	6½ x 8½ "	16½ "	14 "	8½ "	F-7	94.50
12	6½ x 8½ "	19¼ "	14 "	9¼ "	F:7-7	115.50
17	8 x 10 "	23½ "	19¼ "	12 "	F-7	167.50

SENECA SYMMETRICAL LENS

This lens was designed for portraits, groups, architecture, landscape, and instantaneous work. It is one of the best lenses ever constructed for general work, being perfectly rectilinear, free from distortion and all objectionable features. It has a great depth of focus and perfectly flat field, and is fitted to a large proportion of our high-grade cameras, for this season.

PRICE						
4	x 5 size,	1 in. diam. lens,	6¼ in. equiv. focus,	5¾ in. back focus,		\$10.00
5	x 7	" 1½ "	" 8 "	7¼ "	" "	12.00
6½	x 8½	" 1½ "	" 11 "	9¾ "	" "	15.00
8	x 10	" 1¾ "	" 13 "	11½ "	" "	18.00

SENECA RAPID RECTILINEAR LENS This lens is suit-

ed to general viewing and instantaneous photography. Being free from distortion, and having good depth of focus, it has met with such universal satisfaction, both at home and abroad, that we continue for another season to fit it to our more popular priced instruments, and recommend it to those desiring a first class lens at a price within the reach of all. The Rapid Rectilinear Lens is suitable for high grade work of every kind. The absolute uniformity in manufacture as well as the perfect gloss used, contribute to the perfect results for which this lens is noted. No matter what the character of the work may be, this lens always yields the most gratifying results.

PRICE

$3\frac{3}{4} \times 4\frac{3}{4}$	5×5	5×7
\$4.00	\$5.00	\$7.00

SENECA SYMMETRICAL WIDE-ANGLE LENS The wide-

angle lenses are valuable for the character of work for which they are designed. They are adapted for interiors, buildings, landscapes, and all work in confined situations where lenses of longer focus cannot well be used. They have an angle of from 80 to 90 degrees, and are fitted to all of our high-grade cameras when wide-angle lenses are ordered, unless otherwise specified.

PRICE

No. 1, 4	x 5	size, $3\frac{1}{2}$ inch focus,	- -	\$ 8 00
" 2, 5	x 8	" 5 "	- -	10.00
" 3,	$6\frac{1}{2} \times 8\frac{1}{2}$	" $6\frac{1}{2}$ "	- -	12 00
" 4,	8 x 10	" 8 "	- -	15.00

ZEISS ANASTIGMAT, Series V. 1:18 This is the wide-angle lens par excellence, for interiors, architecture, copying and landscapes. It is a wide-angle lens proper, having an angle of 108° , notwithstanding which it is available for instantaneous work with sunlight illumination.

PRICE

No.	Size of Plate covered with Stop $f:36$	Diam. of Largest Plate covered with Sm. Stop $104^\circ, 110^\circ$.	Free Diameter of Largest Lens	Equivalent Focus	
1	$4\frac{1}{4} \times 6\frac{1}{2}$ in.	$8\frac{1}{8}$ in.	$\frac{9}{32}$ in.	$3\frac{3}{8}$ in.	\$22.50
2	5 x 7 "	11 "	$\frac{5}{8}$ "	$4\frac{3}{8}$ "	22.50
3	$6\frac{1}{2} \times 8\frac{1}{2}$ "	$14\frac{3}{16}$ "	$\frac{1}{2}$ "	$5\frac{9}{16}$ "	28.00
4	8 x 10 "	$15\frac{3}{4}$ "	$\frac{9}{16}$ "	$7\frac{3}{16}$ "	35.00

SENECA ANASTIGMAT LENS While our Single Achromatic and Rapid Rectilinear lenses give excellent results, they have their limitations and have to be restricted to narrower angles and smaller diaphragms than the Anastigmats.

The Seneca Anastigmat is made from our own formula and can be used with much larger diaphragms and include a wide-angle of view, consequently such a lens is much more rapid and can be shifted on the front without losing sharpness on the edge of the plate, or can be used on a larger camera as a wide-angle lens.

