

Department 5
Photographic Supplies, Lenses, etc.

1898
Andrew J.
Lloyd &
Company

323-325
Washington Street
Boston

Branch, 454 Boylston Street

. . Established 1870 . .

Our Photographic Department

Is, in fact, more complete than our Catalogue, because we are constantly adding to stock all sorts of goods which were not in existence when the Catalogue was issued. Always write to ask about what you do not find catalogued.

Complaints

Will be promptly and satisfactorily attended to. They should be made without delay, so as to save time in looking up.



Microscopes.

We carry a complete line of the Bausch & Lomb Optical Company's Microscopes, Accessories, Supplies, etc., and will send Catalogue on application to those interested.

Long Distance Telephone, Boston 366

Departments.



- Department 1. Spectacles, Eye-glasses, Lorgnettes, etc. Spherical, Cylindrical, Prismatic, Toric, and Hyperbolic Lenses. Ophthalmoscopes, Ophthalmometers, Retinoscopic Mirrors, Trial Cases, Artificial Eyes. *Prof. Holmgren's Worsted Test for Color Blindness.*
- Department 2. Opera, Field, and Marine Glasses, Spy-glasses, Reading Glasses, Telescopes, Objectives, and Eye-pieces. **Zeiss Field Glasses.**
- Department 3. Barometers, Thermometers, Hydrometers, Hygrometers, Compasses, Pedometers, Passometers, Hour-glasses, etc.
- Department 4. Microscopes, simple and compound, and accessories, Mounted Objects, Glass Slips and Covers, Mounting Media, etc.
- Department 5. Photographic Lenses, Iris Diaphragms, Shutters, Films, Projection Lenses, Condensers, Dry Plates, Cameras, Chemicals, Apparatus, Materials, etc.

Repairs in each department promptly attended to.

15 x 24

Please Notice.



AS this catalogue is likely to be consulted by many people necessarily unknown to us, they should take pains to include with their orders cash, post money order, or express order for the amount due. Otherwise, for our own protection, we must send goods C. O. D.

We cannot pay charges for returns of money on orders of less than \$3.00 sent C. O. D.

Parties wishing to open credit accounts should furnish us with references to consult. A good way to do is to send remittance and references with the first order. We can then ship goods without delay, and look up the reference afterward.

Goods sent by mail are at buyers' risk.

We pack our goods carefully, and deliver them to the transportation companies in good order. Claims for breakage or damage should be made against them, not us.

Prices of photographic materials are liable to vary, and are subject to change without notice.

In ordering goods, please be explicit as to how they shall be shipped. If no shipping instructions are given, we will use our best judgment.

In returning merchandise, please be particular to send a letter notifying us of the return, specifying the merchandise, conveyance, etc.

We aim to ship all orders the day we receive them.

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Photographic Lenses

WE BEING OPTICIANS AND HAVING A THOROUGH AND SCIENTIFIC ACQUAINTANCE WITH PHOTOGRAPHIC LENSES, TAKE THIS OPPORTUNITY TO SAY THAT WE ARE ALWAYS GLAD TO PUT AT THE SERVICE OF OUR FRIENDS AND CUSTOMERS WHO MAY BE CONTEMPLATING THE PURCHASE OF A LENS OUR LONG EXPERIENCE AS PRACTICAL MANUFACTURING OPTICIANS. WE CALL ATTENTION PARTICULARLY TO THE

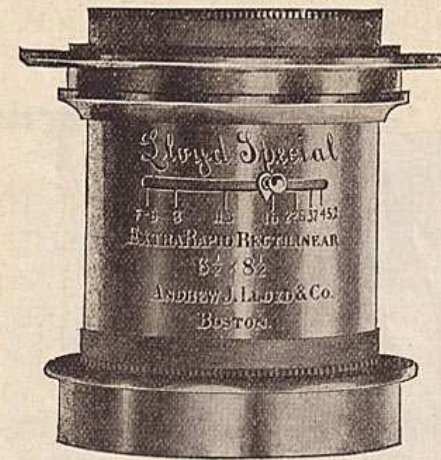
Bausch & Lomb Optical Co. Lenses

Zeiss Anastigmat Lenses

Lloyd Special Lenses

LENSES WILL BE SENT TO RESPONSIBLE PARTIES ON ONE OR TWO WEEKS' TRIAL, AND, IF KEPT LONGER, WILL BE REGARDED AS SOLD

Lloyd "Special"



Extra Rapid Rectilinear Lens.

The growing demand for our "LLOYD SPECIAL LENS" proves the superior quality of lenses constructed on our formula. As we are anxious to meet the full requirements of the professional and amateur photographer, we introduced the "LLOYD SPECIAL" Extra Rapid Rectilinear, for extremely rapid work in the studio and field, and especially adapted for groups and standing figures where distance is limited.

The lenses of this series are the result of exhaustive calculations, and are constructed of carefully selected glass. Are perfectly aplanatic. Their peculiarly accurate correction for spherical and chromatic aberration permits the use of large stops, thereby giving brilliant portraits and groups, or obtaining fully exposed instantaneous pictures with rapid shutters.

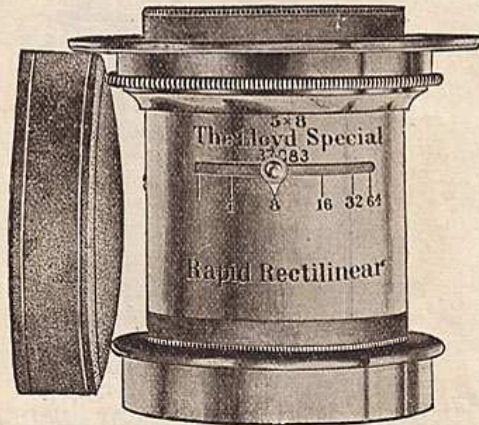
The smaller sizes are invaluable for use in hand camera work. They are supplied only with our Improved Iris Diaphragm.

No.	Size Plate, Portrait Group.	Size Plate, Landscape.	Equivalent Focus.	Back Focus.	Price.
A	4 x 5 in.	5 x 7 in.	6 $\frac{1}{2}$ in.	5 $\frac{1}{4}$ in.	\$17.50
B	5 x 8 "	6 $\frac{1}{2}$ x 8 $\frac{1}{4}$ "	8 "	7 "	22.50
C	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	8 x 10 "	9 $\frac{1}{16}$ "	8 $\frac{1}{4}$ "	28.50
D	8 x 10 "	10 x 12 "	11 "	9 $\frac{1}{4}$ "	38.50
E	10 x 12 "	11 x 14 "	14 "	12 $\frac{1}{4}$ "	52.00
F	12 x 15 "	14 x 17 "	17 "	15 $\frac{1}{4}$ "	70.00
G	16 x 20 "	18 x 22 "	22 "	19 $\frac{1}{4}$ "	90.00

C. Approximate required distance for standing cabinet figure, 13 ft.
 D. " " " " " " " " 16 "
 E. " " " " " " " " 20 "

For vignette only half of these distances required.

The "Lloyd Special" Rapid Rectilinear



For Instantaneous Outdoor Work, Groups, and Standing Figures in the Studio.

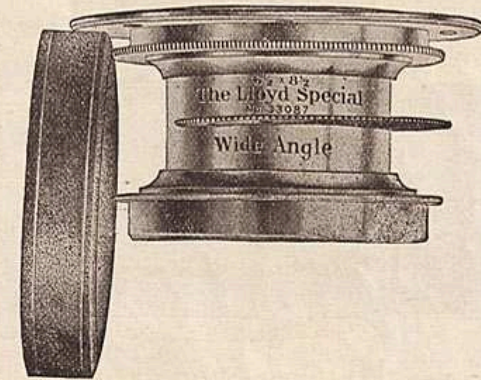
These lenses are of the rapid rectilinear symmetrical type. They have unusual crispness of definition, great covering capacity, and depth. The speed will be found ample for all ordinary lighted studios and for instantaneous outdoor work. Nos. C and D will be found valuable lenses for cabinets and small groups.

No.	Diameter of Lens.	Size of Plate for Portraits and Groups.	Size of Plate for Views with Small Stop.	Equivalent Focus.	Price with Iris Diaphragms.
A	1 in.	4 x 5 in.	5 x 7 in.	6 in.	\$12.50
B	1½ "	5 x 8 "	6½ x 8½ "	9 "	17.50
C	1½ "	6½ x 8½ "	8 x 10 "	11 "	22.00
D	2 "	8 x 10 "	10 x 12 "	13½ "	27.50
E	2½ "	10 x 12 "	11 x 14 "	17 "	37.00
F	2½ "	12 x 15 "	14 x 17 "	19½ "	53.00
G	3½ "	16 x 20 "	18 x 22 "	24 "	70.00
H	3½ "	18 x 22 "	20 x 24 "	31 "	90.00

B.	Approximate required distance for standing cabinet figure,	13 ft.
C.	" " " " " " " "	16 "
D.	" " " " " " " "	21 "

For vignette only half of these distances required.

The "Lloyd Special" Wide Angle Lenses



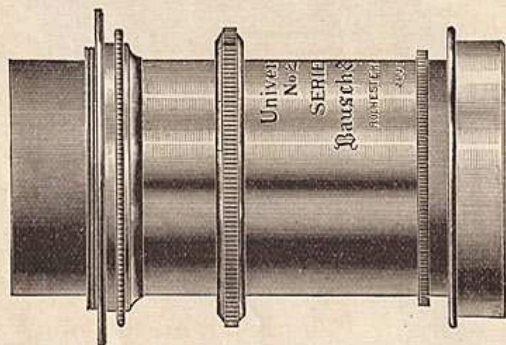
Give fine results in interior and architectural work. The larger stops give an abundance of time to allow their use with flash light exposures and outdoor instantaneous work under favorable conditions.

We quote them working with large stops, and in another column with small stops, in each case giving the angular aperture which the lenses have on each specified plate.

No.	Size of Plate covered with Large Stop. Angle 90°.	Size of Plate covered with Small Stop. Angle 100°.	Back Focus.	Equivalent Focus.	Price.
A	4 x 5 in.	5 x 7 in.	3½ in.	3½ in.	\$9.50
B	5 x 8 "	6½ x 8½ "	4½ "	5½ "	14.00
C	6½ x 8½ "	8 x 10 "	6½ "	6½ "	17.00
D	8 x 10 "	10 x 12 "	7½ "	8 "	21.00
E	11 x 14 "	14 x 17 "	9½ "	10½ "	26.00
F	14 x 17 "	16 x 18 "	13½ "	14 "	33.00
G	16 x 20 "	18 x 22 "	16 "	17 "	42.00
H	20 x 24 "	24 x 24 "	20½ "	22 "	55.00

Bausch & Lomb Optical Company's Universal Portrait Lenses.

Series A. F. 4.



Cut $\frac{1}{2}$ size, No. 3.

Quick-working Lenses for General Portrait Work.

Although these lenses have been in use in the hands of some of our best known photographers for the purpose of testing their particular qualities, they are herewith introduced for the first time to the general public. The general commendations of their high qualities convince us that after these become more generally known they will be the means of making these the leading lenses with professional photographers. They are quick-working, and have an unusual delicacy of definition, freedom from distortion, and even illumination. They are **at least** equal to the lenses of the best European makers intended for the same work, and are very materially lower in price than any of these.

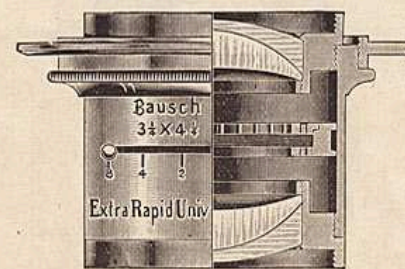
The No. 3 of this series is recommended as the most useful lens for cabinet and whole-plate work in the studio.

They are supplied only with Improved Iris Diaphragm.

No.	Size.	Diameter of Lenses.	Back Focus.	Price.	Telegraphic Code.
1	4 x 5 in.	2 $\frac{1}{2}$ in.	6 $\frac{1}{2}$ in.	\$65.00	Uberty.
2	5 x 8 "	3 $\frac{1}{2}$ "	8 $\frac{1}{2}$ "	90.00	Udal.
3	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	4 $\frac{1}{2}$ "	11 $\frac{1}{2}$ "	135.00	Udaler.
4	8 x 10 "	4 $\frac{1}{2}$ "	13 $\frac{1}{2}$ "	190.00	Udder.

Bausch & Lomb Optical Company's Extra Rapid Universal Lenses.

Series D. F. 6.



Cut full size, No. 00.

For Heads, Groups, Figures, and Outdoor Work of Great Speed.

The larger lenses of this series will be welcomed as portrait lenses *par excellence*, having unusually delicate definition with uniform illumination, good depth and speed in all ordinarily lighted studios. It is rare that a lens which is designed to do good portrait work is suited for good landscape work as well, but these qualities are combined to an unusual degree in these lenses. The lower numbers are designed for very quick hand camera work, giving even illumination and possessing perfect definition. The mountings are comparatively short, which overcomes to a considerable extent the inherent astigmatism in lenses of similar construction. These lenses may be had with or without hood, but will be supplied with hood unless otherwise ordered.

By unscrewing the front combination the back only may be used, giving about twice the focus with about one-half the speed.

These lenses have an angle of 70°.

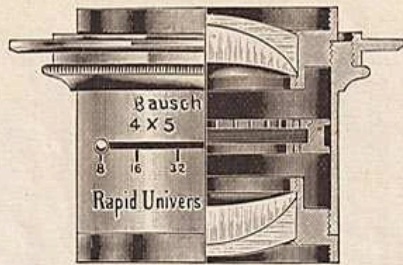
They are supplied only with Improved Iris Diaphragm.

No.	Size.	Diameter of Lenses.	Equivalent Focus.	Back Focus.	Mounting Price.		Telegraphic Code
					Brass	Aluminum	
0	3 $\frac{1}{2}$ x 4 $\frac{1}{2}$ in.	1 in.	4 $\frac{1}{2}$ in.	3 $\frac{1}{2}$ in.	\$24.00	\$27.00	Ukase.
00	4 x 5 "	1 $\frac{1}{2}$ "	6 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	28.00	32.00	Ulaus.
1	5 x 8 "	1 $\frac{1}{2}$ "	8 "	7 "	36.00	40.00	Ulcer.
2	6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	9 $\frac{1}{2}$ "	8 $\frac{1}{2}$ "	46.00	50.00	Ulema.
3	8 x 10 "	2 $\frac{1}{2}$ "	11 $\frac{1}{2}$ "	9 $\frac{1}{2}$ "	58.00	64.00	Ulnim.
4	10 x 12 "	2 $\frac{1}{2}$ "	14 $\frac{1}{2}$ "	12 $\frac{1}{2}$ "	75.00	82.00	Ulnage.
5	12 x 15 "	3 $\frac{1}{2}$ "	17 $\frac{1}{2}$ "	15 $\frac{1}{2}$ "	100.00	108.00	Umbel.
6	16 x 20 "	3 $\frac{1}{2}$ "	22 $\frac{1}{2}$ "	19 $\frac{1}{2}$ "	130.00	139.00	Uمبر.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated.

Bausch & Lomb Optical Company's Rapid Universal Lenses.

F. 8.



Cut full size, No. 5.

For Instantaneous Outdoor Work, Groups, and Standing Figures.

These lenses have enjoyed an unusual popularity since their first introduction. They are of the rectilinear, symmetrical type, and have a construction peculiarly their own. The glass is specially manufactured, of unusual hardness and brilliancy, involving specially favorable curves. While these lenses do not have the speed of the Extra Rapid Series, they give excellent results in a well-lighted studio on groups, figures, and large heads, having great depth and covering capacity.

For outdoor work they have an unusual crispness of definition, with full opening and great covering capacity and depth. The speed is ample for all ordinary instantaneous work without sunlight. While it may be used on architectural subjects and interiors, a wide angle lens is recommended for this purpose. The back combination may be used with good results on twice the size of plate with about one-half the speed. These lenses vary in angle from 70° in the smaller to 60° in the larger sizes.

Our new test chart (copyrighted) accompanies each lens.

They are supplied only with Improved Iris Diaphragm.

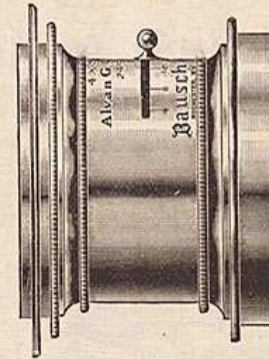
Waterhouse stops in place of Iris at the same prices.

No.	Large Stop Covers.	Diameter of Image Circle.	Diameter of Lenses.	Back Focus.	Equivalent Focus.	Brass Mounting Price.	Aluminum Price.	Telegraphic Code.
4½	3½ x 4½ in.	8 in.	½ in.	4½ in.	5½ in.	\$18.00	\$21.00	Ucubis.
5	4 x 5 "	9½ "	1½ "	5½ "	6½ "	22.00	25.00	Umbrina.
8	5 x 8 "	11 "	1½ "	7½ "	8½ "	26.00	30.00	Unca.
8½	6½ x 8½ "	13½ "	1½ "	10½ "	11½ "	35.00	39.00	Unelli.
10	8 x 10 "	15½ "	1½ "	12½ "	13½ "	48.00	52.00	Upis.
12	10 x 12 "	20 "	2½ "	15 "	17 "	60.00	66.00	Uracca.
15	12 x 15 "	21½ "	2½ "	18 "	20½ "	75.00	82.00	Uxantis.
18	16 x 18 "	27½ "	3½ "	22½ "	24½ "	95.00	108.00	Utica.
22	20 x 22 "	36 "	4½ "	28 "	31½ "	125.00	139.00	Uzita.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated.

Alvan G. Clark Lenses.

F. 8.



Cut full size, No. 5.

For Instantaneous Outdoor Work, Groups, Standing Figures, Interiors, and Architecture.

These lenses are the invention of Alvan G. Clark, the celebrated manufacturer of telescopes, and are of a construction dissimilar from anything heretofore followed, and are as striking in their results as Mr. Clark's success in the telescope objectives has been. They may be used:—

In all work to which the rapid rectilinear type may be adapted, when they give an angle of about 55° with stop $f. 8$, on size of plate as listed.

As wide angle objectives, giving an aperture of about 90° with stop $f. 45$, on larger sizes of plates up to the stated limit of image circle. They are quite free from marginal distortion and magnified perspective, so common to lenses of this class.

The lenses are uncemented, each lens of the combination being mounted for itself, and are therefore free from danger of gradual decrease in speed, so common in many lenses owing to the chemical change in the cement. The crown glass is on the outside, and therefore less liable to become scratched.

They possess less astigmatism than any known lenses of the symmetrical type. The back combination may be used on larger plates at one-half the speed.

These lenses are fully covered by patent.

Our new test chart (copyrighted) accompanies each lens.

They are supplied only with Improved Iris Diaphragm.

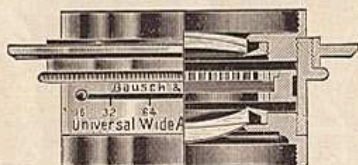
Waterhouse stops in place of Iris at the same prices.

No.	Size of Plate working with Stop $f. 8$.	Diameter of Image Circle.	Diameter of Lenses.	Back Focus.	Equivalent Focus.	Brass Mounting Price.	Aluminum Price.	Telegraphic Code.
4½	3½ x 4½ in.	8½ in.	¾ in.	4½ in.	5½ in.	\$20.00	\$23.00	Abel.
5	4 x 5 "	13 "	¾ "	5½ "	6½ "	24.00	27.00	Abner.
8	5 x 8 "	16 "	1½ "	7½ "	8½ "	30.00	34.00	Achan.
8½	6½ x 8½ "	21½ "	1½ "	10½ "	11½ "	38.00	42.00	Adam.
10	8 x 10 "	24½ "	1½ "	12½ "	13½ "	50.00	54.00	Agate.
12	10 x 12 "	33 "	2½ "	15 "	17 "	64.00	70.00	Alema.
15	12 x 15 "	38 "	2½ "	18 "	20½ "	82.00	89.00	Amasa.
18	16 x 18 "	47 "	3 "	22 "	24½ "	105.00	113.00	Arab.
22	20 x 22 "	64 "	4½ "	28 "	30 "	145.00	155.00	Arbah.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated.

Bausch & Lomb Optical Company's Universal Wide Angle Lenses.

F. 16.



Cut full size, No. 8½.

In these lenses we have sought to combine high efficiency with moderate prices, and the results show that this has been accomplished to an usual degree.

The angular aperture is about 100°. With these wide angles they have rare covering capacity and equality of illumination. Further than this, the largest stop gives a speed which will allow of their use in flash light exposures and instantaneous in outdoor work under favorable conditions of light.

We quote their capacity in a different manner than is usually the case. While the angular aperture of the lenses is about 100°, we quote them working with largest stop, and in another column with small stops, in each case giving the angular aperture which the lenses have on specified plates.

If a careful comparison is made with other lists, it will be found that they are misleading, in so far that, while the angular aperture of lenses is given, they fail, and in some cases very considerably, from giving these angles on the plates for which they are quoted.

Sizes up to and including 8 x 10 are fitted with revolving diaphragm, larger sizes with Improved Iris Diaphragm.

New test chart (copyrighted) accompanies each lens.

No.	Size of Plate covered with Stop <i>f</i> . 16. Angle 80°.	Size of Plate covered with Stop <i>f</i> . 64. Angle 95°.	Diameter of Image Circle.	Diameter of Lenses.	Back Focus.	Equivalent Focus.	Price.	Telegraphic Code.
5	4 x 5 in.	5 x 8 in.	8½ in.	¾ in.	3½ in.	3½ in.	\$16.00	Wade.
8	5 x 8 "	6½ x 8½ "	13 "	1 in.	4½ "	5½ "	20.00	Wait.
8½	6½ x 8½ "	8 x 10 "	15 "	1 1/8 "	6 1/8 "	6½ "	24.00	Walk.
10	8 x 10 "	11 x 14 "	18 "	1 1/4 "	7 1/4 "	8 "	28.00	Walrus.
14	11 x 14 "	14 x 17 "	25½ "	1 1/2 "	9 1/2 "	10½ "	36.00	Water.
17	14 x 17 "	20 x 22 "	32 "	2 "	13 1/8 "	14 "	48.00	Weaver.
22	18 x 22 "	22 x 27 "	37 "	2 1/4 "	16 "	17 "	60.00	Wale.
30	25 x 30 "	30 x 38 "	49 "	2 1/2 "	20 1/4 "	22 "	90.00	Whistle.

Bausch & Lomb Optical Company's Velox Rectilinear Lenses.

These lenses are of the symmetrical rectilinear type. They are carefully made; and, while they will not give such results as our Rapid Universal in definition or covering capacity, they are superior to any of the cheaper grade of lenses now on the market. They are suitable for portraiture, architectural, and all kinds of outdoor work, with a speed equal to all shutter work. The back combination may be used separately.

The mountings are of the "black band" type, neatly finished and lacquered, and provided with morocco cap, and a set of diaphragms in morocco case.

IMPROVED IRIS DIAPHRAGM may be attached in place of the Waterhouse stops at a slight advance.

No.	Size of Plate.	Diameter of Lenses.	Back Focus.	Price.	Price with Iris Diaphragms.	Telegraphic Code.
1	4 x 5 in.	1 in.	5½ in.	\$10.00	\$13.00	Veda.
2	5 x 8 "	1 1/8 "	8 "	15.00	18.50	Veer.
3	6½ x 8½ "	1 1/4 "	10½ "	20.00	23.50	Vell.
4	8 x 10 "	2 "	13 "	25.00	29.00	Vendee.
5	10 x 12 "	2 1/4 "	15½ "	35.00	39.00	Veneer.
6	12 x 15 "	2 3/8 "	18 "	50.00	55.00	Veney.
7	16 x 20 "	3 1/4 "	22½ "	70.00	75.00	Venge.
8	18 x 22 "	3 3/8 "	28 "	90.00	96.00	Venit.

Velox Wide Angle Lenses.

These lenses have an angular aperture of about 80° on the plate for which they are listed, but have an angle of about 90° on the next larger size plate. The largest stop is *f*. 16. They give good results when used with suitable stops on interior and architectural work, and can be commended for a cheap lens.

No.	Size of Plate.	Back Focus.	Equivalent Focus.	Price.	Telegraphic Code.
1	4 x 5 in.	3½ in.	3½ in.	\$10.00	Vermil.
2	5 x 8 "	4½ "	5½ "	15.00	Verst.
3	6½ x 8½ "	6 1/8 "	6½ "	18.00	Vetch.
4	8 x 10 "	7 1/4 "	8 "	22.00	Vild.
5	11 x 14 "	9 1/2 "	10½ "	28.00	Villi.
6	14 x 17 "	13 1/8 "	14 "	35.00	Vacar.
7	16 x 20 "	16 "	17 "	45.00	Vade.
8	20 x 24 "	20 1/4 "	22 "	60.00	Vague.

Sizes up to and including 8 x 10 are fitted with revolving diaphragm, larger sizes with Improved Iris Diaphragm.

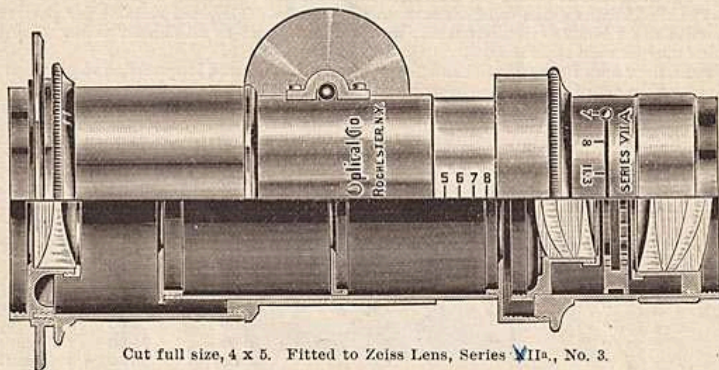
Single Achromatic Lenses.

These lenses are carefully made up of a positive crown and negative flint glass lens. They give the best possible spherical correction of this construction, and make the photographic image coincident with the ground glass.

They are also supplied in neat brass mountings, nicely finished and lacquered, which are provided with revolving diaphragms and morocco cap.

No.	Size of Plate.	Diameter of Lens.	Focus.	Price Unmounted.	Telegraphic Code.	Price Mounted.	Telegraphic Code.
1	3½ x 4½ in.	1 1/8 in.	5½ in.	\$1.20	Singe.	\$2.75	Simia.
2	4 x 5 "	1 1/4 "	6½ "	1.50	Sinker.	3.00	Simil.
3	5 x 8 "	1 1/2 "	9 "	2.00	Sinter.	4.50	Simoon.
4	6½ x 8½ "	1 3/4 "	11 "	2.50	Sineus.	6.00	Simper.
5	8 x 10 "	1 7/8 "	13 "	2.50	Sinure.	7.00	Simu.

Bausch & Lomb Optical Company's Tele-Photo Lenses.



Cut full size, 4 x 5. Fitted to Zeiss Lens, Series VIIa, No. 3.

The purpose of Tele-Photo lenses is to give enlarged images of distant objects. Their advantages are that they give detail in the picture not discernible to the naked eye, and with a camera extension which is very considerably less than would be required by a single lens of the same power.

While the use to which these lenses may be applied is limited, we have sought to give them not only the best possible optical result, but make them *easily applicable to lenses already in use*, with the performance of which the owners are well acquainted, and further enhance their value by their easy variability in power. Their advantage over fixed Tele-Photo or long focus lenses is thus manifest.

The Tele-Photo attachment consists of two sliding tubes variable in length by a spiral rack and pinion. The posterior end is supplied with a flange which is fixed to the front board. At this end is also fixed the Tele-Photo lens. The adjustable tube is supplied at its front end with an adapter, made to suit *any regular photographic lens* which it is desired to use for this purpose. The adjustable tube is nickel-plated, and has a scale engraved upon it indicating the amount of magnification. An increase in power of eight times may thus be obtained.

The photo lenses to be used in connection with them should be of the highest quality, as otherwise the result will be a lack in definition, owing to the amplification.

The scales are designed for the prevailing foci, but may be accurately measured for each lens at an extra cost of 75 cents. Price includes adapter for photographic lens.

DISTANCE FROM THE FRONT BOARD TO THE GROUND GLASS.

Size.	Equiv- alent Focus.	POWER.						Brass Mounting. Price.	Alumi- num Price.
		3.	4.	5.	6.	7.	8.		
4 x 5 in.	6½ in.	6½ in.	9½ in.	12½ in.	16½ in.	19½ in.	22½ in.	\$16.00	\$20.00
5 x 8 "	8½ "	8½ "	13 "	17½ "	22 "	26½ "	31 "	18.00	22.00
6½ x 8½ "	11½ "	10½ "	16½ "	22½ "	28½ "	34½ "	40½ "	20.00	25.00
8 x 10 "	13½ "	13½ "	20½ "	27½ "	34½ "	41½ "	48½ "	24.00	30.00
		CIRCLE OF LIGHT.						Telegraphic Code.	
4 x 5 in.		5½ in.	7½ in.	9½ in.	12 in.	15 in.	17½ in.	Tab.	
5 x 8 "		6½ "	9½ "	12½ "	16½ "	19½ "	22½ "	Tabby.	
6½ x 8½ "		8 "	11 "	14½ "	18 "	22 "	26 "	Tabid.	
8 x 10 "		9 "	12½ "	16½ "	20½ "	26 "	30 "	Table.	

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated.

Zeiss Anastigmat Lenses.



SINCE the first introduction of these lenses in this country the advantages of their construction have been so well appreciated that they have become very popular, and are now accorded the highest rank in the list of various photographic lenses. Time and experience have shown the desirability of still further increasing the number of varieties, so as to fill every possible demand, and have enabled the inventors to make computations for still

GREATER COVERING CAPACITY AND A
HIGHER DEGREE OF ANASTIGMATISM.

In connection with these improvements it has also been deemed advisable to make a

MATERIAL REDUCTION
IN PRICES

IN ORDER TO STILL MORE INCREASE THEIR POPULARITY.

While photographic literature is replete with the advantages of these lenses, it is but proper that we enumerate them in this connection:—

Freedom from astigmatism.

Extreme wide angle lenses, free from distortion.

Exact coincidence of visual and photographic image and equal magnitude of both.

Unequaled covering capacity. Absolute uniformity of illumination.

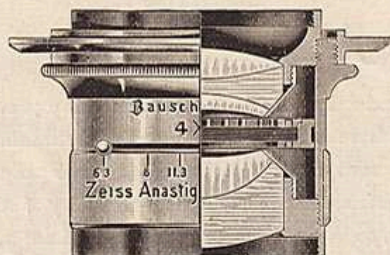
Unusual depth to the proportion of aperture.

No variation of focus with variation in diaphragm.

No flare spot or ghost.

Zeiss Anastigmat, 1:6.3.

Series II.



Extremely Rapid Instantaneous Lens, also for Portraits, Groups, and Copying.

This series is remarkable for its perfect anastigmatic flatness of field in conjunction with its great relative rapidity. On portraits and groups the larger sizes give unusually fine results, combining speed with delicate definition and depth.

For outdoor work they may be used to the limit of angle 85° without sacrifice of flatness; and the smaller numbers are particularly suitable for universal purposes of the amateur and professional, giving a speed equal to all demands, with unusual depth.

New test chart (copyrighted) accompanies each lens.

They are supplied with Improved Iris Diaphragm.

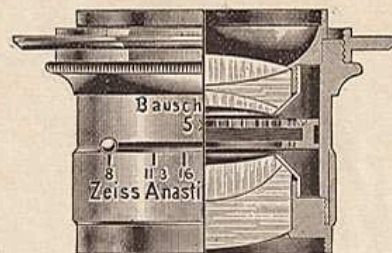
Waterhouse stops in place of Iris at same price.

No.	Size of Plate covered with Stop <i>f</i> . 9.	Diagonal of Largest Plate covered with Sm. Stop 80° .	Free Diameter of Largest Lens.	Equivalent Focus.	Brass Mounting Price.	Aluminum Price.	Telegraphic Code.
1	$2\frac{1}{2} \times 3\frac{1}{2}$ in.	$5\frac{1}{8}$ in.	$\frac{1}{2}$ in.	$3\frac{1}{2}$ in.	\$30.00	\$33.00	Zaffer.
2	$3\frac{1}{4} \times 4\frac{1}{4}$ "	$6\frac{1}{8}$ "	$\frac{3}{8}$ "	$4\frac{1}{2}$ "	33.50	36.00	Zany.
3	4×5 "	$9\frac{1}{4}$ "	1 "	$5\frac{1}{2}$ "	40.50	44.00	Zealous.
4	$4\frac{1}{2} \times 6\frac{1}{2}$ "	$11\frac{3}{8}$ "	$1\frac{1}{4}$ "	$6\frac{1}{2}$ "	51.00	54.00	Zedoary.
5	5×7 "	$13\frac{3}{8}$ "	$1\frac{1}{2}$ "	$8\frac{1}{2}$ "	64.50	68.00	Zephyr.
6	5×8 "	$16\frac{1}{4}$ "	1 $\frac{3}{8}$ "	$9\frac{1}{2}$ "	78.50	84.00	Zigzag.
7	$6\frac{1}{2} \times 8\frac{1}{2}$ "	$19\frac{1}{8}$ "	2 "	$11\frac{1}{2}$ "	108.50	113.00	Zinc.
8	8×10 "	$23\frac{1}{4}$ "	$2\frac{3}{8}$ "	$14\frac{1}{2}$ "	150.00	157.00	Zincky.
9	10×12 "	$28\frac{1}{2}$ "	$2\frac{1}{2}$ "	$16\frac{1}{2}$ "	192.00	200.00	Zodiac.
10	11×14 "	$33\frac{1}{4}$ "	$3\frac{1}{4}$ "	$20\frac{1}{2}$ "	240.00	250.00	Zone.
11	12×15 "	$35\frac{1}{2}$ "	$3\frac{1}{2}$ "	$23\frac{1}{2}$ "	300.00	310.00	Zoology.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated. For pairing two lenses for stereoscopic work, extra, \$3 00.

Zeiss Anastigmat, 1:8.

Series IIa.



For Portraits, Groups, Instantaneous Outdoor Work, and Copying.

The lenses of this new series are composed of five lenses, and have an angle of 80° ; and, being of relatively slower speed, it has been possible to compute them for an absolutely flat image, free from all astigmatism and extremely sharp definition. While the lenses of IIIa. series have up to the present been considered the most desirable outdoor lenses, the lenses of this series will undoubtedly in most cases be preferred, since they retain all the desirable qualities, except a slightly reduced angle, with greater speed. In fact, the speed will be found ample for all ordinary instantaneous exposures, giving an unusual evenness of illumination, flatness, and depth. In the studio they are well adapted for large heads, figures, and groups.

These lenses are also particularly adapted to copying and half-tone work, giving minutest detail with extreme flatness to the edges:

New test chart (copyrighted) accompanies each lens.

They are supplied with Improved Iris Diaphragm.

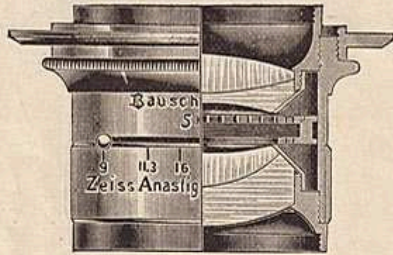
Waterhouse stops in place of Iris at the same prices.

No.	Size of Plate covered with Stop <i>f</i> . 12.5.	Diagonal of Largest Plate covered with Small Stop 72° .	Free Diameter of Largest Lens.	Equivalent Focus.	Brass Mounting Price.	Aluminum Price.	Telegraphic Code.
1	4×5 in.	$6\frac{1}{2}$ in.	$\frac{1}{2}$ in.	$4\frac{1}{2}$ in.	\$30.00	\$33.00	Zaba.
2	$4\frac{1}{2} \times 6\frac{1}{2}$ "	$8\frac{1}{4}$ "	$\frac{3}{8}$ "	$5\frac{1}{2}$ "	33.50	36.00	Zaccho.
3	5×8 "	$10\frac{1}{4}$ "	1 "	$6\frac{1}{2}$ "	44.00	47.00	Zapha.
4	$6\frac{1}{2} \times 8\frac{1}{2}$ "	$12\frac{3}{8}$ "	$1\frac{1}{8}$ "	8 "	54.50	58.00	Zamia.
5	8×10 "	$14\frac{3}{8}$ "	$1\frac{1}{4}$ "	$9\frac{1}{2}$ "	64.50	68.00	Zapote.
6	10×12 "	$17\frac{1}{4}$ "	$1\frac{3}{8}$ "	$11\frac{1}{2}$ "	85.50	91.00	Zarnich.
7	11×14 "	$21\frac{1}{4}$ "	2 "	$13\frac{1}{2}$ "	126.00	125.50	Zax.
8	14×17 "	$26\frac{1}{4}$ "	$2\frac{3}{8}$ "	17 "	161.00	160.50	Zayah.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated. For pairing two lenses for stereoscopic work, extra, \$3.00.

Zeiss Anastigmat, 1:9.

Series IIIa.



Instantaneous Outdoor Lens, also Groups and Large Portraits.

The lenses of this series are composed of five lenses, and have an angle of 90° . They have perfect anastigmatic flatness, without distortion, even when used to the full limit of their angle. They have sharp definition, even illumination, and unusual depth, which adapts them to all outdoor work and particularly to hand camera work. In this direction they surpass any known lens, their speed being ample for all ordinary instantaneous work. Where very quick exposures are desired, the lenses of the Series II. or IIIa. should be selected.

While not of sufficient speed for quick exposures in the studio, the larger numbers are well adapted for larger heads and groups. They are also well adapted for copying.

New test chart (copyrighted) accompanies each lens.

They are supplied with Improved Iris Diaphragm.

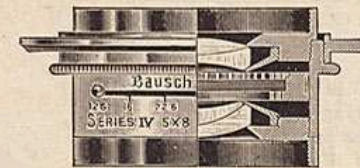
Waterhouse stops in place of Iris at same price.

No.	Size of Plate covered with Stop <i>f</i> . 12.5.	Diagonal of Largest Plate covered with Small Stop 90° .	Free Diameter of Largest Lens.	Equivalent Focus.	Mounting.		Telegraphic Code.
					Brass Price.	Aluminum Price.	
0	$2\frac{1}{2} \times 3\frac{1}{2}$ in.	—	$1\frac{7}{8}$ in.	3 in.	\$21.00	—	Zas.
00	$3\frac{1}{2} \times 4\frac{1}{2}$ "	—	$1\frac{3}{4}$ "	3 $\frac{1}{2}$ "	21.00	—	Zif.
1	4×5 "	$9\frac{7}{8}$ "	$1\frac{3}{4}$ "	4 $\frac{1}{2}$ "	23.00	—	Zinn.
2	$4\frac{1}{2} \times 6\frac{1}{2}$ "	$11\frac{1}{8}$ "	$1\frac{3}{4}$ "	5 $\frac{1}{2}$ "	26.50	—	Zihn.
3	5×7 "	$13\frac{1}{8}$ "	$1\frac{3}{4}$ "	6 $\frac{1}{2}$ "	31.50	\$35.00	Zeguel.
4	5×8 "	$15\frac{1}{8}$ "	1 "	7 $\frac{1}{2}$ "	35.00	38.00	Zaddow.
5	$6\frac{1}{2} \times 8\frac{1}{2}$ "	$18\frac{1}{8}$ "	$1\frac{1}{8}$ "	9 $\frac{1}{2}$ "	45.50	49.00	Zerial.
6	7×9 "	$21\frac{1}{8}$ "	$1\frac{1}{8}$ "	10 $\frac{1}{2}$ "	56.00	60.00	Zerious.
7	8×10 "	25 "	$1\frac{1}{8}$ "	12 $\frac{1}{2}$ "	70.00	75.00	Zerf.
8	10×12 "	32 "	2 "	16 "	105.00	110.00	Zerge.
9	11×14 "	$39\frac{1}{2}$ "	$2\frac{1}{8}$ "	19 $\frac{1}{2}$ "	139.50	147.00	Zet.
10	12×15 "	$47\frac{1}{2}$ "	$2\frac{1}{8}$ "	23 $\frac{1}{2}$ "	174.50	182.00	Zeton.
11	14×17 "	$54\frac{1}{2}$ "	$3\frac{1}{8}$ "	27 $\frac{1}{2}$ "	227.00	236.00	Zetto.
12	16×20 "	$64\frac{1}{2}$ "	$3\frac{1}{8}$ "	32 $\frac{1}{2}$ "	279.00	289.00	Zeven.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated. For pairing two lenses for stereoscopic work, extra, \$3.00.

Zeiss Anastigmat, 1:12.5.

Series IV.



An Instantaneous Wide Angle Lens for Landscapes, Interiors, Architecture, and Copying.

The lenses of this series form two unsymmetrical systems, both of which are composed of two cemented lenses, placed close together, although the numbers above No. 5 will admit of the adaptation of diaphragm shutter.

The field of the smaller lenses, including No. 6, measures an angle of 100° , while in the larger ones it is about 85° . The smaller numbers, including No. 6, admit of a pencil of relative aperture 1:10, and the larger ones 1:12. The larger stop has an aperture of *f*. 12.5.

This series is therefore wide angle, and, as such, may be used for all outdoor work with full aperture, which has unusual value in a large variety of work. It is, of course, understood that they may be used on smaller plates with correspondingly reduced angle.

New test chart (copyrighted) accompanies each lens.

The mountings of the smaller numbers, including No. 5, are provided with revolving diaphragms only; and the larger ones are

Supplied with Improved Iris Diaphragm.

No.	Size of Plate covered with Stop <i>f</i> . 18.	Diagonal of Largest Plate covered with Small Stop 90° .	Free Diameter of Largest Lens.	Equivalent Focus.	Mounting.		Telegraphic Code.
					Brass Price.	Aluminum Price.	
1	$3\frac{1}{2} \times 4\frac{1}{2}$ in.	$5\frac{1}{2}$ in.	$\frac{1}{2}$ in.	$2\frac{7}{8}$ in.	\$17.50	—	Zibet.
2	4×5 "	$8\frac{1}{2}$ "	$\frac{1}{2}$ "	3 $\frac{1}{2}$ "	17.50	—	Zend.
3	$4\frac{1}{2} \times 6\frac{1}{2}$ "	$10\frac{1}{2}$ "	$\frac{1}{2}$ "	4 $\frac{1}{2}$ "	21.00	—	Zoffer.
4	5×8 "	$13\frac{1}{2}$ "	$\frac{1}{2}$ "	6 $\frac{1}{2}$ "	24.50	—	Zein.
5	8×10 "	$17\frac{1}{2}$ "	$\frac{1}{2}$ "	7 $\frac{1}{2}$ "	31.50	\$35.00	Zircon.
6	10×12 "	$22\frac{1}{2}$ "	1 "	10 $\frac{1}{2}$ "	47.00	51.00	Zoril.

The following sizes for copying with stop *f*. 36 at 85° . For landscape work larger plates may be used.

7	12×15 in.	$27\frac{1}{2}$ in.	$1\frac{1}{8}$ in.	$15\frac{1}{2}$ in.	71.50	75.00	Zennir.
8	16×20 "	$43\frac{1}{2}$ "	2 "	$23\frac{1}{2}$ "	125.50	131.00	Zofil.
9	20×24 "	$64\frac{1}{2}$ "	$2\frac{1}{2}$ "	$35\frac{1}{2}$ "	282.50	290.00	Zodic.
10	24×30 "	$86\frac{1}{2}$ "	$3\frac{1}{8}$ "	$48\frac{1}{2}$ "	631.00	642.00	Zunn.

Telegraphic code refers to lenses in brass mounting; if desired in aluminum, it should be so stated. For pairing two lenses for stereoscopic work, extra, \$3.00.

Zeiss Anastigmat, 1:18.

Series V.

Wide Angle Lens, *par Excellence*, for Interiors, Architecture, Copying, and Landscapes.

The lenses of this series are similar in construction to those of Series IV. The numbers above No. 5 admit of the fitting of the diaphragm shutter.

The field of the smaller numbers, including No. 7, measures 108° , while that of the larger ones is 90° and above.

In the smaller sizes, including No. 7, the ratio of aperture to focus is about 1:13, and in the larger ones 1:17. The largest stop has an aperture of $f. 18$.

The smaller numbers of this series are wide angle lenses proper, and are, in spite of their very wide angle, sufficiently rapid to be available for instantaneous work with sunlight illumination. Considering the unequalled extent of angle, this capacity is unapproached by any known lens. They are therefore useful for many purposes. The entire field is orthoscopic, notwithstanding the dissymmetrical construction of the lens.

The larger lenses, of $18\frac{1}{2}$ focus and upwards, are in particular intended for reproductions of charts. They yield a perfectly flat and anastigmatic image, subtending an angle of 60° , and are perfectly free from distortion. Even with stop 1:18 the picture exhibits the sharpness of an engraving.

New test chart (copyrighted) accompanies each lens.

The mountings are similar in construction to those of Series IV., and have the same general appearance. All the smaller sizes, including No. 6, have revolving diaphragm only; and the larger sizes are supplied with **Improved Iris Diaphragm**.

No.	Size of Plate covered with Stop $f. 26$.	Diag. of Larg. Pl. cov. with Sm. Stop $104^\circ-110^\circ$.	Free Diameter of Largest Lens.	Equivalent Focus.	Brass Mounting Price.	Aluminum Price.	Telegraphic Code.
1	$4\frac{1}{2} \times 6\frac{1}{2}$ in.	$8\frac{1}{2}$ in.	$\frac{9}{16}$ in.	$3\frac{3}{8}$ in.	\$22.50	—	Zambo.
2	5×7 "	11 "	$\frac{1}{2}$ "	$4\frac{1}{2}$ "	22.50	—	Zamite.
3	$6\frac{1}{2} \times 8\frac{1}{2}$ "	$14\frac{3}{8}$ "	$\frac{1}{2}$ "	$5\frac{1}{2}$ "	28.00	—	Zeal.
4	8×10 "	$15\frac{1}{2}$ "	$\frac{1}{2}$ "	$7\frac{1}{2}$ "	35.00	—	Zebra.
5	10×12 "	$21\frac{1}{2}$ "	$\frac{1}{2}$ "	$8\frac{3}{4}$ "	44.00	\$47.00	Zebu.
6	11×14 "	$26\frac{1}{2}$ "	$\frac{1}{2}$ "	$10\frac{1}{2}$ "	54.50	58.00	Zealot.
7	12×15 "	$31\frac{1}{2}$ "	$\frac{1}{2}$ "	$12\frac{1}{2}$ "	64.50	68.00	Zenith.
For reproduction of charts and all kinds of copying on large plates when used at an angle of 85° .							
8	12×15 in.	$33\frac{1}{2}$ in.	1 in.	$18\frac{1}{2}$ in.	85.50	89.00	Zulo.
9	16×18 "	$45\frac{1}{2}$ "	$1\frac{1}{8}$ "	$24\frac{1}{2}$ "	126.50	130.00	Zero.
10	20×25 "	$68\frac{1}{2}$ "	$2\frac{1}{8}$ "	$37\frac{1}{2}$ "	247.50	255.00	Zest.
11	28×34 "	$94\frac{1}{2}$ "	3 "	$51\frac{1}{2}$ "	423.00	432.00	Zythum.
12	36×44 "	$118\frac{1}{2}$ "	$3\frac{1}{8}$ "	$65\frac{1}{2}$ "	703.00	714.00	Zimome.

Telegraphic code refers to lenses in brass mountings; if desired in aluminum, it should be so stated. For pairing two lenses for stereoscopic work, extra, \$3.00.

A New Type of Lens.

Zeiss Convertible Anastigmat.

(ZEISS DESIGNATION, SINGLE ANASTIGMAT.)

Series VII. 1:12.5.

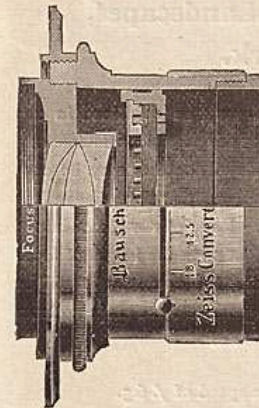
Single Combination for Instantaneous, Landscape, and Group Photography.

This lens consists of four elementary lenses cemented together. The increase in the number of elements has made it possible to apply the principle of anastigmatic correction of single lenses in a distinctly more perfect manner than the limitation to two or three elements, which has heretofore existed.

These lenses possess a **DEGREE OF PERFECTION** and **UNIVERSALITY OF APPLICATION** not approached by any other single combination.

The relative aperture is $f. 12.5$, and the angular field exceeds 85° . Since the anastigmatic flatness of the field is very perfect, the lens is therefore well adapted for all kinds of outdoor photography, also for large portraits, groups, and instantaneous outdoor work with good light. Like all single lenses, however, it is not absolutely rectilinear, although this defect asserts itself only at the maximum limit of its angle. Under ordinary conditions, such as, for instance, when No. 3 is used on a 5×8 plate, it shows only a barely appreciable amount of distortion, even with an architectural subject.

ONE GREAT ADVANTAGE in the purchase of one of these lenses lies in the fact that when, from economical motives, for instance, it is not desired to purchase a double combination, a single lens may be selected which is so mounted that, when it is later desired to **COMPLETE THE DOUBLE COMBINATION**, another suitable single lens may be purchased, which may be applied to the original mounting.



Lens mounting, showing a single anastigmat lens, and hood in place.

is later desired to **COMPLETE THE DOUBLE COMBINATION**, another suitable single lens may be purchased, which may be applied to the original mounting.

No.	Equivalent Focus.	Diameter of Lens.	Size of Plate completely covered at		Diameter of Image, Angle 75° .	Brass Mounts with Iris Diaphragm.	
			$f. 12.5$.	$f. 25$.		Price.	Code Word.
1	$7\frac{1}{2}$ in.	1 in.	$4\frac{1}{2} \times 6\frac{1}{2}$ in.	$6\frac{1}{2} \times 8\frac{1}{2}$ in.	11 in.	\$26.50	Acacia.
2	9 "	1 "	$5 \times 7\frac{1}{2}$ "	8×10 "	13 "	30.00	Acarina.
3	$11\frac{1}{2}$ "	1 "	$6\frac{1}{2} \times 8\frac{1}{2}$ "	10×12 "	17 "	35.00	Aceton.
4	14 "	1 "	8×10 "	11×14 "	21 "	42.00	Achilles.
5	$16\frac{1}{2}$ "	1 "	10×12 "	12×16 "	25 "	54.50	Acidalia.
6	19 "	1 "	11×14 "	13×16 "	29 "	75.00	Aconitum.
7	$23\frac{1}{2}$ "	2 "	12×16 "	16×20 "	35 "	96.00	Adinol.
8	27 "	2 "	13×16 "	20×24 "	41 "	125.50	Aeneas.
9	32 "	2 "	16×18 "	22×26 "	49 "	174.50	Aeolus.
10	$36\frac{1}{2}$ "	3 "	16×20 "	24×28 "	55 "	227.00	Aequator.
11	42 "	3 "	18×24 "	28×32 "	63 "	296.50	Aether.

The mountings of these lenses are provided with a revolving ring, engraved with the $f.$ value of each of the single and of the double combinations. The correct stop for each of the lenses is thus always read from the scale, exactly as in the case of a simple lens. If an additional combination is purchased, the graduated ring is exchanged for another, engraved with scales for all of the combinations. A stop fixes the scale in the proper position.

When ordering an additional single combination, give the serial number of the lens with which it is to be used.

When the single combination is desired without mounting, an allowance of \$1.50 will be made on Nos. 1-5, and \$3.00 on Nos. 6-10.

Zeiss Convertible Anastigmat.

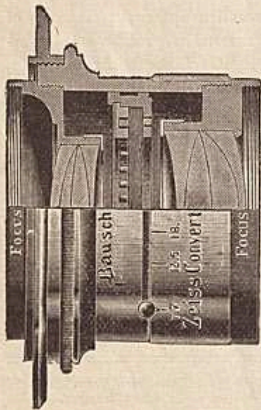
(ZEISS DESIGNATION, SATZ-ANASTIGMAT.)

Series VIIa. 1:6.3.

DOUBLET COMBINATION.

Extra Rapid Universal Lens for Portraits, Groups, Wide Angle Instantaneous Views, Landscapes, Copying, and Process Work.

Any two of the anastigmat lenses specified under Series VII. may be combined in one mount, so as to form a double combination of great speed. Among the possible combinations those specified in the subjoined table of doublets may be considered to have special merits; and we, therefore, keep these in stock. The angular extension of any of the combinations is about 80°. The speed is dependent upon the length of focus of each of the combinations forming the doublet. It will be observed from the table that the regular sets are made up from three numbers. Thus, a combination of



Lens mounting, showing two single anastigmat lenses in place, forming a doublet combination.

The anastigmatic flatness of the field is of the highest degree of perfection, and unapproached by any other lens now in existence. The plates are covered sharply to the edge, and also show straight lines absolutely as such.

By virtue of their great relative aperture and their large anastigmatically flat field these lenses are the

No. 1 and No. 1 gives a speed of $f. 6.3$.

No. 2 and No. 1 gives a speed of $f. 7$.

No. 3 and No. 1 gives a speed of $f. 7.7$.

Typical Extra Rapid Anastigmatic Universal Lenses,

and as such applicable to all branches of photography, and particularly useful in all process work where flatness, microscopic definition, and freedom from astigmatism are prime factors. Furthermore, the two separable elements of the Convertible Anastigmat offer **TWO RAPID SINGLE LENSES** of great excellence, and thus **THREE DIFFERENT LENSES OF VARYING FOCI**, affording means for obtaining not only unapproached work under the usual ordinary conditions, but for producing large figures and groups, landscape views from a great distance,—in fact, all those photographs which require lenses of relatively long focus.

In using these lenses the following rules should be observed:—

WHEN ONE COMBINATION is being used singly, it should always be screwed into the back of the tube, and the hood into the front.

WHEN THE DOUBLET COMBINATION is used, made up of dissimilar lenses, that of the longer focus should be in the front end of the tube, thus giving the greatest possible aperture. Each separate lens mount has its number and length of focus engraved upon it.

Doublet Combinations of Series VII., having, according to their Composition, a Relative Aperture of 1:6.3, 1:7, and 1:7.7.

No.	Combination of Single Anastigmat 1:12.5.		Combined Focus, in.	Largest Relative Aperture.	Size of Plate.			Diameter of Image, Angle 80°, in.	Brass Mount with Iris Diaphragm.	
	Front Lens, in.	Back Lens, in.			Full Aperture, in.	$f. 12.5$, in.	$f. 25$, in.		Price.	Code Word.
1	7½	7½	4½	$f. 6.3$	3½ x 3½	4 x 5	4 x 5	6½	\$51.00	Agonie.
2	9	7½	4½	" 7	3½ x 4½	4½ x 6½	4½ x 6½	7½	54.50	Alabaster.
3	11½	7½	5	" 7.7	4 x 5	4½ x 6½	4½ x 6½	8½	59.50	Alauda.
4	9	9	5	" 6.3	4 x 5	5 x 7½	5 x 7½	8½	58.00	Albatros.
5	11½	9	5½	" 7	4½ x 6½	5 x 8	5 x 8½	9½	63.00	Alizarin.
6	14	9	6½	" 7.7	4½ x 6½	5 x 8	6½ x 8½	10½	70.00	Alkaloid.
7	11½	11½	6½	" 6.3	4½ x 7½	6½ x 8½	6½ x 8½	10½	68.00	Alkohol.
8	14	11½	7	" 7	5 x 7½	6½ x 8½	7 x 9	12	75.00	Amidon.
9	16½	11½	7½	" 7.7	5 x 8½	7 x 9	7 x 9	12½	87.50	Ananas.
10	14	14	8	" 6.3	5 x 8½	7 x 9	7 x 9	13½	82.00	Anchovis.
11	16½	14	8½	" 7	6½ x 8½	8 x 10	9 x 11	14½	94.50	Anilin.
12	19½	14	9½	" 7.7	6½ x 8½	9 x 11	9 x 11	15½	115.50	Anthracit.
13	16½	16½	9½	" 6.3	6½ x 8½	9 x 11	9 x 11	15½	106.50	Antimon.
14	19½	16½	10	" 7	7 x 9	9 x 11	10 x 12	16½	127.50	Antipyrin.
15	23½	16½	11	" 7.7	7 x 9	10 x 12	10 x 12	18½	148.50	Apostat.
16	19½	19½	11	" 6.3	7 x 9	10 x 12	10 x 12	18½	146.50	Aristos.
17	23½	19½	12	" 7	8 x 10	10 x 12	10 x 14	20	167.50	Asbest.
18	27½	19½	12½	" 7.7	8 x 10	10 x 12	10 x 14	21½	197.00	Athene.
19	23½	23½	13½	" 6.3	8 x 10	10 x 14	10 x 14	22½	188.50	Atlas.
20	27½	23½	14½	" 7	10 x 12	11 x 14	12 x 16	24	218.00	Atropin.
21	32	23½	15½	" 7.7	10 x 12	11 x 14	13 x 16	26	254.00	Aurantia.
22	27½	27½	15½	" 6.3	10 x 12	11 x 14	13 x 16	26	248.00	Aurora.
23	32	27½	16½	" 7	11 x 14	12 x 16	16 x 18	28½	284.00	Autonom.
24	36½	27½	17½	" 7.7	11 x 14	12 x 16	16 x 20	29½	325.00	Autoclave.
25	32	32	18½	" 6.3	11 x 14	12 x 16	18 x 22	30½	318.00	Autor.
26	36½	32	19½	" 7	12 x 16	13 x 16	20 x 24	32½	360.00	Avicula.
27	42	32	20½	" 7.7	12 x 16	16 x 20	20 x 24	34½	420.00	Azobenzol.
28	36½	36½	20½	" 6.3	12 x 16	16 x 20	20 x 24	34½	402.00	Azoflavin.
29	42	36½	22	" 7	13 x 16	18 x 24	22 x 26	37	462.00	Azorbun.
30	42	42	23½	" 6.3	13 x 16	18 x 24	24 x 28	39½	521.00	Azurin.