To all who want the best and do not wish to be handicapped in any branch of photography, we unhesitatingly recommend the Seneca Anastigmat lens. We fully guarantee it equal to the best Anastigmat lens made, regardless of price.

PRICE

No.	Size of Plate Covered with Stop <i>f</i> -76.	Diag. of Largest Plate Cover'd with Sm. Stop 104°, 1:0°	Free Diameter of Largest Lens.	Equivalent Focus.	
1	4¼ x 6½	8½ in.	⅜ in.	3⅜ in.	\$26.00
2	5 x 7	11 "	⅝ "	4⅜ "	31.50
3	6½ x 8½	14⅞	½ "	5⅞ "	38.00
4	8 x 10	15¾	⅝ "	7⅞ "	47.00

COLLINEAR DOUBLE ANASTIGMAT, Series II This lens

ranks among the highest types of modern symmetrical double Anastigmats. It is a new form of lens, made of Jena glass, and consists of two symmetrical anastigmatic combinations, each of which is made up of three lenses, the contiguous surfaces being permanently cemented together. In all Collinear Lenses, Series II, the back combination may be used separately, forming an Anastigmat lens with largest aperture *f*-11, and possessing double the focal length of the lens when used as a compound.

FULL APERTURE, *f*:5-6

No.	Equivalent Focus	Size of Plate Sharply Covered			Price with Iris Diaphragm.
		<i>f</i> :5-6	<i>f</i> :8	<i>f</i> :32	
1	3½ in.	3¼ x 3¼ in.	3 x 4 in.	3¼ x 4¼ in.	\$35.00
2	4¾ "	3¼ x 4¼ "	4¼ x 6½ "	5 x 7 "	40.00
3	5⅞ "	4¼ x 6½ "	5 x 7 "	6½ x 8½ "	45.00
4	7⅞ "	5 x 7 "	6½ x 8½ "	8 x 10 "	60.00

FULL APERTURE OF FOLLOWING SIZES, *f*:6-3.

5	9⅞ in.	6 x 8 in.	6½ x 8½ in.	9 x 11 in.	77.50
6	11¾ "	6½ x 8½ "	8 x 10 "	10 x 12 "	105.00
7	14½ "	8 x 10 "	10 x 12 "	12 x 15 "	140.00

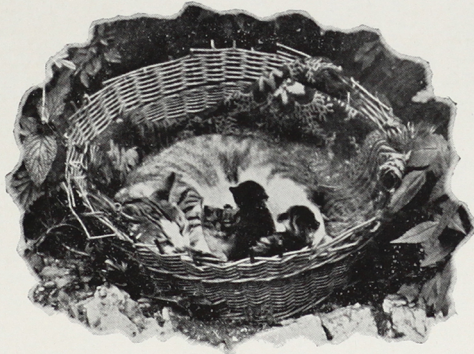
GOERZ'S DOUBLE ANASTIGMATIGMAT *f*-6.8, Series III.

The lenses of this series are universal in character in the full sense of the word. At full aperture they admit of instantaneous photographs embracing an angle of seventy degrees being taken, even on dull days. By the use of small stops, the photograph may be made to include an angle of ninety degrees. The double Anastigmats of Series III satisfy, therefore, the highest requirements, and are adapted for all general purposes, in and out of doors. These lenses are particularly adapted for hand and field cameras, and are well suited to our long draw or Tele-Photo instruments, as both combinations can be used for general work, while one combination alone together with the long draw bellows can be used on distant objects. Suitable for portraits, groups, instantaneous photography, landscapes, architecture, interiors and enlargements.

The lenses of this series are universal in character in the full sense of the word. At full aperture they admit of instantaneous photographs embracing an angle of seventy degrees being taken, even on dull days. By the use of small stops, the photograph may be made to include an angle of ninety degrees. The double Anastigmats of Series III satisfy, therefore, the highest requirements, and are adapted for all general purposes, in and out of doors. These lenses are particularly adapted for hand and field cameras, and are well suited to our long draw or Tele-Photo instruments, as both combinations can be used for general work, while one combination alone together with the long draw bellows can be used on distant objects. Suitable for portraits, groups, instantaneous photography, landscapes, architecture, interiors and enlargements.