The mountings of these lenses are provided with a revolvable ring, engraved with the $f.$ value of each of the single and doublet combinations.

The correct stop for each of the lenses is thus always read from the scale, exactly as in the case of a simple lens.

If an additional combination is purchased, the graduated ring is exchanged for another, engraved with scales for all the combinations.

A stop fixes the scale in the proper position.

When ordering an additional single combination, give the number of the lens with which it is to be used.

Zeiss Sets of Anastigmats.

C and D.

From the single anastigmats it will, with the aid of table under VIIa., be found an easy matter to select, for any given purpose, sets of lenses comprising only a **FEW ELEMENTS**, from which may be formed an **EXTENSIVE SERIES** of rapid lenses of different foci. Thus, a set may be selected whose elements are all single anastigmats of Series VII., and whose doublet combinations (Series VIIa.) are rapid anastigmatic universal lenses of the highest degree.

Of these sets of anastigmats we keep in stock those listed under C and D. They are for plates 5 x 8 and 8 x 10. Any other sets or combinations will be made up to order.

Either of the sets C and D consists of:—

1. A lens tube fitted with Iris Diaphragm and lens screw.
2. In C 3 and in D 4, single anastigmats respectively, having their foci engraved upon them.
3. A hood, screwing into the front of the tube, so as to obviate reflection when only one lens is used.
4. A flange to receive the lens tube.
5. A suitable case containing all the parts and members of the combination.

In using these lenses the following rules should be observed:—

When any one lens is being used singly, it should be screwed into the back of the tube, and the hood into the front.

When two single anastigmats are combined to form an anastigmatic doublet, the hood is replaced by the lens of longest focus.

In the anastigmatic doublet when the lenses are dissimilar in focus, the lens having the longer focus should be placed in the front end of the tube, thus giving the greatest possible aperture.

C Set of Anastigmats.

5 x 8.

Made up of single anastigmats, Series VII., Nos. 2, 3, and 4.

Price, including case, \$103.00. Code word, Alpha.

No.	Pair of Lenses.		Resulting Focus.	Largest Effective Aperture.	Angle subtended by 5 x 8 Plate.	Size of Plate covered at			Diameter of Image with Field of 80°.
	Front Focus.	Back Focus.				Full Aperture.	f. 12.5.	f. 25.	
1	—	14 in.	14 in.	f. 12.5	35°	—	8 x 10 in.	11 x 14 in.	—
2	—	11½ "	11½ "	" 12.5	43°	—	6½ x 8½ "	10 x 12 "	—
3	—	9 "	9 "	" 12.5	53°	—	5 x 7½ "	8 x 10 "	—
4	14 in.	11½ "	7 "	" 7	64°	5 x 7½ in.	6½ x 8½ "	7 x 9 "	12 in.
5	14 "	9 "	6½ "	" 7.7	71°	4½ x 6½ "	5 x 8½ "	6½ x 8½ "	10½ "
6	11½ "	9 "	5½ "	" 7	76°	4½ x 6½ "	5 x 8½ "	5 x 8½ "	9½ "

D Set of Anastigmats.

8 x 10.

Made up of single anastigmats, Series VII., Nos. 3, 4, 5, and 6.

Price, including case, \$201.00. Code word, Alphabet.

No.	Pair of Lenses.		Resulting Focus.	Largest Effective Aperture.	Angle subtended by 8 x 10 Plate.	Size of Plate covered at			Diameter of Image with Field of 80°.
	Front Focus.	Back Focus.				Full Aperture.	f. 12.5.	f. 25.	
1	—	19½ in.	19½ in.	f. 12.5	34½°	—	11 x 14 in.	13 x 16 in.	—
2	—	16½ "	16½ "	" 12.5	40°	—	10 x 12 "	12 x 16 "	—
3	—	14 "	14 "	" 12.5	46½°	—	8 x 10 "	11 x 14 "	—
4	—	11½ "	11½ "	" 12.5	55½°	—	6½ x 8½ "	10 x 12 "	—
5	19½ in.	16½ "	10 "	" 7	61°	7 x 9 in.	9 x 11 "	10 x 12 "	16½ in.
6	19½ "	14 "	9½ "	" 7.7	66°	6½ x 8½ "	9 x 11 "	9 x 11 "	15½ "
7	16½ "	14 "	8½ "	" 7	69½°	6½ x 8½ "	8 x 10 "	9 x 11 "	14½ "
8	16½ "	11½ "	7½ "	" 7.7	76°	5 x 8½ "	7 x 9 "	7 x 9 "	12½ "
9	14 "	11½ "	7 "	" 7	80°	5 x 7½ "	6½ x 8½ "	7 x 9 "	12 "

The mountings of these lenses are provided with a revoluble ring, engraved with the f. value of each of the single and of the doublet combinations.

The correct stop for each of the lenses is thus always read from the scale, exactly as in the case of a simple lens.

If an additional combination is purchased, the graduated ring is exchanged for another, engraved with scales for all the combinations.

A stop fixes the scale in the proper position.

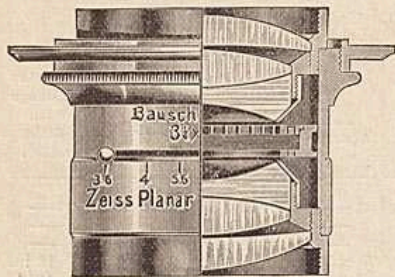
When ordering an additional single combination, give the number of the lens with which it is to be used.

THE ZEISS PLANAR.

A New Rapid Anastigmatically Corrected Lens.

German Patent No. 92,313. Registered No. 23,231.

United States Patent No. 583,336. Registered No. 29,857.



Planar 1: 3.8. $f=160$ mm. (6 $\frac{1}{2}$).
Series Ia. No. 11.
(About two-thirds full size.)

The Planar, as shown in the illustration, is a symmetrical objective consisting of four separated lenses. It possesses the following important features: It is very rapid, and yields sharply defined pictures; it is anastigmatically well corrected, and embraces a comparatively wide angle. The rapidity varies from $f/3.6$ to $f/6$, according to the size and application of the lens, and the angle embraced by it varies from 62° to 72° .

The Planars are superior in precision or defining power to the Anastigmats hitherto made. They are therefore pre-eminently

adapted for all kinds of copying processes. They work equally well when used for enlargements, projection, full-size copies, and reductions. Even the finest details are reproduced with a degree of precision which satisfies the highest requirements.

Owing to its extreme rapidity, the Planar is excellently adapted for the most rapid instantaneous exposures outdoors possible (as in the preparation of animated pictures for the kinematograph and similar work), and for portraits and groups both outdoors and in the studio.

The Planars are, however, not so well adapted for wide-angle architectural and interior views as our Series IIIa. and V., owing to the insufficient angle possessed by the former. In consequence of their great rapidity and their proportionately large size and weight, the Planars are not so convenient for landscape as other less rapid lenses.

The Planar is made after a new formula calculated by Dr. P. RUDOLPH. It has been patented in Germany (No. 92,313, November 14, 1896) and in other countries. A detailed description of this new type of lens may be found in the patent specifications.

The lenses comprised under Series Ia. are symmetrical double objectives consisting of two compound lenses, each of which possesses perfect astigmatic correction as well as spherical and chromatic correction of the first order of approximation. Either of these compound lenses consists of a single uncemented and isolated collective lens and a cemented dispersive lens made up of two elementary lenses having dissimilar dispersion but approximately similar refraction.

We make at present nineteen regular sizes of the Planar (Series Ia.) as specified in the table following, which gives all necessary particulars as to size, covering power, and prices.

Other lenses besides those specified in the table may be made to order.

Special Applications of the Planars.

Instantaneous Photography. Nos. 6 to 19 of Series Ia. are adapted for photographing objects in motion. The size of plate covered at full aperture as given in the table determines the most suitable focus in each case. For exposures of this kind, which should naturally be as short as possible, it is best to use a focal plane shutter placed immediately in front of the plates, provided these do not exceed about 9×7 inches. The photograph should be taken with the largest stop which the required degree of sharpness admits of.

Instantaneous street scenes and *genre* pictures may be taken with intermediate stops, the covering powers being those given in the table under the respective heading. The lens requires in these cases a stop of $f/6$ to $f/9$ according to its focal length and the required depth of focus.

Portraits and Groups. Nos. 12 and 19 are adapted for this class of work, No. 12 being suitable for portrait carte-de-visite, No. 19 for heads in three-fourths size, No. 12 for groups measuring $7\frac{1}{2} \times 5$ inches, No. 19 for groups measuring 18×24 inches. Portraits should be taken with stops of $f/4.5$ to $f/6$. Groups require stops of $f/6$ to $f/12.5$ according to the number of rows or the requisite depth of focus. Since even with short exposures the details contained in the shadows are rendered visible, it is advisable to make the exposure as short as possible.

Kinematograph Pictures. Animated pictures are conveniently made with Nos. 1 to 4 and Nos. 6 and 7. The final selection depends upon the size of the film, and can generally be made from the plate sizes given in the first column.

Photo-micrographic Enlargements and Reductions. Nos. 1 to 5 (1 and 2 fitted with the English Microscopic Society Screw) are well adapted for photo-micrographic enlargements. They yield magnifications up to 100 diameters, and embrace an angle of about 30° . Even Nos. 6 to 8 are available for these purposes. Nos. 1 to 8 are equally well adapted for the production of microscopic reductions, such as are used in communications by carrier pigeons.

Process Work (autotype, three-color printing, half-tone, and photogravure). Nos. 15 to 19 are available for these purposes.—No. 15 covering a plate 12×10 ; No. 19, 32×26 inches. We are prepared to supply, to order, Planars of longer foci capable of covering larger plates. When working with these lenses the following rules should be observed: Object, objective, and focussing screen should be well adjusted with respect to each other, it being absolutely necessary that the object and focussing screen should be strictly parallel to each other, and the axis of the objective should be accurately at right angles to the focussing screen. Any imperfections in these adjustments are rendered apparent, in the shape of dissymmetrical definition, more readily than with the lenses hitherto used for copying. This is due to the fact that the Planars work at considerably larger apertures than the latter, in which inaccuracies are to a certain extent covered by their greater depth of focus.

Focussing must be done with the most scrupulous care. When copying engravings it is advisable to follow the old plan of determining the best position of the screen by a series of trials. Half-tones are copied with a stop of $f/9$ to $f/6$, engravings with stops of $f/10$ to $f/18$. Compared with the older lenses, the Planars require therefore, generally speaking, only one-eighth of the time of exposure necessitated by the former.

SERIES Ia. PLANAR.

A Rapid Special Lens for Instantaneous Photographs, Portraits, and Groups, also for Copying, Enlarging, and Demonstrations on the Screen.

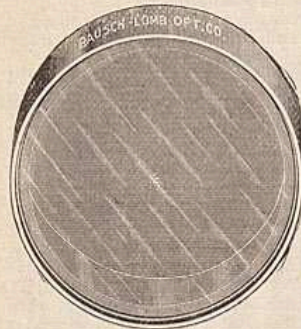
Series and No.	Equivalent focus.		Diameter of lenses.		Largest relative aperture, $f/$.	Size of plate covered.		Diameter of image with small stops, in.	Angle, degrees.	Lens in brass mount fitted with Iris diaphragm.		
	mm.	in.	mm.	in.		At full aperture, in.	With intermediate stops, in.			In standard mount, No.	Price.	Code word.
Ia, 1	20	$\frac{3}{4}$	5	$\frac{1}{4}$	4.5	$\frac{1}{2} \times \frac{1}{2}$	$\frac{2}{3} \times \frac{2}{3}$	1	65	0	\$42.00	Placage.
Ia, 2	35	$1\frac{1}{2}$	9	$\frac{3}{8}$	4.5	$\frac{3}{4} \times \frac{3}{4}$	$1\frac{1}{2} \times 1\frac{1}{2}$	1 $\frac{1}{2}$	65	0	42.00	Placard.
Ia, 3	50	2	12	$\frac{1}{2}$	4.5	$1\frac{1}{2} \times 1\frac{1}{2}$	$1\frac{1}{2} \times 1\frac{1}{2}$	2 $\frac{1}{2}$	65	I.	42.00	Placenta.
Ia, 4	75	3	17	$\frac{3}{8}$	4.5	$1\frac{1}{2} \times 1\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	3 $\frac{1}{2}$	65	II.	42.00	Placet.
Ia, 5	100	4	25	1	4.5	$2\frac{1}{2} \times 2\frac{1}{2}$	$3\frac{1}{2} \times 3\frac{1}{2}$	5	65	III.	42.00	Placitum.
Ia, 6	40	$1\frac{1}{2}$	12	$\frac{1}{2}$	3.6	1 x 1	$1\frac{1}{2} \times 1\frac{1}{2}$	2 $\frac{1}{2}$	70	0	35.00	Placodus.
Ia, 7	60	2	17	$\frac{3}{8}$	3.6	$1\frac{1}{2} \times 1\frac{1}{2}$	$2\frac{1}{2} \times 2\frac{1}{2}$	3 $\frac{1}{2}$	70	II.	35.00	Plafond.
Ia, 8	83	$3\frac{1}{4}$	25	1	3.6	2 x 2	$3\frac{1}{2} \times 2\frac{1}{2}$	4 $\frac{1}{2}$	70	III.	42.00	Plagiat.
Ia, 9	110	4 $\frac{1}{2}$	31	1 $\frac{1}{4}$	3.6	$3\frac{1}{2} \times 2\frac{1}{2}$	$4\frac{1}{2} \times 3\frac{1}{2}$	6	70	IV.	58.00	Plagium.
Ia, 10	130	5	36	1 $\frac{1}{2}$	3.8	$3\frac{1}{2} \times 3\frac{1}{2}$	5 x 4	7 $\frac{1}{2}$	70	V.	68.00	Plakoid.
Ia, 11	160	6 $\frac{1}{2}$	42	1 $\frac{3}{8}$	3.8	$4\frac{1}{2} \times 3\frac{1}{2}$	$6\frac{1}{2} \times 4\frac{1}{2}$	8 $\frac{1}{2}$	70	VIII.	77.00	Planetia.
Ia, 12	205	8	51	2	4.0	$6\frac{1}{2} \times 4\frac{1}{2}$	$7\frac{1}{2} \times 5$	10 $\frac{1}{2}$	65	IXa.	109.00	Planum.
Ia, 13	250	10	61	2 $\frac{1}{2}$	4.0	$7\frac{1}{2} \times 5$	9 x 7	12 $\frac{1}{2}$	65	XII.	150.00	Plasma.
Ia, 14	300	12	71	2 $\frac{3}{4}$	4.2	$8\frac{1}{2} \times 6\frac{1}{2}$	10 x 8	14 $\frac{1}{2}$	62	XIII.	192.00	Plastik.
Ia, 15	370	14 $\frac{1}{2}$	82	3 $\frac{1}{4}$	4.5	9 x 7	16 x 12	21 $\frac{1}{2}$	72	XIV.	241.00	Plastron.
Ia, 16	423	16 $\frac{1}{2}$	94	3 $\frac{3}{4}$	4.5	10 x 8	18 x 14	24 $\frac{1}{2}$	72	XV.	300.00	Plata.
Ia, 17	470	18 $\frac{1}{2}$	94	3 $\frac{3}{4}$	5.0	12 x 9 $\frac{1}{2}$	20 x 16	24 $\frac{1}{2}$	68	XV.	349.00	Platanus.
Ia, 18	610	24	120	4 $\frac{1}{2}$	5.0	16 x 12	24 x 20	32 $\frac{1}{2}$	68	XVII.	698.00	Platinid.
Ia, 19	840	33	140	5 $\frac{1}{2}$	6.0	20 x 16	32 x 26	42	64	XVIII.	1,220.00	Platon.

When working with the Planar it should be remembered that, owing to the great rapidity of the lens, one is apt to over-expose. This naturally causes fogging, and hence it is often advisable to make use of a restrainer during the process of developing.

The halves of the Planar (front and back lenses) cannot be used as landscape lenses excepting with very small stops.

Bausch & Lomb Optical Company's Ray Filter.

For Cloud Photography, Landscape Work, Copying Paintings, Process Work, and all work requiring correct color values.

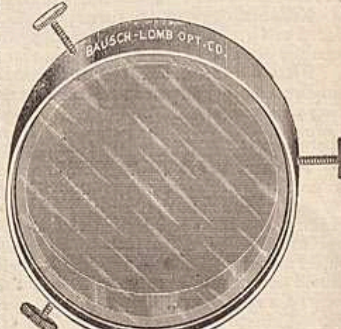


STYLE A.

Photographic defects. The desire of every photographer is to produce natural-looking pictures. It is conceded, however, that, even with the most careful handling of lenses, plates, and prints, much is still to be desired in the average landscape photograph.

How avoided.

An examination of the following pages will show how the



STYLE B.

majority of these defects may be avoided.

Nature of light. White light is a combination of the seven primary colors: violet, indigo, blue, green, yellow, orange, and red, named in the order of their actual intensity.

Optical and chemical effect. The visual intensity (lightness or darkness of a color to the eye) is quite different, some of the blues, for example, appearing to the eye much darker than some of the reds.

The action of the seven colors upon the ordinary photographic plate corresponds with their actual intensity, and decreases with great rapidity from the violet, which is the most active, to the red, which scarcely acts at all on even the most sensitive of the ordinary plates.

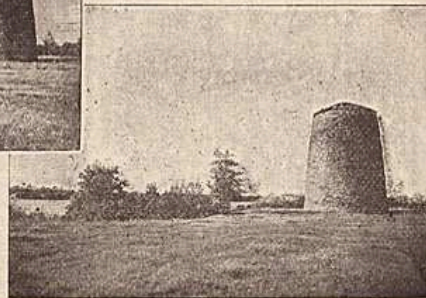
Result in the photograph. The result in the photograph is, some blue or green objects appear too light as compared with yellow or red objects, which are much lighter to the eye; furthermore, objects which reflect a very great quantity of violet or blue rays impress the plate so deeply and quickly that portions touched by these rays become hopelessly over-exposed long before the darker colors have acted at all. Harshness, caused by lack of detail in either the lights or the shadows follows; that is to say, if the development of the plate is arrested when the sky, for example, has attained the proper amount of detail and density for printing, the land portion of the picture will be very much under-developed, lacking both in detail and in density; while, if development is carried on until the land portion has attained its full strength and detail, the sky will have lost everything in a mass of blackness, absolutely impenetrable for printing purposes.

How to avoid errors. To avoid these very undesirable results, two aids, which have been heretofore rather severely overlooked, may be employed: first, a plate properly sensitized for the rays in which



A RAY FILTERGRAPH.

visual and chemical intensity correspond most nearly; and, secondly, the Ray Filter, for the purpose of absorbing all the rays for which the plates are not properly sensitized, and which, if allowed to act, would produce in the negative defects referred to.



A PHOTOGRAPH.

Bausch & Lomb Optical Company's Ray Filter.—Continued.

Proper plates. The ortho- and iso-chromatic plates, which are now supplied at the same rates as ordinary plates, are entirely suitable and should be used in every instance.

Ray Filter. The most important factor, however, is the Ray Filter, as upon it depends the straining out of the too active ultra-violet, violet, and blue rays.

There are various kinds of filters, some of colored glass, colored gelatin, or collodion films. These are of little value, as they permit many of the ultra-violet and violet rays to pass, as may be demonstrated by the spectroscope, and are not perfectly transparent to those rays which it is desired to use in making the picture. It has been found that a solution of bichromate of potash is almost perfectly transparent to green, orange, yellow, and red lights, but absorbs the other colors partly or completely, according to the strength of the solution.

Bichromate of potash Ray Filter. The ideal Ray Filter should not only be transparent to the rays which are to be used in making the picture, but should be so accurately constructed as to cause no deflection of the light rays entering the lens. To meet these conditions we have constructed the bichromate of potash Ray Filter, which consists of two thin pieces of optical glass, the surfaces of which have been ground and polished perfectly plane and parallel. Between these plates is cemented a glass ring of uniform thickness throughout, forming a cell of proper depth, in which is contained the bichromate of potash solution. The glass part is mounted in a neat metal ring, which protects it and holds the filter firmly in the proper position upon the front of the lens. Obviously, the filter should not be placed at the diaphragm of the lens, as any refraction caused by it would be greatly magnified in the image; nor at the back of the lens, being in that position inaccessible if it is desired to make a quick change for instantaneous work, etc.

When to use the Ray Filter.

The Ray Filter is of the utmost practical value in every kind of outdoor work, except for the most rapid exposures. A great improvement is made by the correct rendering of color values, thus developing the proper perspective and introducing that stereoscopic solidity and atmosphere lacking in ordinary photographs. Perhaps the most pleasing feature is the reproduction of the natural tone of the sky, against which any clouds which may be present appear in relief, all the delicate detail being perfectly preserved, the intensity of the sky being such as to print with the foreground. This is possible from the fact that the foreground reflects a relatively much larger per cent. of the darker rays than the sky does.

The reason why. For example, the actinic intensity of the sky may be conveniently represented as one hundred units, the most of this intensity being due to the presence of blue rays. The relative intensity of the land covered with vegetation would then be about forty units, due mostly to the presence of green rays. If now the light which is to make the picture is passed through the bichromate Ray Filter, the actinic intensity of the sky light will be reduced to about forty by the absorption of the blue rays, while the intensity of the landscape light will have been reduced to only about thirty-five, owing to its containing but very few blue rays originally. It therefore follows that an ordinary photograph would show a difference of sixty units between land and sky, while in the Rayfiltergraph the difference will be about five units. This difference gives in prints the most pleasing results,—cloudy sky and foreground both correctly exposed, so as to print together and have their correct relative tones as they appear to the eye.

Marine, snow, and mountain pictures. Marine views are similarly well rendered. For the same reasons, snow scenes are particularly within the scope of Ray Filter work, every detail in the snow itself, as well as in the darker objects, being reproduced and of correct printing intensity. Mountain photography, which is absolutely impossible without the filter, lends itself especially well. The white haze which seems to fill up the distance is due to the reflection of the most actinic rays from minute particles in the air. The Ray Filter absorbs these rays, thus eliminating the haze and giving perfectly distinct pictures of distant peaks which are often invisible to the eye.



Bausch & Lomb Optical Company's Ray Filter.— Concluded.

Copying paintings, three-color work. The Ray Filter is also invaluable for copying paintings and for photographing colored interiors, as well as for making plates for the three-color printing process.

A photographic necessity. The small size and convenience of applying the Ray Filter to any lens, as well as the immense advantage in results to be obtained, make it a necessary part of every photographic outfit, whether hand camera or tripod, for amateur or professional.

A has the advantage that it may be instantly attached to or detached from the lens. When ordering send slip of good paper exactly reaching around the lens hood.

B may be applied to lenses having hoods varying in size from those given in table to one-half inch smaller in diameter.

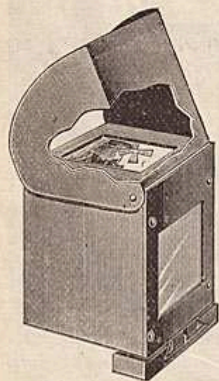
The cell is supplied filled ready for use, and packed in a box with suitable pipette for refilling, also a pair of forceps and an extra quantity of the fluid, and is accompanied by complete instructions.

In our list of sizes, the inside dimensions quoted are the largest diameters of hoods to which each cell can be fitted. Price for mounting A or B the same.

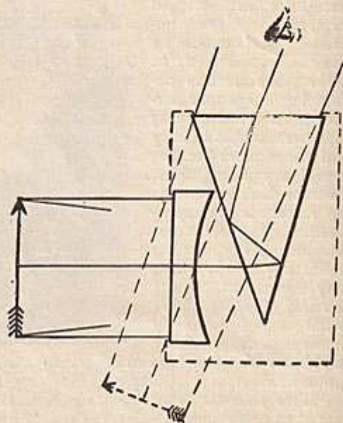
PRICE LIST.

No.	1	2	3	4	5	6	7	8
Inside diameter in inches,	1 $\frac{1}{4}$	1 $\frac{1}{2}$	2 $\frac{1}{8}$	2 $\frac{1}{4}$	2 $\frac{1}{2}$	3 $\frac{1}{4}$	3 $\frac{1}{2}$	4 $\frac{1}{4}$
Price,	\$3.25	\$3.50	\$3.50	\$4.00	\$4.50	\$5.00	\$5.50	\$6.00
Price of morocco cap,	.70	.70	.75	.80	.90	1.00	1.10	1.20
Bichromate of potash (orange) solution, per ounce bottle,								.25
Chromate of potash (yellow) solution,								.25
Extra pipette,								.15
Extra forceps,								.25

The Iconoscope.



THE ICONOSCOPE.



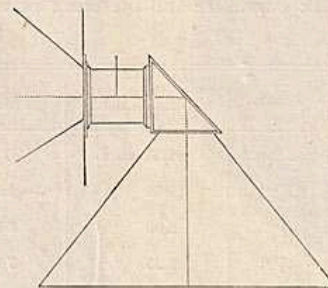
SHOWING PATH OF RAYS THROUGH THE ICONOSCOPE.

A new brilliant view finder constructed on correct optical principles. An ingenious combination of a prism and concave lens gives an image identical with the angle of the camera lens, upright and *not* reversed right for left. This feature makes the Iconoscope superior to the ordinary brilliant finders, which give an image as in a looking-glass. The Iconoscope is neatly finished in mahogany with nickelled shade and front. It is attached to the camera bed by a sliding joint, upon which the finder may be turned either horizontally or vertically.

PRICE.

Large size, . . . \$6.00 Medium size, . . . \$5.00 Small size, . . . \$4.00

Prisms.



These prisms are intended to be used in all classes of photo-mechanical processes. They invert the image, and make stripping of the film unnecessary. The glass is specially made for us, of the highest possible excellence. The surfaces are as accurately ground and polished as the surfaces of a first-class lens, so as to give an absolutely true reflection of the image. The hypotenuse is carefully silvered.

These prisms are in lacquered brass mountings, and arranged to fit the hood of lens.

In estimating the size of prism which is required for a particular lens, a size should be selected which is at least equal to the diameter of the hood. A size which is larger than this is preferable; but under no condition should a smaller one be selected, as, in the work in which these prisms are required, it is of great importance to utilize all the possible light which the lens can transmit.