SPECIFICATION AND PRICE

No.	Equivalent Focus	Free Aperture	Size of Plate Sharply Covered at			With Iris Diaphragm
			<i>f</i> -6.8	<i>f</i> -15.5	<i>f</i> -62.	
0	4¾ in.	⅝ in.	3¼ x 4¼ in.	4 x 5	4¾ x 6½	\$37.50
1	6 "	⅞ "	4 x 5 "	4¾ x 6½ "	5 x 8	45.00
2	7 "	1 "	4¾ x 6½ "	5 x 8 "	7 x 9	51.50
3	8¼ "	1¼ "	5 x 8 "	6½ x 8½ "	8 x 10	62.50
4	9½ "	1⅝ "	6½ x 8½ "	7 x 9 "	10 x 12	75.50
6	12 "	1⅞ "	8 x 10 "	10 x 12 "	16 x 18	107.00



LENS CAPS

	1	2	3	4	5	6	7	8	9	10	11	12
Diameter, in.,	1½	1¾	1⅞	2⅛	2⅜	2½	2¾	3⅛	3⅜	4⅛	4⅜	5⅞
Price,	\$.60	.60	.65	.70	.70	.75	.80	.90	1.00	1.10	1.20	1.25

LENS FLANGES

	1	2	3	4	5	6	7	8	9	10	11
Diameter, in.,	1½	1¾	2	2¼	2½	3	3½	4	5	5½	6
Price,	\$.50	.50	.75	1.00	1.00	1.25	1.50	1.75	2.00	2.50	3.00

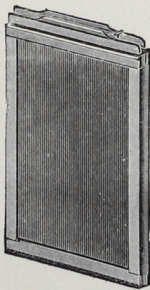


ACCESSORIES



PLATE HOLDERS One of the most important accessories in the equipment of a camera, and one that, next to the camera and lens, is entitled to the greatest consideration, is the plate-holder; for unless it is made upon correct principles, much of the labor and effort of the operator goes for naught and the pleasure of his pursuit is destroyed.

Practical experience and observation have taught us what qualities an ideal plate-holder should possess, as well as what should be eliminated to insure its perfectness. The result has been the production of a holder unequalled.



A double plate-holder should be strong, durable, compact; and as light as compatible with these features. Our plate-holders are made from cherry, selected with reference to strength and evenness of the grain, well seasoned and finished in oil. The grooves are accurate, and smooth inside, insuring freedom of action.

The bead is shallow, leaving but one-eighth inch of unexposed margin on the bottom of the plate, the full width of which is submitted to the action of the light.

The vulcanized rubber slides are hard, tough and pliant, and they always hold their shape. To meet a certain demand, we are now furnishing a high grade press-board slide.

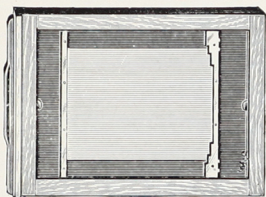
Those manufacturers who depend upon a "tight fit" to hold their slides in place, are often defeated in their purpose by the action upon the wood of the weather, which may make them too tight to use or so loose as to permit them to drop out, spoiling the plate. Our slides are secured by a simple catch, preventing any such accident. The heads are so protected that they cannot pull off. We also supply all plate-holders for Sunart Cameras.

PRICE

	Hard Rubber.		Press Board.
$3\frac{1}{4} \times 4\frac{1}{4}$,	-.60	$6\frac{1}{2} \times 8\frac{1}{2}$,	\$1.25
$3\frac{1}{2} \times 3\frac{1}{2}$,	-.60	8×10 ,	1.50
4×5 ,	-.60		
5×7 ,	-.80		

WARNICA SELF-ADJUST- ABLE PLATE HOLDER

Since the early days of camera making, it has been the desire of amateurs to take pictures of different sizes with their cameras. Up to this time a wooden frame (commonly called a kit) has served as the nearest approach to a practical result in holding plates of a different size in one holder. This method has proved far from satisfactory, as kits are cumbersome, extremely fragile, and expensive, and a separate kit is necessary for each different-sized plate to be used.



The Warnica plate holder is the only one ever manufactured which fits all of our cameras, and at the same time successfully holds dry plates of a smaller size than that of the holder. It automatically centers any size of plate that is used in the holder, and in weight, size and general appearance is identically the same as the holders made for your camera. There are no loose or detachable parts to be continually out of order or lost.

Following are the different-sized plates that may be used in these holders: In 4 x 5 holder: 4 x 5, 4 x 4, 3¼ x 4¼, 3¼ x 4, 3½ x 3½, 2½ x 2½; the last size can be held in a diamond position.

In 5 x 7 holder: 5 x 7, 4¾ x 6½, 4¼ x 6½, 4½ x 5½, 4 x 5, (this size can be held both vertically and horizontally), 4 x 4, 3¼ x 4¼, 3¼ x 4, 3½ x 3½; the last size can be held in a diamond position.

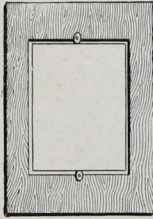
In 6½ x 8½ holder: 6½ x 8½, 5 x 8, 5 x 7, 4¾ x 6½, 4½ x 6½, 4 x 5.

In 8 x 10 holder: 8 x 10, 6½ x 8½, 5 x 8, 5 x 7, 4¾ x 6½, 4¼ x 6½.

A point worthy of your consideration is the great saving made possible by the use of small-sized plates for experimental purposes.

PRICE

	4 x 5	5 x 7	6½ x 8½	8 x 10
Holders, with Rubber Slides,	\$1.25	\$1.50	\$1.85	\$2.25
Press Board furnished when desired.				



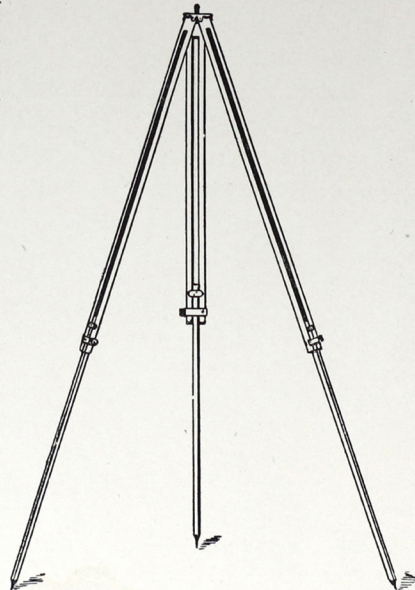
SENECA HOLDER KITS Designed for making views on a plate smaller than that for which the camera was designed. Consists of a strong wood frame in which is an aperture of the required reduced size, into which the smaller plate is inserted. Several sizes may be included in one by a nesting arrangement.

PRICE

Size Outside.	Size of Opening.	Each.
4 x 5,	3¼ x 4¼,	\$.20
5 x 7,	3¼ x 4¼, 4 x 5,	.20
5 x 8,	3¼ x 4¼, 4 x 5, 4¼ x 6½	.20
6½ x 8½,	3¼ x 4¼, 4 x 5, 5 x 7, 5 x 8,	.25
8 x 10,	5 x 7, 5 x 8, 6½ x 8½,	.30

SENECA SPECIAL TRIPOD (Patented.) The Seneca Special is second only to a single stick tripod in point of strength and rigidity. It is made in two sections only, the lower sliding into the upper, and when closed is 29 inches in length ; its greatest height is 54 inches, and it can be adjusted to any height between these extremes.

The material is selected straight-grain spruce, thoroughly kiln-dried and finished in the natural wood. The metal parts are of brass, the exposed portions being highly burnished and lacquered. The tripod complete weighs but 21 ounces, neatly finished with rounded edges.

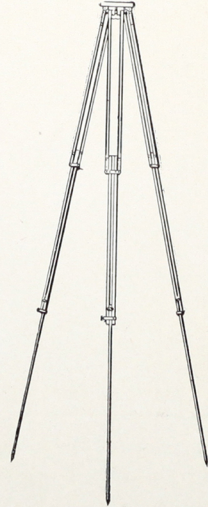


Price, - \$.75

COMPACT FOLDING TRIPOD

For a strong, durable, compact tripod, possessing more than ordinary rigidity, the Compact Folding pattern is recommended. It is strongly made, the material being selected straight-grain hard maple. The metal parts are of brass, the exposed portions being highly polished and lacquered. The hinges are rigid and are secured in the strongest possible manner.