Full Aperture.	Fitted to Rapid Univ. and Alvan G. Clark Lenses.	Fitted to Zeiss Anastigmat, Series IIa.	Fitted to Zeiss Anastigmat, Series III.	Fitted to Zeiss Anastigmat, Series IIIa.	Fitted to Zeiss Anastigmat, Series IV.	Fitted to Zeiss Anastigmat, Series V.	Price.	Price when fitted to Other Lenses.
1 $\frac{1}{4}$ in.	No. 4 $\frac{1}{2}$	Nos. 1 & 2	Nos. 1 & 2	Nos. 1 & 2	Nos. 1 & 2	Nos. 1 & 2	\$28.00	\$30.00
2 "	No. 5	No. 3	No. 3	Nos. 3 & 4	No. 3	No. 3	36.00	38.00
2 $\frac{1}{4}$ "	No. 8	No. 4	No. 4	Nos. 5 & 6	Nos. 4 & 5	Nos. 4 & 5	45.00	47.00
2 $\frac{3}{4}$ "	No. 8 $\frac{1}{2}$	No. 5	No. 5	No. 7	No. 6	Nos. 6 & 7	53.00	55.00
3 "	No. 10	No. 6	No. 6	No. 8	No. 7	No. 8	65.00	67.00
3 $\frac{1}{4}$ "	No. 12	No. 7	No. 7	No. 9	No. 8	No. 9	78.00	80.00
4 "	No. 15	No. 8	—	No. 10	—	No. 10	90.00	93.00
4 $\frac{1}{4}$ "	No. 18	—	No. 8	No. 11	No. 9	No. 11	140.00	145.00
5 $\frac{1}{4}$ "	No. 22	—	No. 9	No. 12	No. 10	No. 12	180.00	185.00

Condensing Lenses.

These lenses we make of the very highest grade and of strong curvature, so as to give the greatest concentration of light. They should not be confounded with plano-convex lenses of weak curvature and therefore of insufficient concentrating capacity.

No.	Diameter.	Focus.	Price, Unmounted.	Price, in Brass Mounting.	Telegraphic Code.
1½	1½ in.	2 in.	\$1.50 each.	\$4.50 per pair.	Obal.
2¼	2¼ "	2¾ "	1.75 "	5.00 "	Oboth.
3	3 "	3¾ "	2.00 "	6.00 "	Ochill.
3½	3½ "	4¼ "	2.25 "	7.00 "	Ociria.
4	4 "	5 "	2.50 "	8.00 "	Oded.
4½	4½ "	5½ "	3.00 "	10.00 "	Olamus.
5	5 "	6¼ "	3.75 "	11.50 "	Oman.
6	6 "	7¼ "	6.00 "	17.00 "	Onias.
7	7 "	9 "	10.00 "	25.00 "	Ono.
8	8 "	10 "	15.00 "	36.00 "	Oreb.
9	9 "	11 "	20.00 "	46.00 "	Oseas.
10	10 "	12 "	25.00 "	60.00 "	Ozen.
12	12 "	14 "	38.00 "	95.00 "	Ozoran.
13	13 "	18 "	50.00 "	120.00 "	Ozone.

Finder Lenses.

These lenses are of first quality, and are furnished either double or plano-convex, with edges ground or unground.

No.	Diameter.	Focus.	Price, with Edges Unground.	Price, with Edges Ground.	Telegraphic Code.
1	½ in.	½ to 2 in.	\$0.40 each.	\$0.60 each.	Idnel.
2	¾ "	¾ " 2 "	.40 "	.60 "	Igal.
3	1 "	1 " 2 "	.40 "	.60 "	Ivam.
4	1½ "	1½ " 3 "	.40 "	.60 "	Ishod.
5	2 "	1½ " 3 "	.50 "	.70 "	Ithai.
6	2½ "	2 " 3½ "	.50 "	.70 "	Irah.
7	1 "	2 " 4 "	.50 "	.70 "	Isui.

Photograph Cases.



\$1.50
2.00

Cabinet, leather, to hold six pictures,
Cabinet, Mantello leather, to hold six pictures,
SPECIAL SIZES MADE TO ORDER.

Morocco Leather Caps.

For Universal, Clark, and Zeiss Lenses.

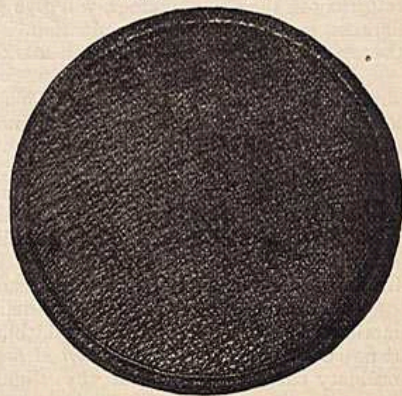
No.	1	2	3	4	5	6	7	8	9	10	11	12
Diam.,	1½	1½	1½	2¼	2¼	2¼	3¼	3¼	4¼	4¼	5¼	5¼
Price,	\$0.60	.60	.65	.70	.75	.80	.90	1.00	1.10	1.20	1.25	each.

Brass Flanges.

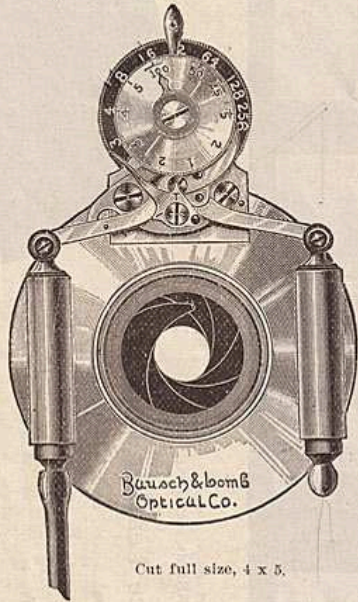
No.	1	2	3	4	5	6	7	8	9
Diam.,	1½	2	2¼	3	3¼	4	5	5½	6
Price,	\$0.50	.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00

Aluminum Flanges.

No.	1	2	3	4	5	6	7	8	9
Diam.,	1½	2	2¼	3	3¼	4	5	5½	6
Price,	\$1.00	1.25	1.50	2.00	2.50	3.00	3.50	4.00	4.50



Bausch & Lomb Optical Company's Diaphragm Shutter.



Cut full size, 4 x 5.

No shutter has ever been introduced, the advantages of which have been so quickly appreciated, and which from its first appearance has been conceded to excel all others. It has stood the test of years, and is *without a rival*.

It requires little argument to show that the proper place for opening and closing a shutter is in the optical axis of the lens; and in both time and instantaneous photography it is evident that this shutter, starting its opening with a pin-hole and gradually increasing to the size of stop for which it is set, and returning in the same manner, will give the effect of a small stop, *i.e.*, more depth, flatness, and equality of illumination. Comparative tests show that in practice these advantages are obtained to a marked degree.

Furthermore, the quality of workmanship in these shutters is altogether superior to that in other devices. This and the construction enables us to adapt lenses to them under the exact original conditions and truly centred, a fact of the greatest importance, as there is not the slightest depreciation in any of the good qualities which a lens may possess.

This shutter meets every requirement of gallery and outdoor work. We disclaim, however, its suitability to so-called "lightning work," although surprising results, such as trains running sixty miles an hour, and trotting horses, show its capacity under suitable management. For all other work it has no rival, either in its results, advantages, conveniences, or workmanship.

While the shutter is easy and delicate in its action, and from its variety of motions comparatively complicated, there is no danger in this fact, as the parts exposed to wear are especially strong. There are *no weak points*; and, with ordinary care, there is not the slightest deterioration in its operation. Its reputation is not alone confined to this country, but it is used at every point of the globe where photography is practised.

All the parts to be operated are at the front and easy of access. The upper lever sets the shutter **without making an exposure**; the lower sets for time or instantaneous exposure. The larger black disk sets the size of opening; the smaller for time of exposure, varying from **3 to 1-100 seconds**. The shutter is very compact and well balanced in its operation, so that there is no jar, even at its quickest speed, while making an exposure.

ITS ADVANTAGES OVER OTHER CONSTRUCTIONS ARE:

- It gives greater depth, more even illumination, greater covering capacity.
- It allows a variation in speed from 1-100 to 3 seconds.
- It gives every variation in size of stops, from pin-hole to full opening.
- It does not jar the camera.
- Can be operated by rubber bulb or finger release.
- Requires the setting of one lever only for each exposure.
- Can be easily applied to hand cameras.
- Makes no exposure when setting.
- Its workmanship is of the highest grade, with lenses true and optically centred.

On account of the variations in size and pitch of threads and varying conditions in the lenses of the same make, we **assume no responsibility** in fitting unless the **complete lenses** are sent us, whether of our or other manufacture.

LLOYD SPECIAL, when fitted to Rapid Universal, Extra Rapid Universal, or Velox Lenses with regular barrel and diaphragm.		Alvan G. Clark.	Zeiss Anastigmat, Series I.	Zeiss Anastigmat, Series II.	Zeiss Anastigmat, Series IIa. and IIIa.	Zeiss Anastigmat, Series III.		
4 x 5 in.	\$14.00							
5 x 8 "	15.00	{ No. 4 $\frac{1}{2}$ No. 5 \$15.00 No. 8	No. 1 \$15.00	No. 3 \$15.00	{ No. 2 \$15.00 No. 3 No. 4 No. 0* No. 00* 16.00 No. 1* No. 5	{ No. 2 \$15.00 No. 3		
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	16.00			{ No. 1* No. 2* 16.00 No. 4	{ No. 00* No. 1* 16.00 No. 5	{ No. 1* No. 4 16.00 No. 5		
8 x 10 "	17.50	{ No. 8 $\frac{1}{2}$ No. 10 17.50	{ No. 2 No. 3 17.50	{ No. 5 No. 6 17.50	{ No. 6 No. 7 17.50 No. 8	{ No. 6 No. 7 17.50		
			Zeiss Anastigmat, Series IV.	Zeiss Anastigmat, Series V.	When fitted to lenses of other manufacture, leaving barrel intact.	Extra for Aluminum.	Opening of Largest Stop.	Telegraphic Code.
4 x 5 in.					\$14.50 / 5.40	\$4.00	$\frac{3}{8}$ in.	Dalphon.
5 x 8 "					15.50 / 14.00	4.50	1 $\frac{1}{8}$ "	Danites.
6 $\frac{1}{2}$ x 8 $\frac{1}{2}$ "	{ No. 1* No. 2* No. 3* \$16.00 No. 5 No. 6 No. 7	{ No. 1* No. 2* No. 3* 16.00 No. 6 No. 7 No. 8			16.50 / 15.00	5.00	1 $\frac{1}{2}$ "	Dara.
8 x 10 "	{ No. 4* No. 8 17.50	{ No. 4* No. 5* 17.50			18.00 / 16.00	5.50	1 $\frac{3}{4}$ "	Darius.

* Indicates shutter being fitted to back of lens. Cannot otherwise be adapted, on account of combination of lenses being too close together.

To graduate disk to correspond with stop accompanying lens, extra, \$0.50.

Finger release attachment to shutters, $\frac{3}{8}$ to $\frac{1}{16}$ size, extra, \$1.00. ($\frac{3}{8}$ is regularly supplied in this way at no additional charge.)

Telegraphic code refers to shutters in brass mounting; if desired in aluminum, it should be so stated.

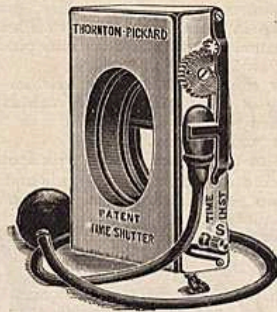
SIZE OF SHUTTER OVER ALL IN HEIGHT AND WIDTH.

Size of opening,	$\frac{3}{8}$	1 $\frac{1}{8}$	1 $\frac{1}{2}$	1 $\frac{3}{4}$
Inches,	2 $\frac{3}{8}$ x 4	3 $\frac{1}{8}$ x 4 $\frac{1}{2}$	3 $\frac{3}{8}$ x 5 $\frac{1}{2}$	4 $\frac{1}{2}$ x 5 $\frac{1}{2}$

B. & L. Stereoscopic Shutter.

Opening.	LLOYD SPECIAL and Rapid Universal.	A. G. Clark.	Velox Rectilinear.	ZEISS ANASTIGMAT.				Price.	
				Series II.	Series IIa.	Series III.	Series IIIa.	Brass.	Aluminum.
$\frac{3}{8}$ in.	No. 5	No. 5	No. 1	No. 2	No. 2 & 3	No. 2 & 3	No. 2 & 3	\$18.00	\$22.00

THE THORNTON-PICKARD Time and Instantaneous Shutter.



Standard Pattern.

To fit on either the hood or tube of the lens. Particulars of the smallest size: speed, up to $\frac{1}{50}$ of a second; dimensions, $3\frac{3}{8} \times 2\frac{1}{4} \times \frac{1}{8}$ inches; weight, $4\frac{1}{2}$ ounces.

The above illustration shows the external appearance of the THORNTON-PICKARD Time and Instantaneous Shutter, which is the one recommended for general all-round work. The shutter is simplicity itself: there is no complicated mechanism to get out of order. It is a perfect substitute for the lens cap, and much more handy and reliable.

The same shutter may be used with any number of lenses, of different sizes, by the use of our Patent Adapters (price from 30 cents each).

For an Instantaneous Exposure place the lever opposite the word "INST." The cord is then pulled out as far as it will come by means of the tassel, which causes the wheel to revolve until the second stud catches in the notch of the lever, making two clicks. The pulling of the cord winds up the blind on the top roller, so that the opaque bottom end covers the opening, and consequently the lens. If now the pneumatic ball is pressed, it will lift the lever clear of the stud and release the wheel, allowing the blind to rapidly rewind upon the bottom spring roller. The aperture in the blind therefore passes rapidly across the opening in the shutter case, which is instantly covered again by the opaque end of the blind. The exposure thus given is an instantaneous one.

The Duration of the Exposure can be ascertained by reference to the SPEED INDICATOR. This consists of a dial, marked in fractions of a second, attached to the side of the shutter, and a pointer on the end of the spring-roller spindle. The speed is indicated on the dial in fractions of a second by the pointer, which can be set to the speed desired by means of the knob.

For Time Exposures the cord is pulled to its limit as before, but the lever is placed opposite the word "TIME." On squeezing the pneumatic ball, the blind stops open by means of the stud, which catches in the notch of the lever, as before described. It remains open until the pressure on the ball is released. Thus a time exposure of any required duration may be given. In this case the exposure commences instantly the ball is squeezed, and terminates immediately the pressure is released. Beyond this there is no limit to the duration of the exposures that may be obtained.

For Very Long Exposures, such, for instance, as are required for INTERIORS, there is no necessity to hold the ball all the time. Without first setting the shutter pull the cord *half-way*, that is, until the first click is heard. This sets the shutter full open; and it may be left so for the desired time of exposure, after which it can be closed by simply squeezing the ball.

For Focusing, the shutter remains open in the same manner, that is, if the cord is pulled only half-way,—until the first click is heard.

PRICE LIST, including Speed Indicator.

To fit on a lens hood or tube up to inches diameter:	1½	1¾	2	2½	3	3½	4	4½	5
	\$7.50	\$7.75	\$8.00	\$9.50	\$11.00	\$13.00	\$15.00	\$17.50	\$19.00

THE THORNTON-PICKARD Behind Lens Shutter,

Time and Instantaneous.

Particulars of the smallest size: price, including speed indicator, \$10; speed, up to $\frac{1}{50}$ of a second; dimensions, $3\frac{3}{8} \times 2\frac{1}{4} \times \frac{1}{8}$ inches; weight, $4\frac{1}{2}$ ounces.

This shutter is of exactly the same construction as the standard pattern described in the preceding pages, but is arranged to be screwed to the panel of the camera front, practically acting as an inside shutter. It then forms a part of the camera, and is always firmly attached and in position. The back is fitted with velvet, which insures a light-tight joint when the shutter is screwed to the panel of the camera front. The lens flange is screwed to a detachable panel, which fits into the front of the shutter. Extra panels for other flanges may be had, so that any number of lenses may be used with the same shutter, and any one instantly dropped into its place ready for immediate use.

The shutter should be attached to the camera front panel by four ordinary small screws passed through from the back of the panel into the velvet-covered back of the shutter. Care should be taken that these screws are not too long, so as to injure the blind.

PRICE LIST, including Speed Indicator.

	1½	1¾	2	2½	3	3½	4	4½	5
Behind Lens.	\$8.25	\$8.52	\$8.80	\$10.45	\$12.10	\$14.30	\$16.50	\$19.25	\$20.90

THE THORNTON-PICKARD Stereoscopic Shutter,

Time and Instantaneous.

To fit on the Hoods or Tubes of Lenses.

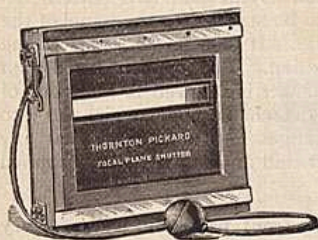
STEREOSCOPIC.

	1½	1¾	2	2½					
Time and Instantaneous,	\$12.50	\$12.50	\$13.50	\$15.00	—	—	—	—	—
Time and Instantaneous Behind Lens,	14.00	14.00	15.00	16.50	—	—	—	—	—
Time and Instantaneous Behind Lens, with adjustable centres (adjustment from 2½ to 3½ in.),	16.50	16.50	17.50	19.00	—	—	—	—	—

These prices are for stereoscopic shutters up to 3½ inch centres. If 3½ inch centres, \$1 extra; 3¼ inch centres, \$2 extra.

THE THORNTON-PICKARD Focal Plane Shutter,

With Patent Adjustable Slit. Fits at the Back
of the Camera.



Particulars of the smallest size: price, including speed indicator, \$19.50; speed (all sizes), $\frac{1}{25}$ up to $\frac{1}{1000}$ of a second; dimensions, $6\frac{1}{2} \times 7\frac{1}{2} \times 1\frac{1}{8}$ inches (not including adapters); weight, 12 ounces.

For those who desire to obtain instantaneous photographs of subjects having an extremely rapid movement, such as flying birds, animals and men leaping, jumping, etc., this is the best shutter. It gives a short exposure, and passes a larger percentage of light than any other form.

The Focal Plane Shutter is made upon the roller-blind principle, like all the Thornton-Pickard shutters. It fits at the back of the camera, and the dark slide fits into the back of the shutter. The shutter blind, therefore, works just in front of the plate, and has a narrow slit in it the full width of the plate, which gives the exposure as it passes rapidly across.

The speed is regulated by means of a small knob that winds up the driving spring, and also by altering the width of the adjustable slit. The speed indicator is always fitted to this shutter.

The winding indicator is an arrangement which automatically prevents the blind being wound up too far when setting the shutter, and will be found on the opposite side of shutter from the winding knob. When it is required to focus, wind the blind up as far as it will go, then press the spring lever over the winding indicator with the finger of the other hand, and continue the winding.

For prolonged exposures the shutter is wound up to the top as when focusing, and a cap or a time shutter may be used in the ordinary way without removing the Focal Plane Shutter from the camera.

THE NEW PATENT ADJUSTABLE SLIT is fitted to all Focal Plane Shutters, in addition to the adjustable spring roller, without extra charge. This improvement adds greatly to the range of speed of the shutter, extending from $\frac{1}{25}$ of a second to $\frac{1}{1000}$ of a second in all sizes of shutters, and allowing not only for the fastest instantaneous work possible, but also for all ordinary instantaneous work down to the slowest. This simple and ingenious invention is the only practical and perfect method which has yet been devised for varying the width of the slit in a Focal Plane Shutter. It is done by means of a chain at each end of the slit, which can be lengthened and shortened at will, making the sides of the slit perfectly parallel without any skill in manipulation.

DIRECTIONS FOR ALTERING THE WIDTH OF SLIT. After removing the focusing screen take hold of the two struts which form the parallel sides of the slit in the blind, and turn them askew, at the same time drawing them forward out of the shutter. The chains at the ends of the slit can then be manipulated. It will be observed that one end of the chain is fixed permanently to one strut, while the other part of the chain is linked on to the extreme end of the other strut, the end of it passing inwards along the length of the strut. This part may be pulled out and linked on to the end of the strut to make the slit wider, or allowed to spring back into the strut, which makes the slit narrower. All that is necessary is to see that the same number of links are used at each end of the slit.

THE SPEED OF THE SHUTTER is found by DIVIDING THE SPEED GIVEN ON THE INDICATOR BY THE NUMBER OF LINKS IN USE at each end. That is to say, with only one whole link the speed is that given on the indicator; with ten links (which is the extremity), it is one-tenth of the same.

PRICE LIST.

4 x 5 in.	4½ x 6½ in.	5 x 7 in.	5 x 8 in.	6½ x 8½ in.	8 x 10 in.	10 x 12 in.	11 x 14 in.
\$18.00	\$20.00	\$20.00	\$23.00	\$25.00	\$28.00	\$33.15	\$35.00

Other sizes made to order.

THE THORNTON-PICKARD Pneumatic Balls and Tubes.



The rubber of which these goods are made is the best that can be obtained for the purpose, and, although no rubber goods will last indefinitely, these balls and tubes will last a long time with ordinary care.

The balls and tubes supplied by us are all specially made for our shutters, and make the shutters work very easily. They are much better than anything obtainable from other sources.

The ball is joined to the tube by an air-tight screw connection, so that should the ball ever become deflated it can be unscrewed. The ball will then instantly refill with air, and after screwing up tight again is ready for use. The end of the rubber tube overlaps the metal connection so as to be squeezed between the two parts of the connection when screwed up, therefore making its own air-tight joint, as shown in the above illustration.

PRICES.

Ordinary pattern, as supplied with every Thornton-Pickard Shutter, 2 feet of tubing, and teat joined up air-tight, **75 cents** each.

Extra teats, 12 cents each. Screw connections, 12 cents per pair (these can be used for joining two short lengths of tubing together).

Note.—When ordered we supply the long tubing with a screw connection, so that it may be attached to the short length already on the shutter by simply unscrewing the small ball. Thus either the long or short lengths are readily interchangeable.

THE THORNTON-PICKARD Rubber Moulding and Adapters, For fitting Shutters to Lenses and for adapting One Shutter to Two or More Lenses.

Made in seven different thicknesses. Price, 30 cents per foot.

No.	1	2	3	4	5	6	7
	$\frac{1}{16}$ "	$\frac{3}{32}$ "	$\frac{1}{8}$ "	$\frac{3}{16}$ "	$\frac{1}{4}$ "	$\frac{5}{16}$ "	$\frac{3}{8}$ "
	¼" thick.						

Fitting.—It should be cut to the required length with a sharp knife, and sprung into the aperture with the rib or flange on the inside.

Adjustment.—The screw in the side of shutter will give the exact adjustment by turning with a screw-driver. An accurate fit upon the lens hood is thus insured.

Any thickness may be rubbed down on the back with a piece of sandpaper when too thick, or in case of emergency a piece of cardboard may be used as packing behind the moulding when it is not thick enough.

ADAPTERS.

When it is desired to fit two or more lenses to the same shutter, a second piece of moulding may be used inside the first one, so as to form an adapter which can be put in or taken out as required. **Price, 30 cents each.**

In case a very large shutter has to be adapted to a very small lens, a wooden adapter is necessary. Price, **75 cents** up to 2½ inches diameter, and \$1.00 if larger.

Unicum Shutter.

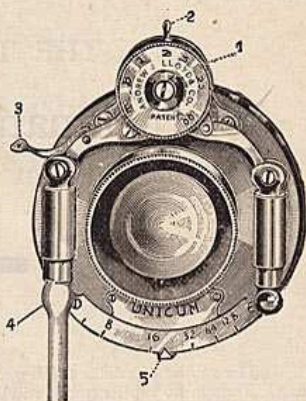
The Unicum Shutter is the latest product of the Bausch & Lomb Optical Company, especially made for us, and is one of the best working shutters now on the market. It has both finger and pneumatic release.

It is fitted with Iris Diaphragms, which are regulated by moving the lever 5 to the right or left. The openings are in accordance with the uniform system, and are indicated on the scale.

It works automatically from $\frac{1}{100}$ of a second to 1 second, and any fraction between these desired is obtained by simply revolving the disc No. 1 to the desired speed.

Long time exposures are given by placing letter T at indicator. One pressure of the bulb will open the shutter, and the second pressure will close it.

When letter B is at indicator, one pressure of the bulb will open it; and it will close when pressure is released.



PRICE LIST OF UNICUM SHUTTERS.

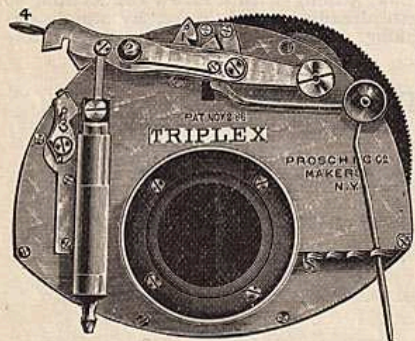
No.	Size.	Diameter of Opening.	Fitted to Our Lenses without Barrel.		Fitted to Other Lenses, leaving Barrel Intact.	
			With Retarding Device.	Without Retarding Device.	With Retarding Device.	Without Retarding Device.
1	4 x 5 in.	$\frac{1}{2}$ in.	\$8.00	\$6.50	\$9.00	\$7.50
2	5 x 8 "	$1\frac{1}{4}$ "	9.00	7.50	10.00	8.50
3	$6\frac{1}{2}$ x $8\frac{1}{2}$ "	$1\frac{3}{8}$ "	10.00	8.50	11.00	9.50

The Triplex Improved Shutter.

The Triplex Improved being fitted between the combinations of the lenses, each shutter also contains an entirely new lens tube, the original lens tube or barrel not being cut in any way, unless specially ordered, but returned intact.

Rotary stops are fitted to all shutters, when possible. Shutters may also be adapted for use with Waterhouse or plain stops, same price.

We prefer, under all circumstances, to have lens tube, and do not guarantee fit unless we have complete lens.



PRICE LIST OF TRIPLEX IMPROVED SHUTTERS.

Size,	00	0	0A	1	1A	2	2A	3	3A
Aperture, in.,	$\frac{3}{8}$	$\frac{1}{2}$	1	$1\frac{1}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{3}{4}$	2
Price,	\$12.50	\$13.00	\$13.50	\$14.00	\$15.00	\$15.50	\$16.00	\$17.00	\$18.00
Extra for aluminum,	3.00	3.50	4.00	4.50	5.00	5.50	6.00	6.50	7.00
	4	5	6	7	8				
	$2\frac{1}{4}$	$2\frac{1}{2}$	3	$3\frac{1}{2}$	4				
	\$20.00	\$22.00	\$26.00	\$30.00	\$35.00				

N. B.—When the lens combinations come so close together that it is necessary to fit stop *inside of shutter case*, an extra charge of \$1.00 is made.

Triplex Stereoscopic Shutter.

It is simply a double Triplex Shutter in one frame, operated by one lever bar.

Prices: No. 1, \$20.00 No. 2, \$22.00 No. 3, \$23.50 No. 4, \$25.00

Low Shutter, No. 3.

Price, \$4.00 each.



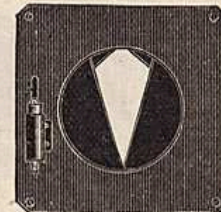
Opening	by 2 7/8 in. wide	by 3 1/2 in. long.
1 1/4 in.	3 1/2 "	4 1/2 "
1 3/8 "	3 3/4 "	4 3/4 "
2 "	3 3/4 "	4 3/4 "
2 1/4 "	4 "	5 1/2 "
3 1/4 "	5 3/8 "	7 1/4 "
3 1/2 "	6 1/4 "	7 3/4 "
4 "	7 1/4 "	9 "

The Low Shutter, No. 3, is designed to be attached to the front board on the inside of camera.

It opens so as to light the drapery and foreground most. Will balance open while focusing.

Low Shutter, No. 5.

Opening	3 in. square,	Price
1 1/4 in.	\$4.00	\$4.00
1 3/8 "	3 1/2 "	4.50
2 "	4 "	4.50
2 1/4 "	4 1/2 "	5.00
3 "	5 1/2 "	5.50
3 1/4 "	6 3/8 "	6.00
4 "	7 1/4 "	6.50
4 1/4 "	8 1/4 "	7.00
5 "	9 "	7.00

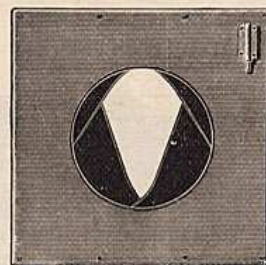


The Low Shutter, No. 5, is a very simple, well made, and nicely finished shutter, having the special advantage of a very large opening in a small shutter.

Packard Time Shutter.

This shutter has four wings, and has the advantage of a **very large opening** in connection with very small outside dimensions. It is intended for time exposures, works very evenly and accurately, is placed on the inside of the camera.

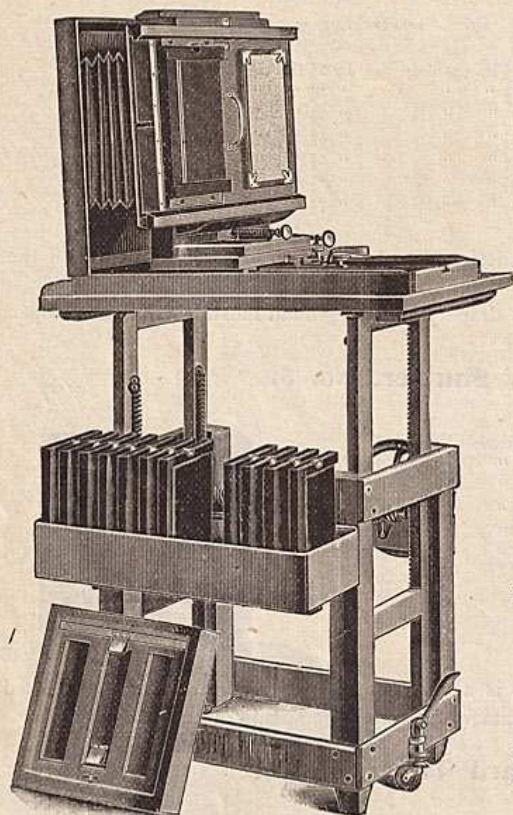
For cameras having small front boards this shutter is especially adapted.



SIZES AND PRICES.

Opening.	Outside Dimensions.	Price.
2 3/8 in.	4 1/4 in.	\$4.50
2 1/2 "	5 "	4.50
3 1/4 "	6 "	5.00
3 3/8 "	7 "	5.50
4 1/4 "	8 "	6.00

New York Studio Outfit.



This outfit is, without exception, the most complete and the cheapest for the studio. It includes:—

One 8 x 10 mahogany portrait camera, fitted with double swing back and patent lever focusing attachment, curtain slide Benster holder, and an automatic cabinet attachment, with one holder, by means of which in one movement the ground glass is pushed aside and holder placed in position with slide automatically drawn, ready for exposure; also one No. 1 New York Camera Stand.

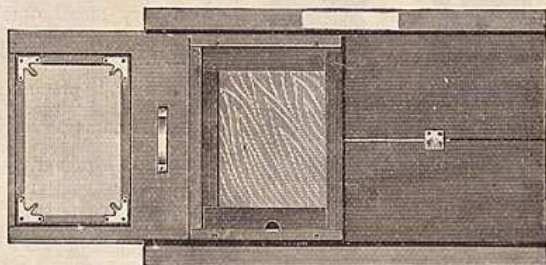
Size.	Price.
8 x 10 New York Studio Outfit, complete as above,	\$45.00
11 x 14 New York Studio Outfit, complete as above,	70.00

EXTRA HOLDERS.

4 1/2 x 6 1/2, 5 x 7, or 5 x 8,	\$1.20
11 C. Camera alone,	21.00
13 C. Camera alone,	50.00

Automatic Cabinet Attachment.

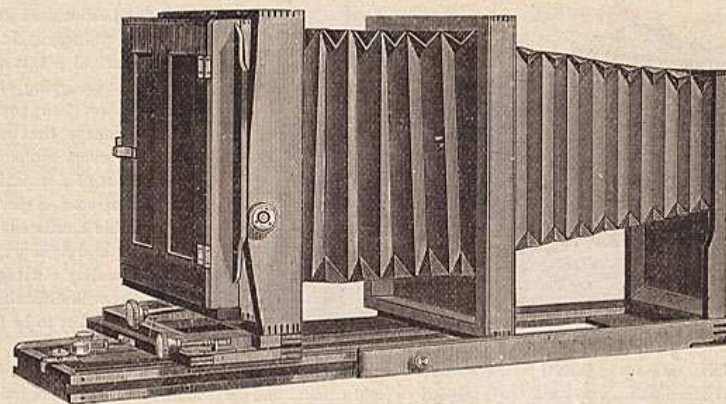
It consists of a mahogany back that can be fitted to any 8 x 10 or larger camera, and has a ground glass and receptacle for plate holder on a sliding carriage which moves from left to right. The plate holder being adjusted, and the focusing being done, the carriage is moved and the ground glass is replaced by the plate holder, the slide being automatically withdrawn.



The automatic attachment will be made to fit any 8 x 10, 10 x 12, or 11 x 14 camera. It fits the camera where the ordinary holder is adjusted. 5 x 8, 5 x 7, or 4 1/2 x 6 1/2 holders are supplied, as desired.

	Price.
8 x 10 attachment, with one holder,	\$10.00
10 x 12, or 11 x 14, with one holder,	12.00
Extra (single) holders, per dozen,	14.40

Eclipse Portrait Camera.

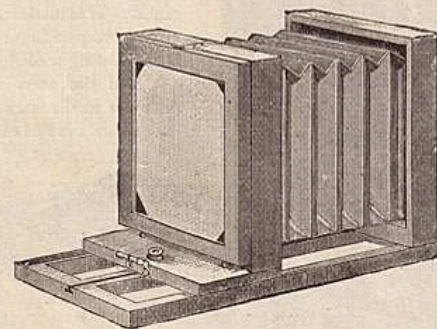


No.	Size.	To cover Plate.	With Double Swing-back.
1	1-4	3 1/2 x 4 1/2 in.,	\$20.00
2	1-2	4 1/2 x 5 1/2 "	27.00
3		4 1/2 x 6 1/2 "	30.00
4	4-4	6 1/2 x 8 1/2 "	35.00
5 Extra	4-4	8 x 10 "	38.00
6		10 x 12 "	48.00
7		11 x 14 "	64.00
8		12 x 15 "	72.00
9		14 x 17 "	76.00
10		16 x 20 "	88.00
11		17 x 20 "	90.00
12		18 x 22 "	100.00
13		20 x 24 "	110.00
14		22 x 27 "	130.00
15		25 x 30 "	170.00
16		30 x 38 "	350.00

with platform 30 in. long, and vertical shifting front.

When ordering, please specify whether Waterbury or Bonanza Holder is preferred.

Acme Standard Portrait Cameras.

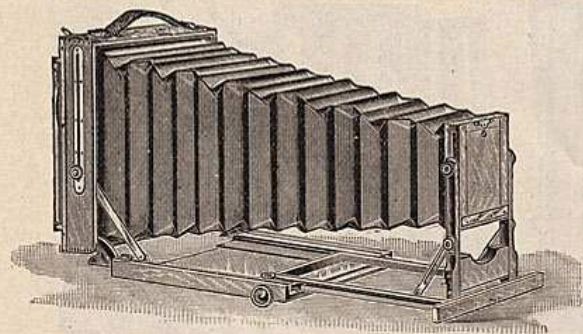


The Acme Portrait Cameras have rubber bellows, Swing ground glass, and reversible holder.

	Plain, with Solid Glass Corner Holder.	Double Swing-back, with Bonanza Holder.
500 1-4 size, reversible, plate 3 1/2 x 4 1/2 in.,	\$5.00	—
501 1-2 " " " " 4 1/2 x 5 1/2 "	10.00	—
502 4-4 " " " " 6 1/2 x 8 1/2 "	14.00	\$24.00
503 Ex. 4-4 " " " " 8 x 10 "	20.00	26.00
504 " " " " 8 x 10 " with focus rack,	22.50	28.00
505 10 x 12 size, reversible, with focus rack,	25.00	33.00
506 11 x 14 " " " " " " " "	35.00	45.00
507 14 x 17 " " " " " " " "	45.00	55.00
510 6 1/2 x 8 1/2 Acme Standard Portrait Camera, with Sliding S. G. Cor. Holder,	19.00	—
511 8 x 10 " " " " " " " "	27.00	—

Solid glass corner or rabbeted dry plate holders supplied with these cameras.

The King Camera.

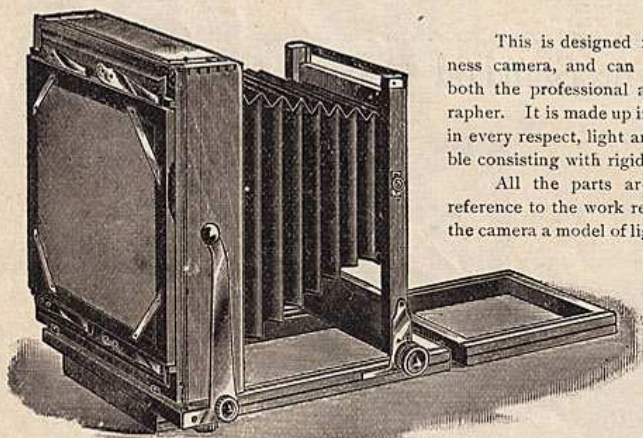


The best camera known to the photographic art. The principal points aimed at in the designing of this camera were to produce an instrument that would combine every modern improvement of practical utility; compact and portable as possible consistent with strength and rigidity; that should be simple in its parts, so as to avoid difficulties in use and liability to be easily put out of order.

The price of the KING includes one holder and canvas case. When desired, cases will be furnished to hold camera and six holders, or camera, six holders, tripod, and pocket for lenses.

Size of View.			Price.
5 x 7 in.	17 in.	4 lbs	\$35.00
5 x 8 "	18 in.	4 lbs	36
6 1/2 x 8 1/2 "	21	5 lbs	40
8 x 10 "	24 1/2	5 1/2 lbs	45
10 x 12 "	33 1/2	11 lbs	50.00
11 x 14 "			55.00

Rochester View Camera.



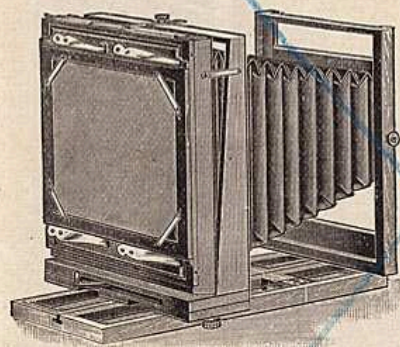
This is designed for a thorough business camera, and can be recommended to both the professional and amateur photographer. It is made up in a first-class manner in every respect, light and compact as possible consisting with rigidity.

All the parts are made strong with reference to the work required, thus making the camera a model of lightness and strength.

Price includes canvas carrying case and one double plate holder.

Size of Plate.			Price, Single Swing.	Price, Double Swing.
5 x 7 in.	16 1/2 in.	4 1/2 lbs	\$18.00	\$20.00
5 x 8 "	17 1/2 in.	5 lbs	20.00	22.00
6 1/2 x 8 1/2 "	20	5 1/2 lbs	22.00	24.00
8 x 10 "	21 1/2	6 lbs	24.00	26.00
10 x 12 "	24 1/2	7 lbs	28.00	30.00
11 x 14 "	26 1/2	8 lbs	30.00	32.00
14 x 17 "	33 1/2	10 lbs	45.00	50.00
17 x 20 "		12 lbs		

The Favorite Camera.



This is especially designed to meet the requirements of the outdoor professional, but can be used equally as well by the amateur or in the gallery.

It is made to cover the field of usefulness of all cameras, yet at a price within the reach of all.

The carrying case is canvas, made to hold the camera in one end and six holders in the other.

Price, including camera, canvas case, and one double dry plate holder:

Size.			Price.
5 x 7 in.	13 3/4 lbs	4 lbs	14 \$17.00
5 x 8 "	15 1/8	4 1/2	14 17.00
6 1/2 x 8 1/2 "	"	5	14 18.00
8 x 10 "	18 1/4	6 1/4	15.50 20.00
11 x 14 "	23 3/4	10	24 25.00
14 x 17 "	28 1/2	17	35 35.00

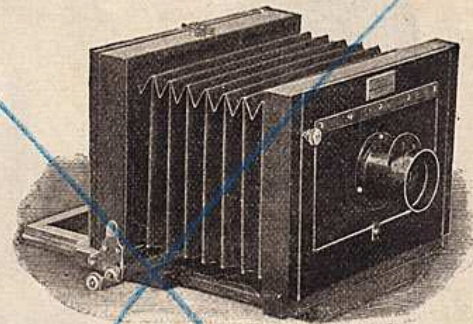
New Model Camera.

The NEW MODEL CAMERA is well known, it having been on the market for twelve years; and its popularity attests its merits.

It is very light and compact, making a desirable camera for a good but cheap outfit.

Price includes Single View Lens, Standard Folding Tripod, Carrying Case, and one Perfection Plate Holder (except 8 x 10, where neither lens nor tripod is included).

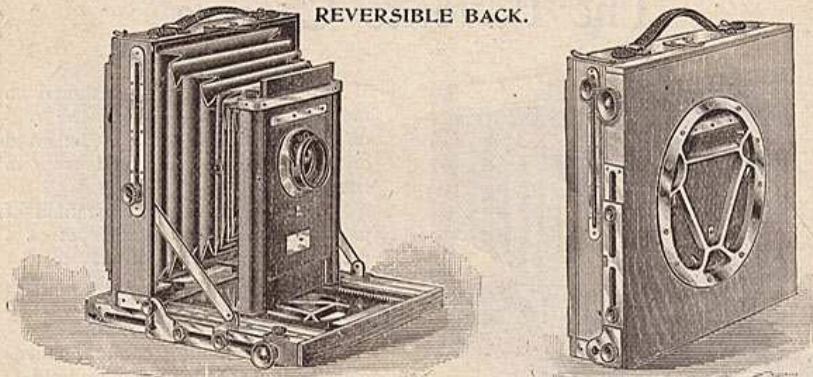
The carrying case will hold two extra plate holders.



Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.
3 1/2 x 4 1/2 in.	8 in.	1 1/2 lbs	\$10.00
4 x 5 "	9 "	1 3/4 "	8 10.00
4 1/2 x 6 1/2 "	10 "	2 "	11.00
5 x 7 "	11 1/2 "	2 1/2 "	12.00
5 x 8 "	12 1/2 "	2 3/4 "	12.00
6 1/2 x 8 1/2 "	14 "	3 1/2 "	15.00
8 x 10 "	16 "	5 "	12 14.00

The Carlton Camera.

REVERSIBLE BACK.



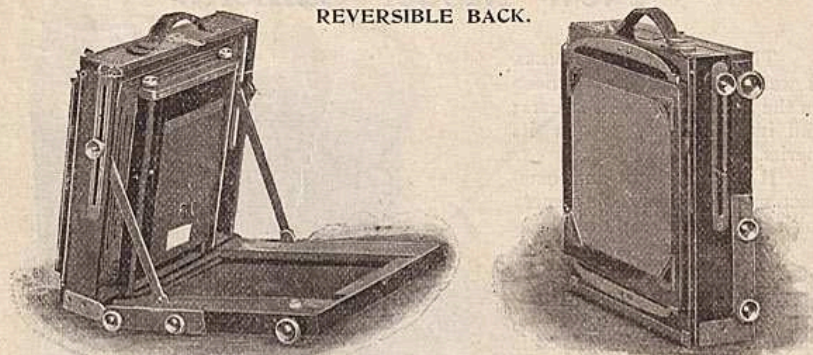
For the enthusiastic amateur and professional photographer who believes in having the very best of everything, the Carlton with its manifold features, adapting it to an almost infinite variety of work, will be found to fully meet their views.

The price includes one mahogany-Perfection Holder, with rubber slides, mahogany combination tripod and canvas case, but no lens.

Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.	Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.
4 x 5 in.	13 in.	2 1/2 lbs.	\$35.00	6 1/2 x 8 1/2 in.	20 1/2 in.	7 lbs.	\$45.00
4 1/2 x 6 1/2 "	15 1/2 "	4 "	36.00	8 x 10 "	24 "	9 1/2 "	50.00
5 x 7 "	17 "	4 1/2 "	40.00	10 x 12 "	26 1/2 "	12 1/2 "	55.00
5 x 8 "	19 "	5 "	42.00	11 x 14 "	30 1/2 "	15 1/2 "	62.00

The Universal Camera.

REVERSIBLE BACK.



PARTIALLY FOLDED.

FOLDED.

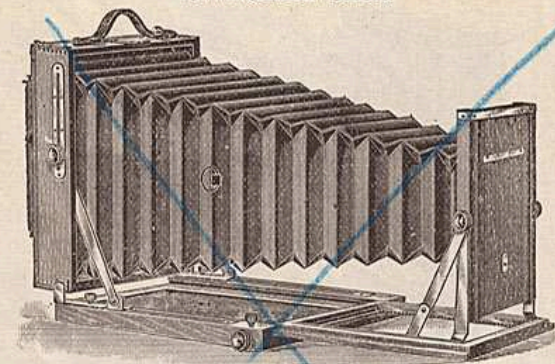
The UNIVERSAL is made with both single and double swing, has swinging front, and rising and falling front controlled by a spring acting in a ratchet, doing away with milled heads. The forward end of bellows is attached to the movable front and slides with it, thus avoiding a possibility of cutting off the rays of light.

Price includes canvas carrying case, one Perfection Holder, and combination tripod, but no lens. (With sizes above 11 x 14 English book-holder is supplied.)

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.	Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
4 x 5 in.	13 in.	2 1/2 lbs.	\$28.00	\$30.00	8 x 10 in.	24 in.	7 1/2 lbs.	\$40.00	\$43.00
4 1/2 x 6 1/2 "	15 1/2 "	3 1/2 "	30.00	32.00	10 x 12 "	26 1/2 "	10 1/2 "	45.00	48.00
5 x 7 "	17 "	3 1/2 "	33.00	35.00	11 x 14 "	30 1/2 "	13 1/2 "	50.00	55.00
5 x 8 "	19 "	4 1/2 "	35.00	37.00	14 x 17 "	36 "	21 1/2 "	64.00	70.00
6 1/2 x 8 1/2 "	20 1/2 "	5 1/2 "	38.00	40.00	17 x 20 "	43 "	34 "	75.00	85.00

The Monitor Camera.

REVERSIBLE BACK.



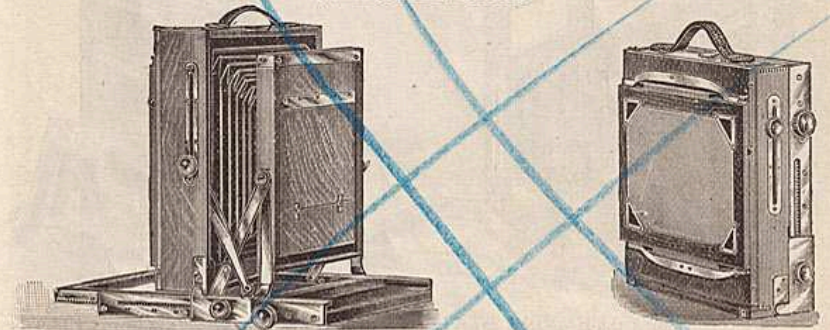
The MONITOR CAMERA is a new form of the compact-style of view camera, and is similar in general appearance to the Carlton and Universal.

Price includes canvas carrying case, one Perfection, Jr., Holder, and combination tripod, but no lens.

Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.
4 x 5 in.	13 in.	2 lbs.	\$24.00
5 x 7 "	17 "	3 1/2 "	27.00
5 x 8 "	19 "	4 1/2 "	30.00
6 1/2 x 8 1/2 "	20 1/2 "	4 3/4 "	33.00
8 x 10 "	24 "	6 1/2 "	36.00
10 x 12 "	26 1/2 "	9 1/2 "	40.00
11 x 14 "	30 1/2 "	12 "	45.00

The Kenwood Camera.

REVERSIBLE BACK.

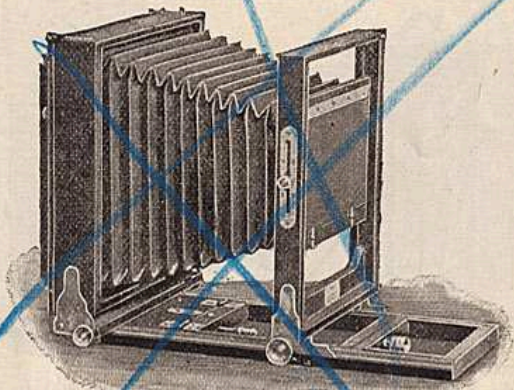


The KENWOOD CAMERA is another new form of the compact camera, its especial feature being the wide front for stereoscopic work.

Price includes canvas carrying case, one Perfection, Jr., Plate Holder, and combination tripod, but no lens.

Size of View.	Focal Capacity.	Weight of Camera.	Double Swing.
5 x 7 in.	17 in.	4 1/2 lbs.	\$30.00
5 x 8 "	19 "	5 1/2 "	33.00
6 1/2 x 8 1/2 "	20 1/2 "	6 "	36.00
8 x 10 "	24 "	8 1/2 "	40.00

The Ideal Camera. REVERSIBLE BACK.

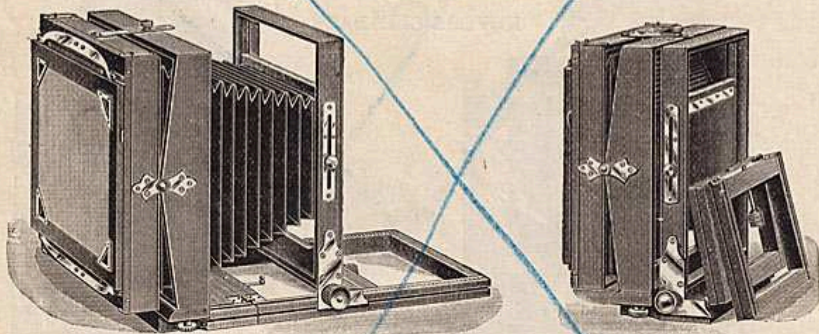


Taken in its entirety we can recommend the **IDEAL** to both the professional and amateur photographer.

Price includes one Perfection Plate Holder and canvas carrying case, but no lens or tripod. The carrying case will hold two extra plate holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
3 1/2 x 4 1/2 in.	9 1/2 in.	2 lbs.	\$17.00	\$19.00
4 x 5 "	10 "	2 1/2 "	18.00	20.00
4 1/2 x 6 1/2 "	11 1/2 "	3 "	20.00	22.00
5 x 7 "	13 1/2 "	4 1/2 "	22.00	24.00
5 x 8 "	14 1/2 "	4 3/4 "	24.00	26.00
6 1/2 x 8 1/2 "	14 3/4 "	5 1/2 "	26.00	28.00
8 x 10 "	21 1/2 "	8 "	36.00	33.00

Empire State Camera.

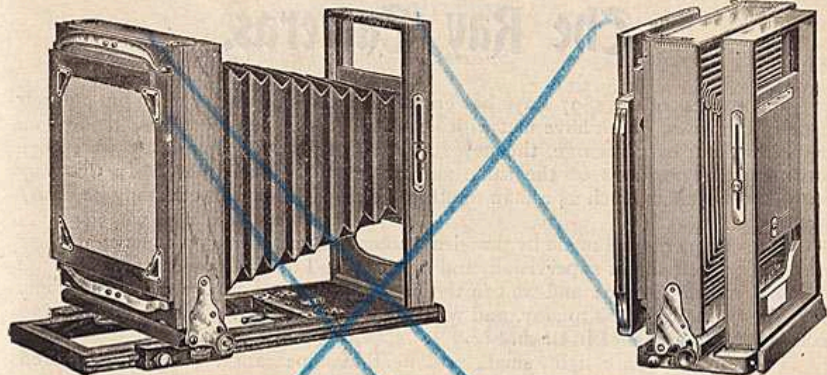


In recommending the **EMPIRE STATE** as a thoroughly practical camera in every particular, we feel that our claims will be even more than justified by an examination of the instrument itself, the price in no way conveying an idea of its merits.

Price includes canvas carrying case and one Perfection Holder, but no lens or tripod. The carrying case will hold two extra plate holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
5 x 7 in.	15 1/2 in.	5 lbs.	\$17.00	16
5 x 8 "	16 "	5 1/2 "	18.00	16
6 1/2 x 8 1/2 "	16 1/2 "	5 3/4 "	20.00	16
8 x 10 "	19 "	7 1/2 "	22.00	18
10 x 12 "	21 "	8 1/2 "	28.00	26
11 x 14 "	23 1/2 "	11 1/2 "	30.00	26
14 x 17	29	23 3/4		40
17 x 20	37	30		45
18 x 22	39	38		50
20 x 24	41	46		60

The Standard Camera. REVERSIBLE BACK.

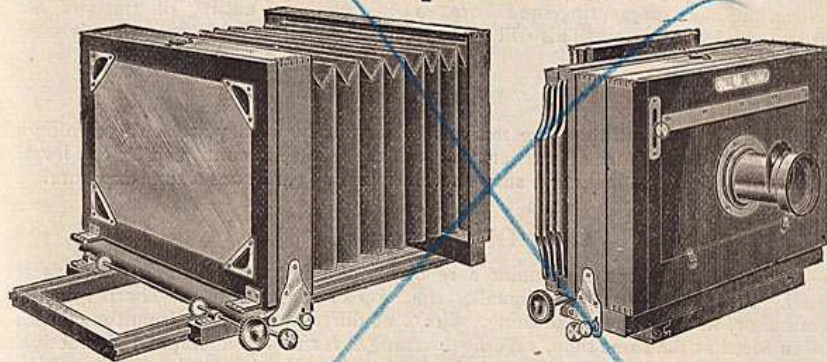


The **STANDARD CAMERA** is made on the same general style as the Empire State, though with back focus and without rack and pinion.

The price includes canvas carrying case and one Perfection Holder, but no lens or tripod. The carrying case will hold two extra plate holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
3 1/2 x 4 1/2 in.	9 1/2 in.	1 1/2 lbs.	\$10.00	\$12.00
4 x 5 "	10 1/2 "	2 "	10.00	12.00
4 1/2 x 6 1/2 "	12 "	2 1/2 "	12.00	14.00
5 x 7 "	13 "	3 1/2 "	12.00	14.00
5 x 8 "	13 1/2 "	3 3/4 "	14.00	16.00
6 1/2 x 8 1/2 "	14 1/2 "	4 1/2 "	16.00	18.00
8 x 10 "	16 1/2 "	5 1/2 "	18.00	20.00

New Model Improved Camera.



The **New Model Improved** is made after the general style of the New Model, and makes a very desirable instrument for those who want a good camera but do not care to invest in a high-priced outfit.

Price includes single view lens, Carlton Sliding Tripod, carrying case, and one Perfection Plate Holder (except 8 x 10, where neither lens nor tripod is included).

The carrying case will hold two extra plate holders.

Size of View.	Focal Capacity.	Weight of Camera.	Single Swing.	Double Swing.
3 1/2 x 4 1/2 in.	8 1/2 in.	1 1/2 lbs.	\$13.00	\$15.00
4 x 5 "	9 "	1 3/4 "	14.00	16.00
4 1/2 x 6 1/2 "	9 1/2 "	2 1/4 "	16.00	18.00
5 x 7 "	11 1/2 "	2 3/4 "	18.00	20.00
5 x 8 "	12 1/2 "	2 3/4 "	18.00	20.00
6 1/2 x 8 1/2 "	14 "	3 1/2 "	22.00	24.00
8 x 10 "	16 "	5 1/2 "	15.00	17.00

The Ray Cameras.

The success of the 1897 Rays has encouraged the manufacturers to put out new designs and sizes, which have met with instant success. On the newer models we supply, without extra charge, the new Ray Multiplying Attachment, by which one may take two positions of the same fighting subject upon the same plate. In this way many a weird effect, such as a man fighting a duel with himself, etc., may be easily produced.

These cameras are made by practical camera manufacturers, who have all their work under their direct supervision, and are prepared to give you cameras that are practical and up-to-date; and we can thoroughly guarantee all we claim for them. They are in the business to stay, and want their goods to advertise themselves and secure public confidence in them.

These cameras are light, small, and neat in appearance. They are covered with genuine leather and trimmed with polished and lacquered brass.

Lenses.

Only the most improved type of meniscus achromatic lenses are used in the construction of these cameras. They are accurately corrected, and cover the plate clearly to the corners of the plate, even in the 4 x 5 size.

Finder.

The finder is square, with the lens properly adjusted to throw the image in the centre of the ground glass; and the view in the finder is just a little less than that on the plate, preventing the failure, so often made, of cutting off parts of the picture you wish to get. This will be appreciated by those who have already used cameras.

Shutters.

The 1898 Ray shutters are marvels of simplicity. They are set by turning a milled head on the front of the camera; and the release is controlled by one lever, a downward pressure making a snap-shot, and two upward ones a time exposure.