This is a combination of the sliding and folding tripod; the top arms of each of the three legs folding against the middle section, into which the bottom section slides, being secured by a brass strap and a milled thumb-screw the adjustment (in height) is limited—between 40 and 54 inches. Adjustment to uneven ground can be readily accomplished with either pattern. The top locks securely when fastened to the legs, so that it is unnecessary to unmount the camera to carry it from place to place. The whole is less than two feet long when folded. A universal screw thread is used, fitting any camera.



Price, - - - \$2.00.

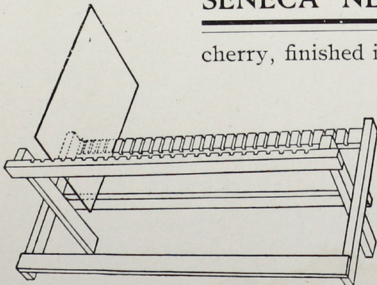
SENECA FOLDING AND SLIDING TRIPOD

It is the most convenient tripod yet devised. Easily set up for use, readily adjusted at any desired height, and perfectly rigid. Made in three sections, the lower section slides into the second, while the upper section folds back upon it. This tripod is made from selected spruce, brass trimmings, and is the lightest and most compact tripod on the market.

Price, - - - \$1.50

SENECA NEGATIVE RACKS

made of seasoned cherry, finished in oil. Is strong, and when folded is compact. They are very convenient as they keep the negatives from becoming scratched when drying.



PRICE

For holding 12 negatives, - \$.15
For holding 24 negatives, - .20

SENECA PRINTING FRAMES

The Seneca printing frames are made of choice cherry, finished in oil, the corners being neatly and strongly dovetailed. They are guaranteed not to warp and are built to stand more than ordinarily rough usage, notwithstanding their lightness.

The springs are of best quality and are pivoted on washers with a rivet. The spring ends engage with a grooved slot in the frame, obviating the necessity of metal "ears," which interfere with piling.

PRICE

2½ x 2½,	-	\$.10	3¼ x 4¼,	-	\$.10
3½ x 3½,	-	.10	5 x 7	-	.15
4 x 5,	-	.12			

Seneca Extra Heavy Printing Frames, metal hinges :

4 x 5,	-	\$.25
5 x 7,	-	.30
6½ x 8 ½,	-	.35
8 x 10,	-	.45

SENECA PROFESSIONAL

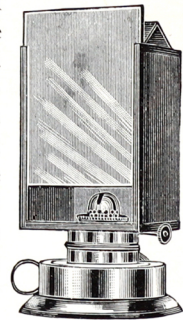
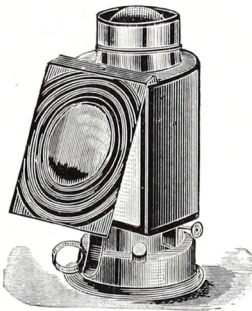
With metal ears and hinges.

PRICE

4 x 5,	-	\$.30
5 x 7,	-	.40
6½ x 8 ½,	-	.50
8 x 19	-	.65

SENECA LAMPS

We manufacture our own dark room lamps, and in design and finish they are up to the standard of our other products, in fact, the best that special machinery and skilled labor can produce. Special attention has been given to secure ample ventilation, and Seneca lamps will not smoke or fill the dark room with an odor of coal oil. We use improved burners that give a clear, steady flame, with plenty of light, and there are no soldered joints that will separate. Seneca lamps are coated with a brilliant black Japan, baked hard and durable. No. 1 has a single sheet of ruby glass in front, and has an oil burner. No. 2 is a larger size, and is supplied with both amber and ruby glass, and has a shade to shield the light. Each lamp is put up in a neat carton.



Price, - - - No. 1, \$.50 No. 2, \$.75