Diaphragms.

In all designs but the Junior a revolving diaphragm with three openings is fitted. As is well known, the smaller the stop or diaphragm, the sharper is the picture, or, what is the same thing, objects at different distances from the camera are in focus at the same time. We have arranged for this in a simple and practical manner, which is fully described and explained in the instruction books which accompany each camera.

Plate Holder.

The new patent plate holders are one-fifth of an inch thick, the smallest, lightest, and most durable ever placed on the market. They each hold one plate with a separate rubber slide to each, thus preventing the failures continually made in magazine cameras, in which, if light reaches one plate, it injures the whole lot, causing great expense and annoyance. Owing to improved methods of manufacturing, they are able to furnish these plate holders at more reasonable prices than anything hitherto offered. Cut sheet films can also be used in these holders without any extra appliances.

Manipulation.

The manipulation of these cameras is the simplest of any, and can be learned at a glance, requiring very little instruction. The patent shutter has no complicated parts to get out of order, and is operated by a button to set it and one lever for either time or instantaneous exposures, which can be made at will by pressing the lever down for instantaneous and up for time. This has never before been accomplished in a photographic shutter.

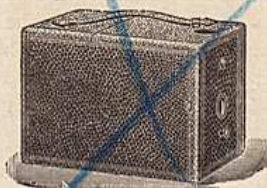
All catches, hinges, and similar parts are securely fastened, and guaranteed not to fall off or come loose.

Multiplying Attachment.



The latest photographic novelty. By means of this device it is possible to take two positions of the same subject on the same plate. With a little ingenuity, many interesting and ludicrous pictures may be taken. For instance, the same person seated at both sides of the same table, fighting a duel with himself, etc., together with hundreds of other possibilities. The best pictures are those in which the action of the one double is directed on the other position, for example, where one of the subjects is "holding up" the other or in conversation with the other.

The Ray, Jr., $2\frac{1}{2} \times 2\frac{1}{2}$.



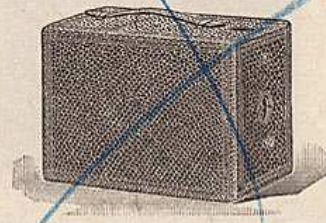
This camera was designed to meet the demand for something cheaper than the Ray, and still give a fair-sized picture with good results. The same care is taken in the selection of lenses and material as in the more expensive cameras. It has a single achromatic lens that covers the plate perfectly, has a round view finder, single diaphragm, and rotary shutter.

It is covered with seal grain leather, has leather handle, and a capacity of six plate holders, and measures but $5\frac{1}{4} \times 3\frac{3}{8} \times 3\frac{1}{4}$ inches, and weighs 7 ounces.

Price, including two plate holders,	\$2.50
Extra holders, . . . . .	.25
Ray, Jr., carrying case, for bicycle or shoulder,	1.00
Lloyd candle lamp, . . . . .	.25
Ruby lantern, No. 1, . . . . .	.80
Ruby lantern, No. 2,	1.00
Ray, Jr., printing frame, . . . . .	.25
Rayon paper, $2\frac{1}{2} \times 2\frac{1}{2}$, per dozen, . . . . .	.10
Rayon paper, $2\frac{1}{2} \times 2\frac{1}{2}$, per gross, . . . . .	.60
Rayon toning solution, 8-oz. bottle, . . . . .	.35
Lloyd combined toning and fixing powders, per box of 6, . . . . .	.25
Ray, Jr., dry plates, per dozen, . . . . .	.20
Lloyd developing powders, per box of 6, . . . . .	.25
Lloyd, Jr., developing trays (acid proof), . . . . .	.20
Ray, Jr., card mounts, per package of 25, . . . . .	.20
Ray, Jr., card mounts, per package of 100, . . . . .	.60

Lloyd, Jr., Developing Printing Outfit, complete, \$1.00

The Ray and Ray Special, $3\frac{1}{2} \times 3\frac{1}{2}$.



This is the most **complete** and **perfect** camera **ever offered** for the price. It makes a $3\frac{1}{2} \times 3\frac{1}{2}$ picture. Has a revolving diaphragm with three openings, brilliant square view finder (properly adjusted), Universal tripod socket, and a simple and practical Improved Patent Revolving Shutter.

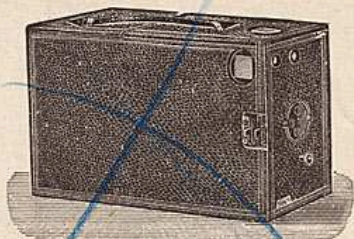
It is covered with genuine morocco grain leather, trimmed with polished and lacquered brass.

The Ray has a capacity of six plates, measures $6\frac{1}{2} \times 4\frac{1}{4} \times 4\frac{1}{4}$ inches, and weighs less than 14 ounces. The Ray Special carries double wooden holders.

Price, Ray, including two holders,	\$4.00
Price, Ray Special, including one double holder,	4.00
Extra holders, Ray, . . . . .	.35
Extra double holders, Ray Special,	1.00
Ray carrying case, for bicycle or shoulder,	1.25
Tripods, No. 1, sliding,	2.00
Tripods, No. 1, combination,	3.00
Lloyd candle lamp, cardboard, . . . . .	.25
Lloyd metal candle lamp, . . . . .	.50
Ruby lantern, No. 1, . . . . .	.80
Ruby lantern, No. 2,	1.00
Ray printing frame, . . . . .	.25
Rayon paper, $3\frac{1}{2} \times 3\frac{1}{2}$, per dozen, . . . . .	.10
Rayon paper, $3\frac{1}{2} \times 3\frac{1}{2}$, per gross, . . . . .	.75
Rayon toning solution, 8-oz. bottle, . . . . .	.35
Lloyd combined toning and fixing powders, per box of 6, . . . . .	.25
Ray dry plates, per dozen, . . . . .	.35
Lloyd developing powders, per box of 6, . . . . .	.25
Lloyd developing trays, acid proof, . . . . .	.28
Ray card mounts, per package of 25, . . . . .	.25
Ray card mounts, per package of 100, . . . . .	.85

Lloyd, Jr., Developing and Printing Outfit, \$1.00

The Ray B Camera, $3\frac{1}{4} \times 4\frac{1}{4}$,



WITH NEW MULTIPLYING ATTACHMENT.

The wonderful success with which the Ray cameras have met has induced the manufacturers to put on the market new styles, which we now illustrate for the first time. These new cameras are made in the same careful manner as the Ray and Ray, Jr.; and the thousands now in use, giving almost universal satisfaction, are the best recommendation that we can offer.

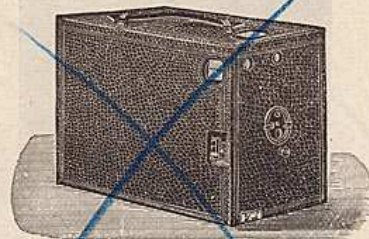
These cameras are as complete and perfect as it is possible to make a camera for this price.

The Ray B camera makes $3\frac{1}{4} \times 4\frac{1}{4}$ pictures; has revolving diaphragm with three openings, brilliant square view finder (accurately adjusted), universal tripod sockets, and the popular, simple improved Ray Shutter. These cameras are covered with genuine morocco grain leather, and trimmed with polished and lacquered brass.

The "RAY B" has a capacity for TWELVE PLATES, measures $7\frac{7}{8} \times 5\frac{3}{4} \times 4\frac{3}{8}$ inches, and weighs 23 ounces; RAY A, FOR SIX PLATES.

Price, Ray B, including twelve holders,	\$8.00
Price, Ray B, including two holders,	5.00
Price, Ray A, including two holders,	5.00
Extra holders, . . . . .	.35
Ray B carrying case, for bicycle or shoulder,	1.50
Ray A carrying case,	1.25
Tripods, No. 1, sliding,	2.00
Tripods, No. 1, combination,	3.00
Lloyd compact candle lamp, . . . . .	.25
Lloyd compact metal candle lamp, . . . . .	.50
Ruby lantern, No. 1, . . . . .	.80
Ruby lantern, No. 2,	1.00
Ray printing frame, . . . . .	.25
Rayon paper, $3\frac{1}{4} \times 4\frac{1}{4}$, per doz., . . . . .	.10
Rayon paper, $3\frac{1}{4} \times 4\frac{1}{4}$, per gross, . . . . .	.75
Rayon toning solution, 8-oz. bottles, . . . . .	.35
Lloyd combined toning and fixing powders, per box of 6, . . . . .	.25
Lloyd dry plates, per doz., . . . . .	.45
Lloyd developing powders, per box of 6, . . . . .	.25
Lloyd developing trays, acid proof, . . . . .	.28
Ray B card mounts, per package of 25, . . . . .	.28
Ray B card mounts, per package of 100,	1.00

The Ray C Camera, 4×5 ,

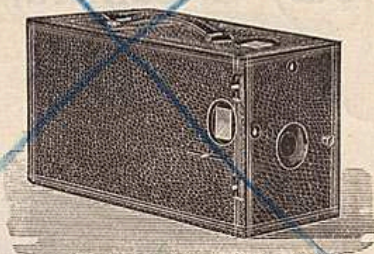


WITH NEW MULTIPLYING ATTACHMENT.

This camera is designed to meet the demand of those who wish to make a picture as large as possible with a fixed focus camera. It has a single achromatic lens with good covering capacity. A great deal of time has been spent perfecting this lens so that it will do the work in a proper manner. It has two square view finders (accurately adjusted), universal tripod sockets, and the popular, simple, improved Ray shutter. The Ray C has a capacity for three double wooden plate holders, 4×5 , with rubber slides.

Price, including one double plate holder,	\$5.00
Extra holders, each,	1.00
Carrying case for bicycle or shoulder,	2.00
Tripods, No. 1, sliding,	2.00
Tripods, No. 1, combination,	3.00
Lloyd compact candle lamp, . . . . .	.30
Compact metal folding lamp, . . . . .	.50
Ruby lantern, No. 1, . . . . .	.80
Ruby lantern, No. 2,	1.00
Ray printing frame, . . . . .	.25
Rayon paper, 4×5 , per doz., . . . . .	.12
Rayon paper, 4×5 , per gross,	1.00
Rayon toning solution, 8-oz. bottles, . . . . .	.35
Lloyd combined toning and fixing powders, per box of 6, . . . . .	.25
Ray dry plates, per doz., . . . . .	.65
Lloyd developing powders, per box of 6, . . . . .	.25
Lloyd developing trays, acid proof, . . . . .	.28
RAY C CARD mounts, per package of 25, . . . . .	.35
RAY C CARD mounts, per package of 100,	1.25

The Ray D Camera, 4 x 5.



This new camera has been added to the already large list of the well-known RAY cameras in order to meet the requirements of those wishing a good 4 x 5 focussing camera of the box pattern at a moderate price. It is especially fitted for those who are not suited by the compact folding cameras because of the necessary opening and shutting of those cameras before and after use.

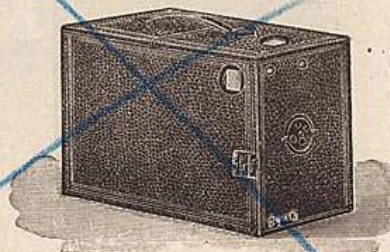
The RAY D is handsomely covered with fine seal grain leather throughout, is fitted with a fine, high-grade achromatic lens of good covering capacity, has two large and brilliant rectangular view finders, two tripod sockets, a focussing scale accurately marked for views from six feet to any distance, and has a door at the back to admit of focussing on the ground glass when desired.

The shutter is of the NEW RAY pattern, the simplest and nearest to perfection of any ever placed on a hand camera. It does not expose the plate in setting, can be easily regulated for different speeds of the instantaneous, and is so arranged that one lever operates both time and instantaneous exposures.

The RAY D camera is made to hold four double plate holders or roll holder.

Price, complete with one double holder,	\$8.00
Extra holders, each,	1.00
Carrying case for bicycle or shoulder,	2.00
Lloyd's single folding tripod,	1.00
Tripods, No. 1, sliding,	2.00
Tripods, No. 1, combination,	3.00
Lloyd compact candle lamp, . . . . .	.30
Lloyd compact metal candle lamp, . . . . .	.50
Ruby lantern, No. 1, . . . . .	.80
Ruby lantern, No. 2,	1.00
Ray printing frame, . . . . .	.25
Rayon paper, 4 x 5, per doz., . . . . .	.12
Rayon paper, 4 x 5, per gross,	1.00
Rayon toning solution, 8-oz. bottles, . . . . .	.35
Lloyd's combined toning and fixing powders, per box of 6, . . . . .	.25
Ray dry plates, 4 x 5, per doz., . . . . .	.65
Lloyd's developing powders, per box of 6, . . . . .	.25
Lloyd's developing trays, acid proof, . . . . .	.28
RAY D CARD mounts, per package of 25, . . . . .	.35
RAY D CARD mounts, per package of 100,	1.25

The Ray E Camera, 4 x 5,

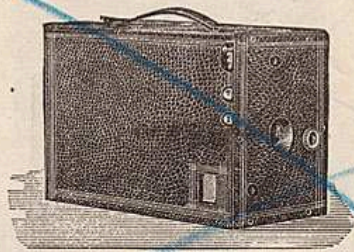


WITH NEW MULTIPLYING ATTACHMENT.

With the new thin metal plate holders the manufacturers of the Ray cameras have designed a 4 x 5 universal focus camera, having a capacity of twelve plates. It has single achromatic lens, fully covering the plate, two accurate view finders, universal tripod socket, and the popular Ray shutter. Every camera fitted with our simple duplicating device, by which many weird and curious effects may be produced.

Price, complete with twelve single plate holders,	\$10.00
Extra holders, . . . . .	.40
Carrying case,	2.00
Lloyd's single folding tripod,	1.00
Tripods, No. 1, sliding,	2.00
Tripods, No. 1, combination,	3.00
Lloyd compact metal candle lamp, . . . . .	.50
Ruby lantern, No. 1, . . . . .	.80
Ruby lantern, No. 2,	1.00
Ray printing frame, . . . . .	.25
Rayon paper, 4 x 5, per dozen, . . . . .	.12
Rayon paper, 4 x 5, per gross,	1.00
Rayon toning solution, 8-oz. bottles, . . . . .	.35
Lloyd's combined toning and fixing powders, . . . . .	.25
Ray dry plates, 4 x 5, . . . . .	.65
Lloyd's developing powders, per box of 6, . . . . .	.25
Lloyd developing trays, . . . . .	.28
Ray E card mounts, per package of 25, . . . . .	.35
Ray E card mounts, per package of 100,	1.25

GEM POCO CAMERAS.

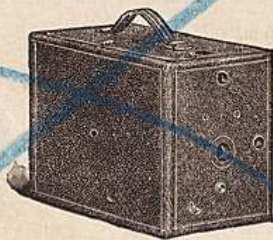


4 x 5.

Made in two sizes, 4 x 5 and 3 1/4 x 4 1/4. Has fixed focus lens, time and instantaneous Rochester shutter, and two brilliant view finders. Covered with fine morocco grain leather, has leather handle and two tripod plates. Capacity is three holders.

	PRICE.	3 1/4 x 4 1/4	4 x 5
Camera, complete, with one dry plate holder,		\$4.00	\$5.00
Double dry plate holders,		.75	.75
Gem leather carrying case with shoulder strap,		1.25	1.40
Size,		4 1/4 x 5 x 7	5 1/4 x 6 1/4 x 8
Weight,		1 lb.	1 1/2 lbs.

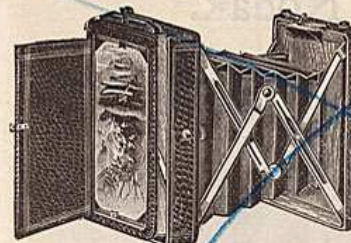
PREMO V CAMERAS.



This camera is carefully made, is covered with morocco grain leather, has two brilliant view finders, will hold three Perfection dry plate holders, has new safety shutter. Made in 3 1/4 x 4 1/4 and 4 x 5 sizes.

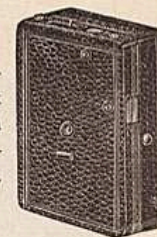
	PRICE.	3 1/4 x 4 1/4 or 4 x 5
Premo V, single achromatic lens, and one dry plate holder,		\$5.00
Perfection dry plate holders, each,		1.00
Premo V leather carrying case and straps,		1.25
Developing and printing outfit,		1.50

Monroe Cameras.



Pocket Cameras.

These little cameras collapse into so small a space that they may be easily carried in the pocket. Have fine achromatic lenses and new shutter. Covered with fine leather.



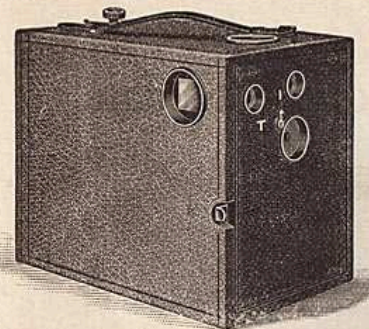
	PRICE LIST.	
No. 1. Vest pocket, 2 x 2 1/2,		\$5.00
No. 1. Metal plate holders,		.50
No. 2. Coat pocket, 3 1/4 x 3 1/4,		7.50
No. 2. Metal plate holders,		1.00
No. 3. Tourist, 3 1/4 x 4 1/4 (aluminum),		10.00
No. 3. Metal plate holders,		1.00

Folding Cameras.

	PRICE LIST.	4 x 5	5 x 7
No. 4. Royal camera,		\$10.00	\$25.00
No. 5. Monroe camera,		18.00	32.00
No. 6. Monroe camera,		25.00	37.00
No. 7. Long-focus camera,		30.00	47.00
Plate holders,		1.00	1.25
Combination cases, holding camera and five plate holders,		3.00	4.00

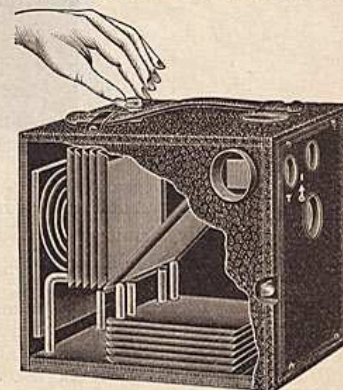
Cyclone Magazine Cameras.

These cameras hold twelve plates at one loading, which drop into place one by one by operating a button on the top. The plates may be exposed with great rapidity, it being possible to expose the twelve plates in as many seconds. The lens is a Universal, fixed focus, achromatic combination, which, for depth of focus and sharpness of definition, cannot be excelled. The

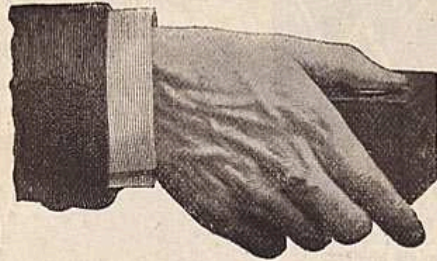


shutter is always set, there are no levers to turn: merely touching the button does the work. Made in three sizes, neatly covered with morocco leather. Price includes 12 holders.

No. 1. 2 1/4 x 2 1/4,	\$3.50
No. 2. 3 1/4 x 4 1/4,	6.00
No. 3. 4 x 5,	10.00



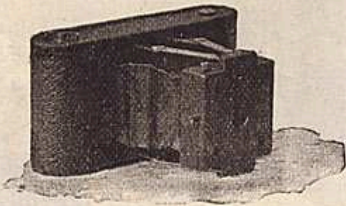
The Pocket Kodak.



Measures $2\frac{1}{2} \times 2\frac{7}{8} \times 3\frac{3}{8}$ inches, makes a picture $1\frac{1}{2} \times 2$ inches, and weighs only 6 ounces.

Pocket Kodak covered with fine leather, with roll of film for 12 exposures,	\$5.00
Leather hand carrying case (for Pocket Kodak and three extra spools of film). Price of case only,	.75
Leather bicycle carrying case (for Pocket Kodak and three extra spools of film). Price of case only,	1.00
Russet leather cases,	1.00
Film cartridge, 12 exposures,	.25
Complete A B C developing and printing outfit,	1.50
Plate holders,	.25

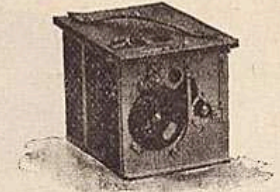
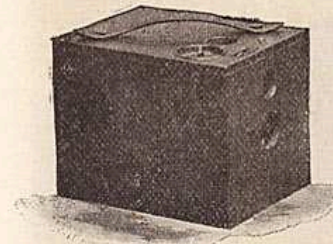
The Folding Pocket Kodak.



Oblong, with rounded ends. Is but one and one-half inches thick when closed, and can be easily carried in the pocket. Has new self-setting shutter, and is made of aluminum, thus combining strength with lightness. Loads in daylight.

Folding Pocket Kodak, with achromatic lens, not loaded,	\$10.00
Light proof film cartridge, 12 exposures, $2\frac{1}{2} \times 3\frac{1}{4}$,	.40
Black sole leather carrying case and strap,	1.25
Complete A B C developing and printing outfit,	1.50

Improved No. 2 Bull's-eye.

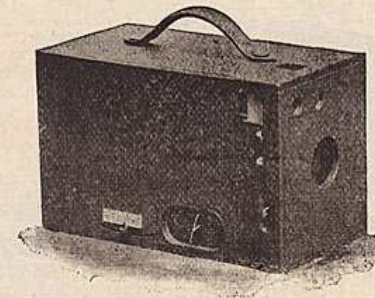


SHOWING BULL'S EYE SHUTTER.

For square pictures, $3\frac{1}{2} \times 3\frac{1}{2}$ inches; capacity, eighteen exposures without reloading; size of camera, $4\frac{1}{2} \times 4\frac{1}{2} \times 5\frac{1}{2}$ inches = 116 cubic inches; weight, 18 ounces; length of focus of lens, $4\frac{1}{2}$ inches.

No. 2 Bull's-eye, fitted with achromatic lens (not loaded),	\$8.00
Light-proof film cartridge, twelve exposures, $3\frac{1}{2} \times 3\frac{1}{2}$,	.60
Light-proof film cartridge, eighteen exposures, $3\frac{1}{2} \times 3\frac{1}{2}$,	.90
Black sole leather carrying case,	1.25
Complete A B C developing and printing outfit,	1.50

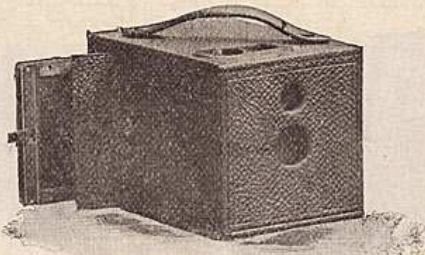
Improved No. 4 Bull's-eye.



For rectangular pictures, 4×5 inches; capacity, twelve exposures without reloading; size of camera, $4\frac{1}{2} \times 5\frac{1}{2} \times 9\frac{1}{2}$ inches = 265 cubic inches; weight, 2 pounds, 2 ounces; length of focus of lens, $6\frac{1}{2}$ inches.

No. 4 Bull's-eye, fitted with achromatic lens (not loaded),	\$12.00
Light-proof film cartridge, twelve exposures, 4×5 ,	.90
Black sole leather carrying case,	2.00
Complete A B C developing and printing outfit,	1.50

Improved No. 2 Bullet.

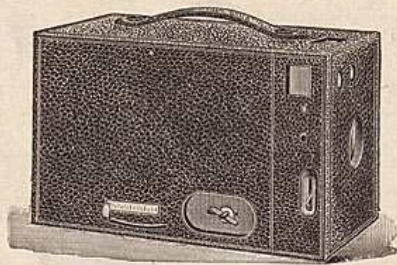


For Film and Plates.

For square pictures, $3\frac{1}{2} \times 3\frac{1}{2}$ inches; capacity, eighteen exposures without reloading; size of camera, $4\frac{1}{2} \times 4\frac{1}{2} \times 6$ inches = 121 cubic inches; weight, 20 ounces; length of focus of lens, $4\frac{1}{2}$ inches.

No. 2 Bullet, fitted with achromatic lens (not loaded),	\$10.00
Light-proof film cartridge, twelve exposures, $3\frac{1}{2} \times 3\frac{1}{2}$ inches,	.60
Light-proof film cartridge, eighteen exposures, $3\frac{1}{2} \times 3\frac{1}{2}$ inches,	.90
Single plate holders ($3\frac{1}{2} \times 3\frac{1}{2}$ inches), each,	.60
Glass plates ($3\frac{1}{2} \times 3\frac{1}{2}$ inches), per dozen,	.35
Black sole leather carrying case,	1.25
Complete A B C developing and printing outfit,	1.50

No. 4 Bullet.



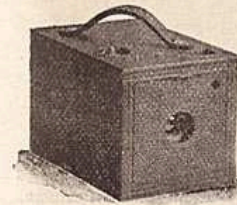
For Film and Plates.

For rectangular pictures, 4×5 inches; capacity, twelve exposures without reloading; size of camera, $4\frac{7}{8} \times 5\frac{7}{8} \times 9\frac{1}{4}$ inches = 265 cubic inches; weight, 2 pounds, 2 ounces; length of focus of lens, $6\frac{1}{4}$ inches.

No. 4 Bullet, fitted with achromatic lens (not loaded),	\$15.00
Light-proof film cartridge, twelve exposures, 4×5 in hes,	.90
Single plate holders (4×5 inches), each,	.75
Glass plates, 4×5 inches, per dozen,	.65
Black sole leather carrying case,	2.00
Complete A B C developing and printing outfit,	1.50

No. 2 Bull's-eye Special.

For square pictures, $3\frac{1}{2} \times 3\frac{1}{2}$ inches; capacity, 12 exposures without reloading; size of camera, $4\frac{3}{4} \times 4\frac{3}{4} \times 6\frac{3}{4}$ inches; weight, 22 ounces; length of focus of lens, 5 inches.



This instrument combines the extreme simplicity of the cartridge system, as exemplified in the No. 2 Bull's-eye, with a shutter and fixed focus double lens of the finest quality.

The shutter is, in fact, the Eastman pneumatic shutter which is furnished with the No. 4 Cartridge Kodak, but arranged to work with a finger release instead of with a bulb. It has three speeds for instantaneous exposures, and is fitted with iris diaphragm stops graduated for Nos. 8, 16, 32, and 64. The shutter is set and operated without opening the front except to change stops or change action from time to instantaneous or *vice versa*.

This Kodak has square finder, socket for tripod screw, is covered with fine black morocco and beautifully finished.

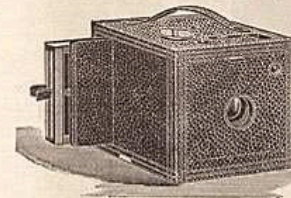


No. 2 Bull's-eye Special, showing shutter.

No. 2 Bull's-eye Special, with rapid rectilinear lens and Eastman shutter, with iris diaphragm stops, not loaded,	\$15.00
Light-proof film cartridge, 12 exposures, $3\frac{1}{2} \times 3\frac{1}{2}$,	.60
Light-proof film cartridge, 18 exposures, $3\frac{1}{2} \times 3\frac{1}{2}$,	.90
Black sole leather carrying case,	1.25
Complete Bull's-eye developing and printing outfit,	1.00

No. 2 Bullet Special, Film or Plates.

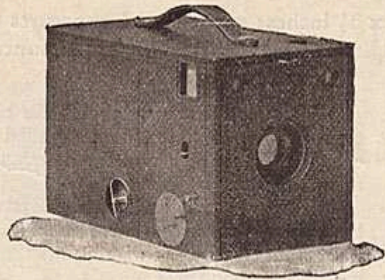
For square pictures, $3\frac{1}{2} \times 3\frac{1}{2}$ inches; capacity, 12 exposures without reloading; size of camera, $4\frac{3}{4} \times 4\frac{3}{4} \times 7\frac{1}{2}$ inches; weight, 35 ounces; length of focus of lens, 5 inches.



The Bullet Special bears the same relation to the Bull's-eye Special as the regular Bullets do to the Bull's-eyes. It is fitted with a double rapid rectilinear lens of fixed focus, and the regular Cartridge Kodak shutter. It loads in daylight, taking the ordinary $3\frac{1}{2}$ -inch spool, and may be easily adapted to plates. Unlike the original No. 2 Bullet, it takes *double* holders in place of the regulation single holders. Has square finder and socket for tripod screw.

No. 2 Bullet Special Kodak, lens, Eastman shutter, not loaded,	\$18.00	Ladies' buff leather hand carrying case, with name plate,	\$2.00
Light-proof cartridge, 12 exposures,	.60	Double glass plate holders, $3\frac{1}{2} \times 3\frac{1}{2}$, for No. 2 Bullet Special,	1.00
Black sole leather case,	1.25	Leather case for three double plate holders,	.75
Bicycle carrying case, style A,	2.00	Leather cases for six double plate holders,	1.00
Washers for holding case in front of brake rod, per set,	.50	Complete Bull's-eye developing and printing outfit,	1.00
Detachable lamp bracket,	.25		
Bicycle carrying case, style B,	1.50		

No. 4 Bull's-eye Special.



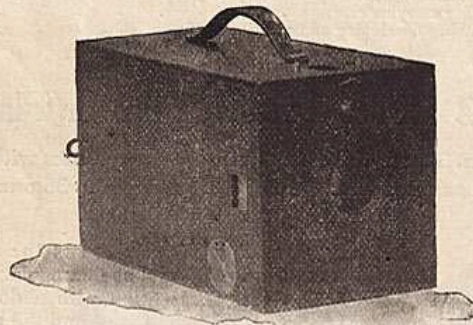
For rectangular pictures 4 x 5 inches; capacity, 12 exposures without reloading; size of camera, $5 \times 5\frac{1}{2} \times 8\frac{1}{2}$ = 257 cubic inches; weight, 2 pounds 9 ounces; length of focus of lens, $6\frac{1}{2}$ inches.

This instrument is fitted with the regular Eastman Cartridge Kodak lens and shutter, with accurate focussing scale. It has three speeds for instantaneous exposures, time and bulb releases. Has two tripod screws and two carefully corrected finders. Covered with fine morocco, nickelled fittings.

PRICE.

No. 4 Bull's-eye Special Kodak, Eastman lens and shutter (not loaded),	\$20.00
Light proof film cartridge,	.90
Black sole leather carrying case,	2.00
Complete A B C developing and printing outfit,	1.50

No. 4 Bullet Special.



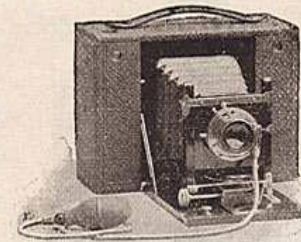
For rectangular pictures 4 x 5; capacity, 12 exposures without reloading; size of camera, $5\frac{1}{2} \times 6\frac{1}{2} \times 10\frac{1}{2}$ inches = 373 cubic inches; weight, including roll holder, 3 pounds 9 ounces; length of focus of lens, $6\frac{1}{2}$ inches.

No. 4 Bullet Special differs from the other Bull's-eyes and Bullets in that it is fitted with a 4 x 5 cartridge roll holder, with dark slide, thus making it possible to focus while using film, and to use interchangeably either films or plates.

PRICE.

No. 4 Bullet Special Kodak, for film or plates, including cartridge roll holder, one double plate holder, and Eastman lens and shutter, not loaded,	\$25.00
Same without roll holder,	20.00
Cartridge roll holder, not loaded,	5.00
Light proof film cartridge,	.90
Double plate holders, 4 x 5,	1.00
Black sole leather carrying case,	2.25
Complete A B C developing and printing outfit,	1.50

The No. 4 Cartridge Kodak.



CARTRIDGE KODAK, OPEN.

For Film and Plates.

For rectangular pictures, 4 x 5 inches; capacity, 12 exposures without reloading; size of camera, $3\frac{1}{4} \times 6\frac{3}{4} \times 8\frac{1}{2}$ inches = 167 cubic inches; weight, loaded, 2 pounds, 12 ounces; length of focus of lens, $6\frac{1}{2}$ inches.

In the Cartridge Kodak the makers have adapted the "Film Cartridge System" to a folding kodak of the finest quality and greatest capabilities. It is hardly more than half the thickness of other cameras which are adapted to both film and plates, and is the only folding camera having the daylight loading feature. The makers never place a camera upon the market until they have thoroughly tested its actual working qualities under all conditions, and the finished product is always an improvement over the first model; but in their years of experience in camera making no instrument which they have introduced has been so carefully planned, so severely tested, or has been the subject of so much thought and experiment as the Cartridge Kodak. The result is an instrument which is the embodiment of photographic perfection.

The Cartridge Kodak uses either daylight loading film cartridges or glass plates, is fitted with carefully tested rapid rectilinear lenses and pneumatic release shutter fitted with Iris Diaphragm stops. This shutter has three speeds for instantaneous exposures. It makes short time exposures by one pressure of the bulb, the shutter closing when the bulb is released, and makes longer time exposures by pressing the bulb once to open the shutter and again to close it. It may be operated by the finger trigger instead of the bulb when so desired.

The Cartridge Kodak is provided with a rising, sliding, and falling front, two view finders, one for vertical and one for horizontal exposures, two sockets for tripod screws, and is equally perfect as a hand or as a tripod camera. It has an index for focusing, and when used with plates may be focused on the ground glass if desired.

When used with film there are no projecting parts, no attachments to become lost, no extras to be mislaid. The plate adapter is simple and compact, and can be put in place or removed in five seconds.

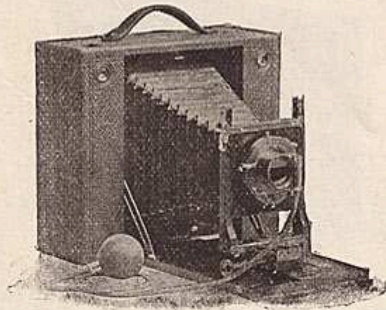
Strength and reliability have not been sacrificed to mere lightness, nor efficiency to compactness. The finish is rich and beautiful. When closed for carrying it is inconspicuous, there being no metal parts in sight, even the key, which is in the bottom of the camera, being recessed and entirely hidden from view. When open for use it exposes to view a bed and front board of highly polished mahogany with buffed brass fittings, set off in brilliant contrast by the highly polished nickel shutter. In short, it has, in a superlative degree, that rich and dainty finish which characterizes all these goods.



CARTRIDGE KODAK, CLOSED.

No. 4 Cartridge Kodak, with rapid rectilinear lens and pneumatic shutter,	\$25.00
Light-proof film cartridge, 12 exposures, 5 x 4 inches,	.90
Plate adapter, with focussing glass,	2.50
Plate holders,	1.00
Sole leather case,	2.00

The No. 5 Cartridge Kodak.



For Film and Plates.

For rectangular pictures, 5 x 7; capacity, 12 exposures without reloading; size of camera, 3 $\frac{1}{4}$ x 8 $\frac{1}{2}$ x 10 $\frac{1}{8}$ inches || 280 cubic inches; weight, 3 pounds, 15 ounces; length of focus of lens, 8 $\frac{1}{2}$ inches.

Except in size, the 5 x 7 Cartridge Kodak differs but little from the 4 x 5. It is hardly more than half the thickness of other cameras which are adapted to both films and plates, and is the only 5 x 7 folding camera having the daylight loading feature.

The Cartridge Kodak uses either our daylight loading film cartridges or glass plates, is fitted with carefully tested rapid rectilinear lens and the Eastman pneumatic release shutter fitted with iris diaphragm stops. Gives three instantaneous speeds, besides bulb and time release. Finger release is also furnished.

This camera has rising, sliding, and falling front, Eastman's patent non-collapsible bellows, two view finders, one for vertical and one for horizontal exposures, and is equally perfect as a hand or as a tripod camera. It has index for focussing, and when used for plates may be focussed on the ground glass, if desired.

The No. 5 Cartridge Kodak may easily be adapted to the wheel, either on the bicycle head or between the frame.

PRICE LIST.

No. 5 Cartridge Kodak, not loaded,	\$35.00
Film cartridge, 12 exposures, 5 x 7,	1.60
Black sole leather carrying case,	2.50
Bicycle case for No. 5 Cartridge Kodak,	3.25
Washer, to hold case in front of brake rod, per set, . . . . .	.50
Adjustable lamp bracket, . . . . .	.25
Glass plate adapter, with ground glass,	3.00
Double plate holders, 5 x 7, each,	1.25
Black sole leather carrying case, for 3 plate holders,	1.50
Eastman's special 5 x 7 developing outfit,	2.00

Cartridge Kodak Bicycle Case.

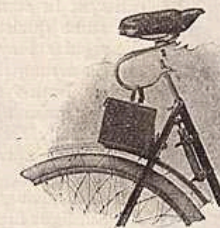


This case is strongly made, of wood, covered with fine grain leather and lined with cloth, and is fitted with springs on the inside, which take up the vibration of the wheel and prevent injury to the camera. By means of two simple thumb screws, which securely grasp the tubing, the case may be attached to the head of the machine or suspended from the top bar, inside the frame. Being but 3 $\frac{1}{4}$ inches in thickness, it in no wise inconveniences the rider when carried in the latter position, and stands but little chance of injury in case of a fall. The clamps can be attached to any side of the case (except, of course, the door); and in using it on the bicycle head the door may be at the top, at either side, or directly in front, in which latter position the case presents almost no "wind resistance." There being no play at the points of contact with the machine, it will not wear the enamel.

Outside measurements, 3 $\frac{1}{4}$ x 7 $\frac{1}{4}$ x 8 $\frac{1}{2}$ inches.

No. 4 Cartridge Kodak bicycle case,	\$2 50
Washers for holding case in front of brake rod, . . . . .	.50
Detachable lamp bracket, . . . . .	.25

Style B Case, for Bullets, Bull's-eyes, and Falcons.

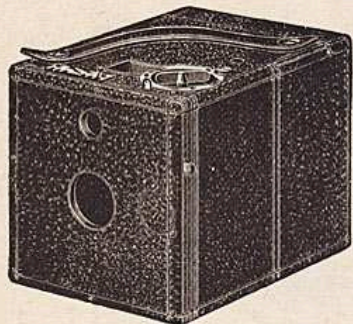


This case is designed to attach to the rear forks immediately under the saddle, and is especially adapted to use on a lady's wheel or on any wheel having mud-guards. It is provided with three straps, two of which attach to the rear forks, the third passing through the saddle spring proper or through the U spring, where one is used as shown in the illustration. It is made of the best black sole leather, and is easily accessible, a single strong clasp securing the flap in position. It makes a safe and convenient carrier for the camera.

Price, No. 2 Bullet, Bull's-eye, and Falcon bicycle carrying case, style B, \$1.50

NOTE.—This case is impracticable for very short riders, as it requires a space of 6 to 7 inches between the mud-guard and the saddle spring.

The Hawk-eye, Jr., $3\frac{1}{2} \times 3\frac{1}{2}$.



A camera so constructed that either roll film or glass plates can be used interchangeably, without any attachment other than a plate holder.

The lens is a single achromatic, set focus, very rapid, and capable of doing good work indoors as well as in the open air. The latest improvement for a shutter allows time exposures to be made without danger of jarring the camera, which is a difficulty experienced when undertaking to make such exposures with a majority of small cameras.

When making snap shots the speed can be regulated, which will properly time the negative, even though the light be very weak. The device

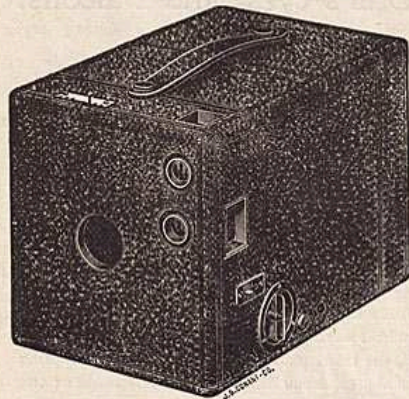
for indicating exposures never fails, and the automatic tally always shows at a glance the number of pictures taken. An extra brilliant square finder reflects the object very distinctly, and centres the view accurately upon the surface of the film or plate.

The covering of the box is of the best grain leather, and everything pertaining to the camera is simple and easy to operate.

PRICE LIST.

The Hawk-eye, Jr., covered with black grain leather,	\$8.00
Double holder, for dry plates, . . . . .	.75
Leather case, with strap,	1.50
Developing outfit,	1.00
Printing outfit,	1.00
Sunlight film, 12 exposures, . . . . .	.60

The 4 x 5 Hawk-eye, Jr.



The design of this camera is similar to that of the smaller Hawk-eye, Jr., although different in some respects. The lens is of the same quality as that we have used in the regular Hawk-eye for a number of years, and is arranged with a focussing lever and scale. Both vertical and horizontal finders, interior ground-glass screen, automatic registering tally showing number of exposures made, and a tripod plate for time work are provided.

This camera, like the smaller sizes, uses the Sunlight film, and can be loaded and unloaded in broad daylight without the least danger of destroying the material.

The advantage of using either film or glass plates must be considered, as it is often the case that one or two exposures are required for immediate development, and by

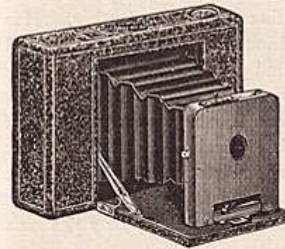
using the holder with plates the expense of an entire roll of film is saved.

PRICE LIST.

The 4 x 5 Hawk-eye, Jr., covered with black grain leather,	\$15 00	Developing outfit,	\$1.25
Double holder, for dry plates,	1.00	Printing outfit,	1.25
Leather case, with strap,	2.50	Sunlight film, 12 exposures, . . . . .	.85

The Tourist Hawk-eye.

3 1-2 x 3 1-2
Dimensions, $1\frac{1}{2} \times 4\frac{1}{2} \times 6\frac{1}{2}$.
Size of photo, $3\frac{1}{2} \times 3\frac{1}{2}$ inches.
Weight, 15 ounces.
Capacity, 12 exposures.



4 x 5
Dimensions, $2 \times 5\frac{1}{2} \times 8\frac{1}{2}$.
Size of photo, 4×5 inches.
Weight, 20 ounces.
Capacity, 12 exposures.

In constructing this Hawk-eye, the manufacturers have aimed to produce a camera making a picture of good size, and still of dimensions that will permit carrying in the pocket. The lens used is an achromatic, set focus, and guaranteed to cover the field under any conditions. The shutter is a simple, reliable piece of mechanism, so constructed that any amount of jarring will not affect its working qualities; can be regulated for different speed, which is the means of obtaining properly timed negatives under varying conditions, and also has a time device allowing any length of exposure required. A set of three stops is also provided, and the finder is extra brilliant, showing the object very plainly.

The new device for measuring film makes it impossible for mistakes to occur, and the registering tally always shows the exact number of exposures made.

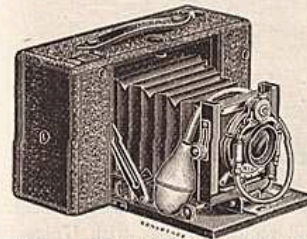
The covering is of the finest morocco grain leather, and the workmanship throughout is of the very best.

We recommend this camera for the cyclist, as it can be carried safely on the frame, the same as an ordinary tool bag. It will also be found a convenient outfit for the traveller, as it loads in daylight, is very compact, and never gets out of adjustment.

PRICE LIST.

	3 1-2 x 3 1-2	4 x 5
The Tourist Hawk-eye, not loaded,	\$9.00	\$15.00
Special Sunlight film, 12 exposures, . . . . .	.60	.85
Leather carrying case,	1.50	2.00
Developing outfit,	1.00	1.25
Printing outfit,	1.00	1.25
Plate attachment,		2.50
Extra dry plate holders,		1.00

The Special Tourist Hawk-eye.



Dimensions, $3 \times 5\frac{1}{2} \times 8\frac{1}{2}$ inches; size of photo, 4×5 inches; weight, 2½ pounds; capacity, 12 exposures.

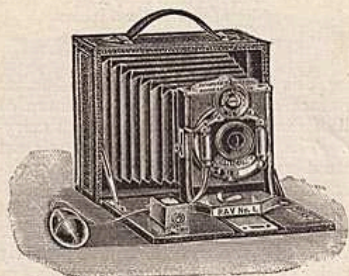
This camera is daylight loading with cartridge film, 4×5 , and is easily adapted for use with plates. It has removable front board, to which is attached a high-grade double rapid rectilinear lens, suitable for all general work, and the latest Unicum shutter, which works automatically from one to one-hundredth part of one second. Iris diaphragm, time and bulb exposures, are also included. There are two tripods, one for horizontal and one for vertical exposures, rack and pinion for fine focussing, rising and falling front, and both horizontal and vertical finders. The back of the camera is removable, and may be replaced with extra fitting by a plate back; for use with dry plate holders. Wood parts of mahogany, finished with lacquered brass, and covered with fine grain morocco. Dimensions, $3 \times 5\frac{1}{2} \times 8\frac{1}{2}$ inches; weight, 2½ pounds.

PRICE LIST.

The Special Tourist Hawk-eye,	\$25.00
The Special Tourist Hawk-eye, no lens,	15.00
Special Sunlight film, 12 exposures, 4×5, . . . . .	.85
Leather carrying case, with strap,	2.00
Plate attachment, with one double holder,	2.50
Extra holders, for dry plates,	1.00
Developing outfit,	1.25
Printing outfit,	1.25

Ray Cycle Cameras.

RAY, No. 1.



A light, compact folding camera, specially adapted for wheelmen and tourists. Made of polished mahogany, finished with lacquered brass, and covered with fine seal grain leather. Has reversible finder and focussing scale for six feet and upwards. The ground glass frame makes the back of the camera, and recedes for plate holder. The lens is single achromatic, one of the products of the Bausch & Lomb Optical Co.; and the shutter is the Unicum with iris diaphragms and automatic releases from 1-100 second to one second. Price

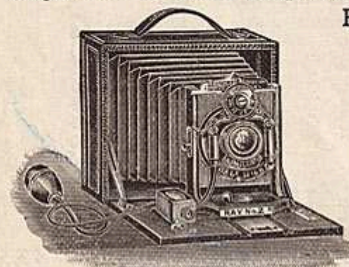
includes carrying case for carrying case and five holders, or roll holder. 5 x 7 has rack and pinion.

4 x 5, closed, 6 x 5½ x 2½ inches, 1¾ lbs.
5 x 7, " 8½ x 6½ x 2½ " 2½ "

	PRICE.	4 x 5	5 x 7
Ray Camera, No. 1, Unicum shutter, lens, case, and one double plate holder,	\$15.00	\$22.50	
Extra holders,	1.00	1.25	

Ray, No. 1, with Rapid Rectilinear Lens, \$16.00

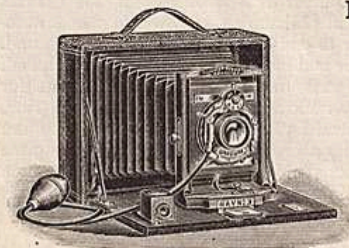
RAY, No. 2.



The No. 2 Ray is fitted with a rectilinear lens in place of the achromatic of the No. 1. It has Unicum shutter, with pneumatic release, spring-actuated ground glass, reversing finder. The price includes the case, which will hold, in addition to the camera, five extra holders or a cartridge roll holder, by means of which the camera may be loaded with cartridge films in daylight.

	PRICE.	4 x 5	5 x 7
Camera, with Unicum shutter, rapid rectilinear lens, case, and one plate holder,	\$20.00	\$27.50	
Extra holders,	1.00	1.25	

RAY, No. 3.



In this design, all cameras are fitted with rack and pinion focussing attachment, rising and sliding fronts, in addition to the regular equipment. It has a fine rapid rectilinear lens, with Unicum shutter, receding ground glass, and reversible finder. Carrying case included. Takes either plate holders or cartridge roll holders for daylight loading films.

4 x 5, 6 x 5½ x 2½ inches, 2 lbs.
5 x 7, 8½ x 6½ x 2½ " 2½ "

	PRICE.	4 x 5	5 x 7
Camera, Unicum shutter, rapid rectilinear lens, case, and one plate holder,	\$25.00	\$30.00	
Extra holders,	1.00	1.25	

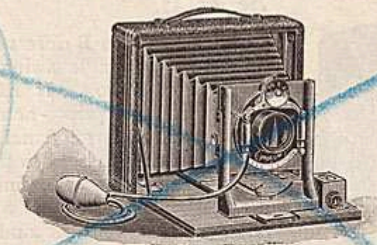
Folding Gem Poco.



A fixed focus folding camera, taking a 4 x 5 picture, and collapsing into space 6 x 5½ x 1½ inches. It has spring-actuated ground glass, two tripod plates, and the Poco reversible finder and level. The shutter is the Rochester safety with speed regulator, fitted to a fine fixed focus 4 x 5 lens. A carrying case, with capacity for camera, and three holders or roll holder, is furnished with each camera.

PRICE.	Size, 4 x 5
Camera complete, with one plate holder and case,	\$7.00
Double dry plate holders, . . . . .	.75
Cartridge system roll holder,	5.00

Folding Gem, Rapid Rectilinear Lens.

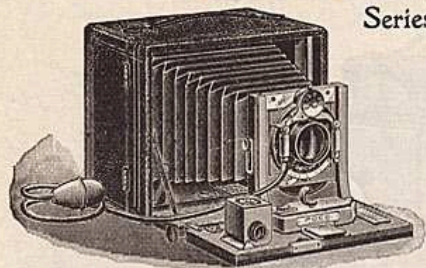


This Gem Poco is the same as the original Folding Gem, but has double lens with focussing scale in place of the regular achromatic lens. Unicum shutter is supplied, also spring-actuated ground glass, two tripod plates, and Poco reversible view finder and level combined. A sole leather carrying case, which carries the camera and four double dry plate holders or roll holder, is included with the camera.

PRICE.	Size, 4 x 5
Camera, complete with shutter, lens, one double dry plate holder and carrying case,	\$16.00
Double dry plate holders, . . . . .	.75
Cartridge system roll holder,	5.00

Poco Folding Cameras.

Series A.



Poco A is fitted, as ordered, with either the popular Unicum shutter or the more elaborate Bausch & Lomb Optical Company's diaphragm shutter, with the Rochester symmetrical lens. It has rising and sliding front for adjusting sky and foreground, and two tripod plates for horizontal or vertical views. A double swing back, pivoted at the centre, which is optically correct, and the Poco reversible view

finder and level are also supplied.

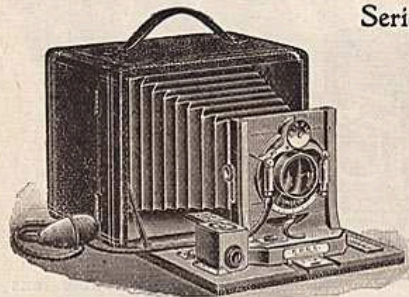
Poco A has a capacity of four double holders or roll holder, which may be loaded with cartridge film in daylight on the 4 x 5 and 5 x 7 sizes only.

PRICE.

	Size, 4 x 5	5 x 7	6½ x 8½	8 x 10
Complete, with Unicum shutter, lens, and one plate holder,	\$25.00	\$33.00	\$42.00	\$50.00
Complete, with B. & L. diaphragm shutter, lens, and one holder,	34.00	38.00	55.00	65.00
Complete, Unicum shutter, Rochester anastigmat lens, and one holder,	50.00	60.00	90.00	110.00
Extra, for R. C. Co.'s wide angle lens,	8.00	10.00	15.00	18.00
With Unicum shutter, other lens fitted,	24.00	30.00	35.00	40.00
Camera, no lens or shutter,	16.00	20.00	28.00	35.00
Double dry plate holders, . . . . .	.75	1.00	1.25	1.50
Roll holders, 4 x 5 and 5 x 7, daylight loading,	5.00	6.50	—	—
Sole leather case and strap,	2.50	3.00	3.50	4.00
Weights,	2½ lbs.	3½ lbs.	4½ lbs.	5 lbs.
Measurements,	5½ x 4½ x 6½	5 x 9½ x 7	6½ x 11 x 8½	10½ x 6½ x 12½

Poco Folding Cameras.

Series B.



Poco B differs from Poco A in that it has single swing back, and no rack and pinion. It has rising and falling front, spring-actuated ground-glass screen, large panel at the back to focus on the glass when using tripod, and new Poco combined finder and level. The Unicum shutter with pneumatic and finger releases and iris diaphragm, as in Series A. Lens is the Rochester symmetrical, perfectly rectilinear, and

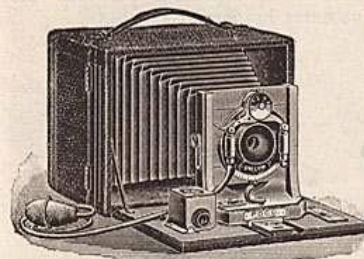
adapted to general work. Wide angle lenses interchangeable in ordinary cell. Made only in 4 x 5 size, capacity four holders; and 5 x 7 size, capacity three holders.

PRICE.

	Size, 4 x 5	5 x 7
Camera complete, with shutter, lens, and one dry plate holder,	\$20.00	\$25.00
Camera, complete, with shutter and rapid rectilinear lens,	16.00	21.00
Complete, with Rochester anastigmat lens, etc.,	45.00	55.00
Rack and pinion, extra,	3.00	3.00
R. C. Co.'s wide angle lens,	8.00	10.00
Without lens or shutter,	12.00	18.00
Double dry plate holders, . . . . .	.75	1.00
Roll holders, daylight loading,	5.00	6.50
Sole leather case with shoulder strap,	2.50	3.00
Weight,	2½ lbs.	3½ lbs.
Measurements,	5½ x 4½ x 6½	5 x 9½ x 7

Poco Folding Cameras.

Series C.



This series is constructed to meet the requirements of those desiring a compact folding camera at a moderate price. Mahogany, finely polished, with all metal parts of brass. Covered with morocco grain leather. The swing back is pivoted at the centre, making it optically correct. Spring-actuated ground glass, rising and sliding front, attached to Russia leather bellows.

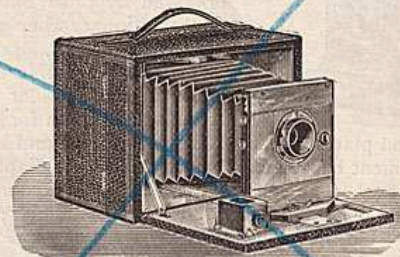
Differs from B only in lens, a high-grade single achromatic being supplied in place of the rectilinear.

PRICE.

	Size, 4 x 5	5 x 7
Camera, complete, with shutter, single achromatic lens, and one dry plate holder,	\$15.00	\$20.00
Double dry plate holder, . . . . .	.75	1.00
Roll holder, daylight loading,	5.00	6.50
Sole leather carrying case and shoulder strap,	2.50	3.00

Poco Folding Cameras.

Series D.



In Series D the shutter and camera front are combined, leaving no loose or detachable parts. It is simple in manipulation, being fitted with a small milled head screw on the front for setting the shutter, the leaves remaining entirely over the lens, excluding all light. Two buttons are provided, one for time, and another for instantaneous, and a speed regulator. The lens is the regular high-grade single achromatic.

PRICE.

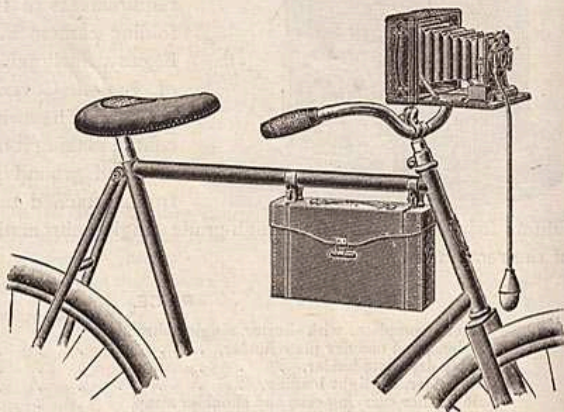
	Size, 4 x 5	5 x 7
Camera, complete, with one dry plate holder,	\$10.00	\$16.00
Double dry plate holders, . . . . .	.75	1.00
Roll holders, daylight loading,	5.00	6.50
Sole leather carrying case with shoulder strap,	2.50	3.00

Cycle Poco Cameras.

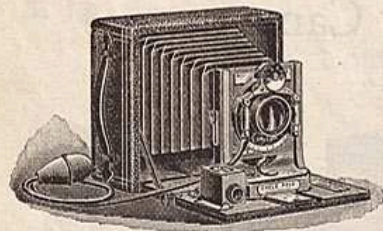
This series is designed especially for wheelmen and other tourists who wish a complete outfit in the smallest space. The price on each camera includes the carrying case, which will hold the camera and five extra holders.

It has a leather handle for use in hand, and rings on the ends, by which a shoulder strap may be attached. It may be rigidly attached to the bicycle frame by means of the Poco bicycle carrying attachment.

All Cycle Pocos are finished in mahogany, with brass parts highly polished, and lacquered. They are covered with fine seal grain morocco leather, with handle and red Russia leather bellows.



Cycle Poco, No. 1.



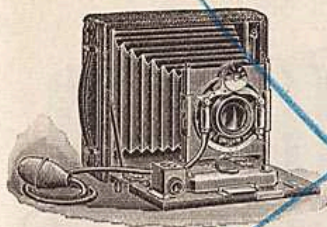
Cycle Poco No. 1 is designed to meet all the requirements of the wheelmen, tourists, and others wishing a thoroughly up-to-date camera. The double swing back is operated by push buttons, remaining perfectly stationary when placed. It has rising and falling front, spring-actuated ground glass, and removable back, in whose place a cartridge roll holder may be substituted. A rack and pinion for fine focussing is also

attached, also two tripod plates and reversing view finder and level.

The regular equipment has Unicum shutter, with iris diaphragm; time, instantaneous, and bulb release. The lens is the Rochester symmetrical. The 4 x 5 size carries five holders or roll holder, and one plate holder; the 5 x 7 size, four holders or roll holder. On the 4 x 5 and 5 x 7 sizes of roll holders daylight cartridges are used.

PRICE.	4 x 5	5 x 7	6 1/2 x 8 1/2	8 x 10
Camera, complete, with Unicum shutter, lens, plate holder, and carrying case,	\$25.00	\$33.00	\$42.00	\$50.00
Camera, complete, with Diaphragm shutter, lens, plate holder, and carrying case,	34.00	38.00	52.00	60.00
Complete, with Unicum shutter, Rochester anastigmat lens, plate holder, and carrying case,	50.00	60.00	90.00	110.00
Wide angle lens, extra,	8.00	10.00	15.00	18.00
With Unicum shutter, other lens fitted,	24.00	30.00	35.00	40.00
Without lens or shutter,	16.00	20.00	28.00	35.00
Double dry plate holders, . . . . .	.75	1.00	1.25	1.50
Cartridge roll holder,	5.00	6.50		
Bicycle clamp, . . . . .	.75	.75	.75	.75
Poco carrier for attaching camera to bicycle,	1.00	1.00	1.00	1.00
Shoulder strap or bicycle strap, . . . . .	.25	.25	.25	.25

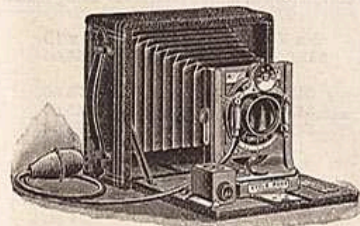
Cycle Poco, No. 2.



The smallest folding 4 x 5 double lens camera manufactured. It is especially designed for ladies, and is the ideal ladies' camera. When folded and carried without the case, it has the appearance of a small book, measuring 5 x 6 x 1 1/2 inches. Otherwise this camera is a duplicate of the No. 1. Each camera is furnished with a sole leather carrying case, which holds camera and four plate holders or roll holder.

PRICE.	Size, 4 x 5
Camera, complete, with shutter, lens, and one dry plate holder,	\$22.00
Double dry plate holders, . . . . .	.75
Roll holder, daylight loading,	5.00
Shoulder strap, or strap for attaching to bicycle, . . . . .	.25

Cycle Poco, No. 3.

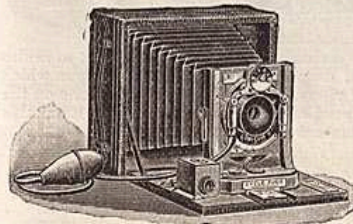


The No. 3 is one of the most popular of the entire series. It has Unicum shutter, with Rochester symmetrical lens. It has regular spring-actuated ground glass, rising and falling front, and two tripod plates, so that views can be taken either horizontally or vertically on the tripod or on the bicycle, as may be desired, also Poco combined reversing finder and level. The sole leather carrying case has capacity for the camera and five holders in 4 x 5 size; for 5 x 7

size, four holders.

PRICE.	Size, 4 x 5	5 x 7
Camera, complete, with shutter, lens, one dry plate holder, and carrying case,	\$20.00	\$25.00
Complete, with Unicum shutter, Rochester anastigmat lens, one holder and case,	45.00	55.00
Rack and pinion, extra,	3.00	3.00
Wide angle lens, extra,	8.00	10.00
Double dry plate holders, . . . . .	.75	1.00
Roll holders, daylight loading,	5.00	6.50
Bicycle clamp, as tripod, . . . . .	.75	.75
Poco carrier for attaching camera to cycle,	1.00	1.00
Shoulder straps or bicycle straps, . . . . .	.25	.25

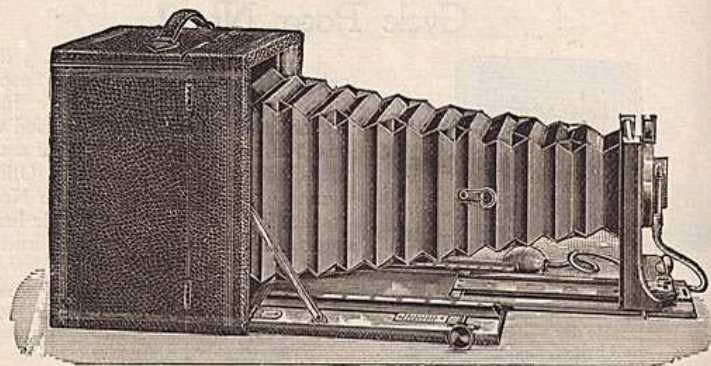
Cycle Poco, No. 4.



In this series the Unicum shutter is fitted with a high-grade single achromatic lens in place of the more expensive symmetrical double lens of the No. 3. In all other respects this camera is identical with No. 3.

PRICE.	4 x 5	5 x 7
Camera, complete, lens, shutter, case, and one plate holder,	\$15.00	\$20.00
Double dry plate holders, . . . . .	.75	1.00
Roll holders, daylight loading,	5.00	6.50
Bicycle clamp, . . . . .	.75	.75
Poco carrier for attaching case to bicycle,	1.00	1.00
Shoulder or bicycle clamp, . . . . .	.25	.25

Tele
Photo
Poco
A.

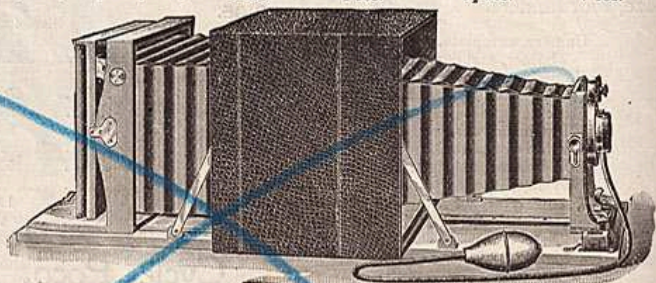


In this series the bellows has about twice the extension of the ordinary series, which allows the use of extreme long-focus lenses for copying, enlarging, and all work.

The Unicum shutter with iris diaphragm, hand and pneumatic release, is the regular equipment. A reversing back allows either horizontal or vertical pictures to be taken without removing the camera from the tripod. Two swing backs, both optically correct, are mounted on the reversing back.

	PRICE.			
	4 x 5	5 x 7	6½ x 8½	8 x 10
Complete, with Unicum shutter, lens, and one double plate holder,	\$38.00	\$45.00	\$55.00	\$65.00
Complete, with B. & L. shutter, lens, and one double plate holder,	45.00	54.00	65.00	75.00
Camera, no lens nor shutter,	28.00	32.00	40.00	45.00
Wide angle lens, extra,	8.00	10.00	15.00	18.00
Double dry plate holders, . . . . .	.75	1.00	1.25	1.50
Roll holders (4 x 5, 5 x 7, daylight loading),	5.00	6.50	—	—
Sole leather carrying case and strap,	3.00	3.50	4.50	5.50
Size,	5 x 7 x 5½	5½ x 9½ x 9½	7 x 11 x 11½	7 x 12½ x 13½
Focal length,	13½ in.	18 in.	21 in.	24 in.
Weight,	3 lbs.	4 lbs.	5½ lbs.	7 lbs.

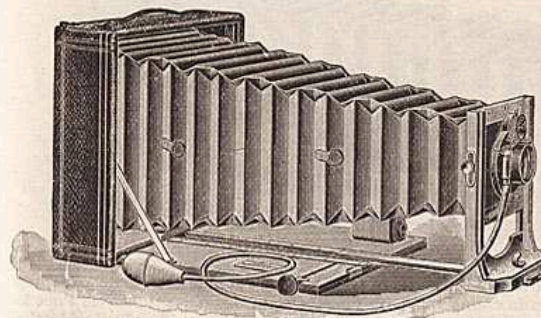
Tele
Photo
Poco B.



Is designed for both amateurs and professionals, and is similar in external appearance to Series A. The long draw is obtained by a folding back, which drops down, forming a bed upon which the ground glass and swing backs slide out. For distant views, the back combination alone on the long draw gives a double-size image with about half the speed of the double lens, making it suitable for distant views. This is the ideal camera for copying, lantern slides, etc.

	PRICE.			
	4 x 5	5 x 7	6½ x 8½	8 x 10
Complete, with Unicum shutter, lens, and one dry plate holder,	\$32.00	\$35.00	\$45.00	\$55.00
Camera, no lens or shutter,	24.00	26.00	33.00	38.00
Wide angle lens, extra,	8.00	10.00	15.00	18.00
Roll holder (4 x 5, 5 x 7, daylight loading),	5.00	6.50	—	—
Double dry plate holder, . . . . .	.75	1.00	1.25	1.50
Sole leather carrying case and strap,	3.00	3.50	4.50	5.50
Size,	7½ x 5¼ x 6½	9½ x 6½ x 7½	11½ x 7½ x 9½	13 x 8½ x 11½
Focal length,	15½ in.	17½ in.	22½ in.	27½ in.
Weight,	3½ lbs.	6 lbs.	9 lbs.	12 lbs.

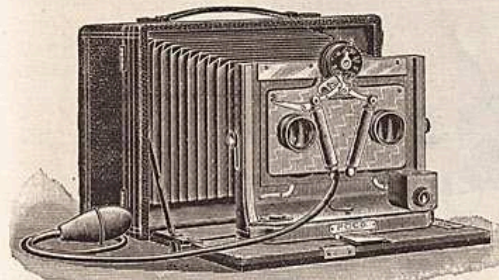
Tele Photo Cycle Poco.



The most compact long-focus camera ever constructed. It is similar in extension to the Telephoto A series, and is fitted, like that type, with reversible back, rising and sliding front, rack and pinion. It is fitted with a Rochester symmetrical double lens, the back combination of which may be used separately, giving an image twice the size of the doublet image with one-half the speed. Distance is especially well rendered by the long-focus lens.

	PRICE.			
	4 x 5	5 x 7	6½ x 8½	8 x 10
Complete, with shutter and lens, carrying case, and plate holder,	\$28.00	\$35.00	\$45.00	\$55.00
Without lens or shutter,	18.00	24.00	30.00	35.00
Double dry plate holders, . . . . .	.75	1.00	1.25	1.50
Roll holders (4 x 5, 5 x 7, daylight loading),	5.00	6.50	—	—

Stereo Poco Camera.



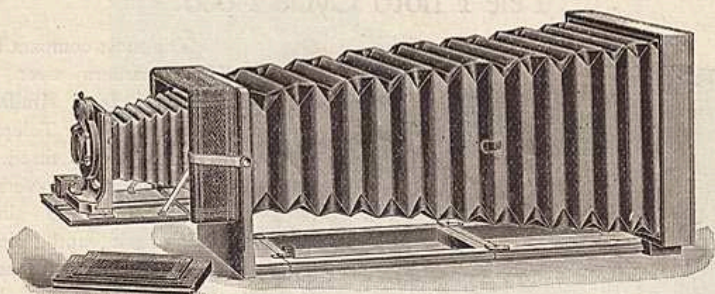
Made for both amateur and professional use. It is similar in design to Series A, with exception of the wide front which holds the stereoscopic lenses. It has double swing-back, rack and pinion, double tripod plates.

The shutter is the Bausch & Lomb stereo, which works automatically from three seconds to one-hundredth part of a second, with hand and pneumatic release, and time lever. The lenses are a matched pair of Rochester symmetrics, rectilinear and free from distortion.

Wide angle lenses are interchangeable in the same cells; and, if 5 x 7 single pictures are desired, a 5 x 7 lens and shutter with an extra lens board may be supplied.

	PRICE.	5 x 7
Stereo camera, lenses, and shutter, and one plate holder,		\$55.00
Pair wide angle lenses,		16.00
Double dry plate holders,		1.00
Sole leather carrying case and shoulder strap,		3.00
5 x 7 lens and Unicum shutter, extra,		15.00

Cycle Poco Copying Camera.



Especially designed for use with any of the series of Cycle Pocos. It may be used for enlarging or copying, or as a long-focus camera in connection with the Cycle Poco. After the Cycle Poco is attached, the front lens may be removed, using the back combination only, which will double the size of the image. The illustration shows method of attaching the two cameras.

The enlarging camera may be used as a view camera by fitting a lens board and lens into the front, for pictures up to 8 x 10 size. Two sizes only, 6½ x 8½ and 8 x 10, are made. The front of the 8 x 10 holds a 5 x 7 Cycle Poco and 4 x 5 with adapter. 6½ x 8½ takes only 4 x 5 Cycle Poco.

	PRICE.	
	6½ x 8½	8 x 10
Complete, with one plate holder,	\$12.00	\$14.00
Adapters,		.50
Double dry plate holders,	1.25	1.50
Lens boards,	.50	.50

The Special.

The Special is a first-class camera at a low price. It is covered with morocco. All working parts are flush with side of camera box.



SPECIAL.

Has two large brilliant view finders, two tripod plates, and large panel at the back to focus on the ground glass.

Is supplied with a rapid achromatic lens.

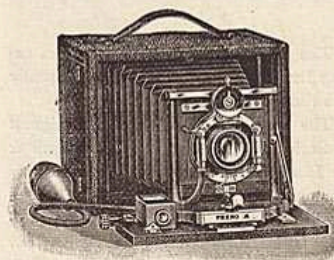
The shutter is the Rochester, very simple. In setting it the plates are not exposed, and it is easily regulated for different speeds.

It has two press buttons, one marked I for instantaneous, and one marked T for time exposures.

Made in the 4 x 5 size only, which holds four double dry plate holders or roll holder.

	PRICE.
Complete, with one holder,	\$8.00
Double plate holders, each,	.75
Roll holders,	10.00

The Premo A.



Premo A is fitted with central swing back, and a fine rack and pinion movement for focusing.

The lens is the Victor Rapid Rectilinear, adapted for general work, and made especially for use with the Premo. This lens may be removed from the shutter, and the Victor Wide Angle substituted when desired, as the cells of both are interchangeable.

The new Victor Shutter has both finger and pneumatic release, and is fitted with Iris Diaphragm.

The ground glass screen is spring-actuated. Glass plates, cut and roll films, may all be used. The plate holder is the Perfection, Jr., with rubber slides.

The price includes camera, lens, shutter, and one double plate holder.

	PRICE.	3½ x 4½	4 x 5	5 x 7	6½ x 8½
Premo A,	\$25.00	\$25.00	\$25.00	\$33.00	\$42.00
Premo A, with diaphragm shutter,	32.00	32.00	32.00	41.00	51.00
Wide angle lens, extra,	—	10.00	12.00	15.00	15.00
Extra plate holders,	1.00	1.00	1.25	1.60	1.60
Cut film holder,	1.35	1.35	1.60	1.85	1.85
Cartridge roll holder, empty,	5.00	5.00	6.50	—	—
Light proof film cartridge,	.60	.90	1.60	—	—
Leather-covered case,	2.50	2.50	3.00	3.50	3.50
Sole leather case,	3.50	3.50	4.00	4.50	4.50

The Premo, Sr.

The Premo, Sr., combines all the essential features necessary for either hand or tripod work, in the most compact form.

The Premo, Sr., has double swing back, double sliding front, and rack and pinion for focusing.

We make the bed in two sections, hinged together, when desired for use with extremely wide angle lenses. Ordinary wide angle lenses do not need it.

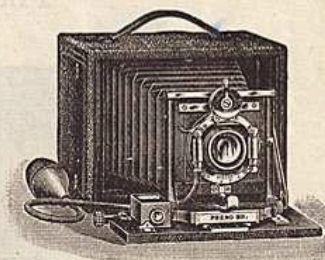
The lens is the Victor Rapid Rectilinear.

The new Victor Shutter, with Iris Diaphragm, is furnished with the Premo, Sr. It works between the lenses without noise or jar.

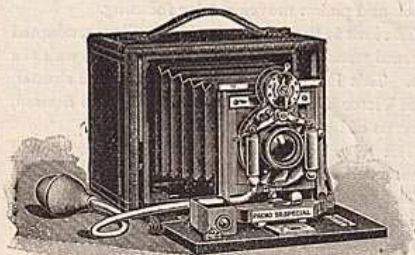
The size of the 4 x 5 Premo, Sr., when closed, is only 5½ x 4½ x 7 inches, including space for three holders, or roll holder; and it weighs but 2½ pounds.

The price includes the camera, lens, shutter, and one double plate holder.

	PRICE.	3½ x 4½	4 x 5	5 x 7	6½ x 8½	8 x 10
Premo, Sr.,	\$30.00	\$30.00	\$30.00	\$40.00	\$50.00	\$60.00
Premo, Sr., with diaphragm shutter,	37.00	37.00	37.00	48.00	59.00	69.00
Wide angle lens, extra,	—	10.00	12.00	15.00	18.00	18.00
Hinged bed, extra,	—	3.00	3.00	3.50	4.00	4.00
Extra plate holders,	1.00	1.00	1.25	1.60	2.00	2.00
Cut film holders,	1.35	1.35	1.60	1.85	2.30	2.30
Cartridge roll holder, empty,	5.00	5.00	6.50	—	—	—
Light proof film cartridge,	.60	.90	1.60	—	—	—
Leather-covered case,	2.50	2.50	3.00	3.50	4.00	4.00
Sole leather case,	3.50	3.50	4.00	4.50	5.00	5.00



The Premo, Sr., Special.



The description of the Premo, Sr., excepting lens and shutter, will apply equally well to the Premo, Sr., Special.

The merits of the Zeiss Anastigmat Lens, Series IIa., fitted with the Bausch & Lomb Diaphragm Shutter, as furnished with this camera, are well and favorably known among both amateur and professional photographers the world over. The Series IIa., Zeiss lens embraces an angle of about 80°. It yields an absolutely flat image, free from

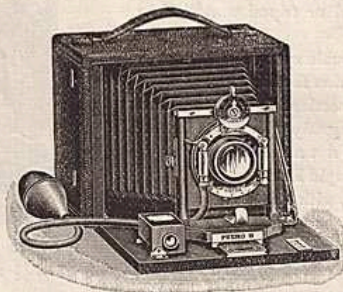
astigmatism, sharply defined to the extreme edges of the plate; and the speed is such as to particularly commend it for hand camera use.

The price includes camera, Zeiss Lens, Series IIa., diaphragm shutter, and one plate holder.

PRICES.	4 x 5	5 x 7	6½ x 8½	8 x 10
Premo, Sr., Special,	\$67.00*	\$84.00	\$103.00	\$120.00
Extra plate holders,	1.00	1.25	1.60	2.00
Cut film holder,	1.35	1.60	1.85	2.30
Cartridge roll holder, empty,	5.00	6.50	—	—
Light proof film cartridges, . . . . .	.90	1.60	—	—
Leather-covered case,	2.50	3.00	3.50	4.00
Sole leather case,	3.50	4.00	4.50	5.00

* Fitted with the No. 2 Lens.

The Premo B.



Premo B is similar in general design to style A.

Premo B is furnished with the Victor shutter, having Iris diaphragm and pneumatic release. Either single achromatic or the Victor rapid rectilinear lens is fitted, as may be preferred.

The rapid rectilinear lens is precisely the same as furnished with Premo A.

Price includes camera, lens, shutter, and one double plate holder.

PRICES.	4 x 5	5 x 7
Premo B, with achromatic lens,	\$15.00	\$23.00
With Victor rapid rectilinear lens,	20.00	30.00
Wide angle lens, extra,	10.00	12.00
Extra Premo plate holders,	1.00	1.25
Cut film holder,	1.35	1.60
Cartridge roll holder, empty,	5.00	6.50
Light proof film cartridge, . . . . .	.90	1.60
Leather-covered case,	2.50	3.00
Sole leather case,	3.50	4.00

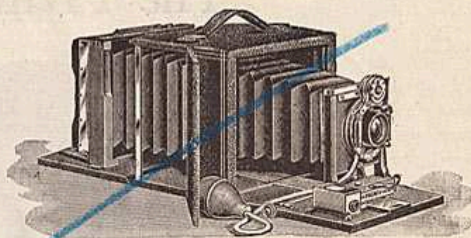
LONG FOCUS PREMO.

When not fully extended the Long Focus Premo is similar in appearance to the Premo, Sr.

Though but a trifle larger than the Senior, the Long Focus Premo has nearly double the focal capacity.

The extra length of draw is obtained by the addition of a folding back.

The Long Focus Premo has double swing back, double sliding front, and a fine rack and pinion movement for focusing. Both the horizontal and vertical swings are at the centre of the plate.



Focal Capacity or Length of Bellows.

4 x 5. 15 inches.	5 x 7. 19 inches.	6½ x 8½. 22 inches.	8 x 10. 28 inches.
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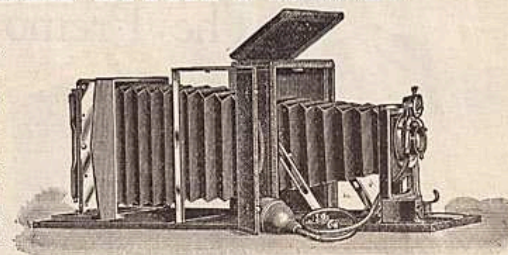
The price includes the camera, lens, shutter, and one double plate holder.

PRICES.	4 x 5	5 x 7	6½ x 8½	8 x 10
Long Focus Premo,	\$35.00	\$45.00	\$55.00	\$65.00
Long Focus Premo, with Zeiss convertible anastigmat, Series VII. ^a diaphragm shutter,	97.00	121.00	169.00	189.00
Wide angle lens, extra,	10.00	12.00	15.00	18.00
Hinged bed, extra,	3.00	3.00	3.50	4.00
Extra plate holders,	1.00	1.25	1.60	2.00
Cut film holder,	1.35	1.60	1.85	2.30
Cartridge roll holder, empty,	5.00	6.50	—	—
Light proof film cartridges, . . . . .	.90	1.60	—	—
Leather-covered case,	2.50	3.00	3.50	4.00
Sole leather case,	3.50	4.00	4.50	5.00

REVERSIBLE BACK PREMO.

The Reversible Back Premo is provided with all modern improvements. It has double swing back, both rising and sliding front and a fine rack and pinion movement, permitting the most delicate focusing.

For the use of long focus lenses for copying, enlarging, and all other purposes requiring an extended length of bellows, the Reversible Back Premo is particularly well adapted.



Combining the desirable features of both hand and view camera, the Reversible Back Premo will appeal to and be fully appreciated by a very large class of both amateur and professional photographers.

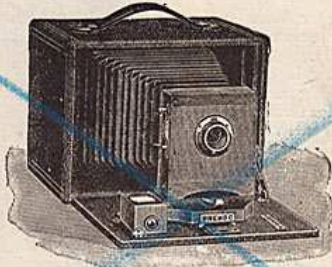
Focal Capacity or Length of Bellows.

4 x 5. 17½ inches.	5 x 7. 23 inches.	6½ x 8½. 29 inches.	8 x 10. 33½ inches.
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The price includes the camera, lens, shutter, and one double plate holder.

PRICES.	4 x 5	5 x 7	6½ x 8½	8 x 10
Reversible Back Premo,	\$40.00	\$50.00	\$62.00	\$72.00
Reversible Back Premo, Zeiss convertible anastigmat lens, Series VII. ^a diaphragm shutter,	102.00	126.00	176.00	196.00
Wide angle lens, extra,	10.00	12.00	15.00	18.00
Hinged bed, extra,	3.00	3.00	3.50	4.00
Extra plate holders,	1.00	1.25	1.60	2.00
Cut film holder,	1.35	1.60	1.85	2.30
Cartridge roll holder, empty,	5.00	6.50	—	—
Light proof film cartridges, . . . . .	.90	1.60	—	—
Leather-covered case,	2.50	3.00	3.50	4.00
Sole leather case,	3.50	4.00	4.50	5.00

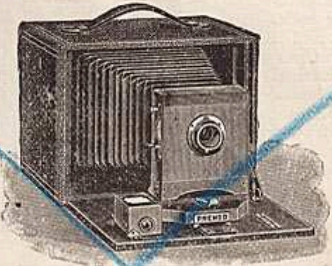
The Premo C.



Premo C is fitted with single achromatic or rapid rectilinear lens, with rotating diaphragm. It has a new safety time and instantaneous shutter, a neat and effective device for all classes of work. The shutter is quickly set by a lever at the side, the leaves remaining stationary. Price includes camera, lens, shutter, and one plate holder.

PRICES.	4 x 5	5 x 7
Premo C, with achromatic lens,	\$12.00	\$20.00
With rapid rectilinear lens,	17.00	26.00
Extra Premo plate holders,	1.00	1.25
Cut film holders,	1.35	1.60
Cartridge roll holder, empty,	5.00	6.50
Light proof film cartridges,	.90	1.60
Leather-covered case,	2.50	3.00
Sole leather case,	3.50	4.00

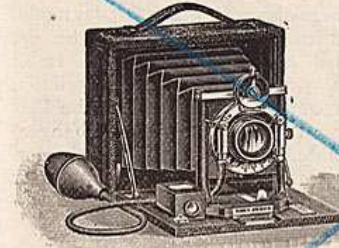
The Premo D.



Premo D is similar in appearance to style C, though made without the swing back. Premo D has sliding front for adjusting sky and foreground, and is fitted with single achromatic or rapid rectilinear lens with rotating diaphragm. Our new safety shutter is also supplied, being a neat and effective device for both time and instantaneous work. The shutter is set by a lever at the side, the leaves remaining stationary. Price includes camera, lens, shutter, and one double plate holder.

PRICES.	4 x 5	5 x 7
Premo D, with achromatic lens,	\$10.00	\$18.00
With rapid rectilinear lens,	15.00	24.00
Extra Premo plate holders,	1.00	1.25
Cut film holder,	1.35	1.60
Cartridge roll holder, empty,	5.00	6.50
Light proof film cartridge,	.90	1.60
Leather-covered case,	2.50	3.00
Sole leather case,	3.50	4.00

The Pony Premo.



Owing to its extreme portability and lightness of weight, this style Premo will of course appeal directly to wheelmen and tourists generally; yet we feel certain it will also find favor among a large class of amateurs desiring a thoroughly practical outfit to occupy the smallest possible space.

The lens is the Victor rapid rectilinear. It will be found well adapted for all classes of work. The shutter is the Victor, fitted with Iris diaphragm and pneumatic release.

The Pony Premo is furnished with a neat sole leather case.

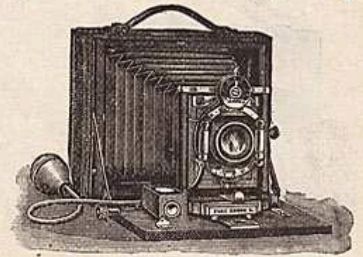
The price includes camera, lens, shutter, one double plate holder, and sole leather case with strap.

PRICES.	3 1/2 x 4 1/2	4 x 5	5 x 7
Pony Premo,	\$22.00	\$22.00	\$30.00
Wide angle lens, extra,	—	10.00	12.00
Extra plate holders,	1.00	1.00	1.25
Cut film holders,	1.35	1.35	1.60
Roll holder, empty,	5.00	5.00	6.50
Light proof film cartridges,	.75	.90	1.60

The Pony Premo A.

In general design Pony Premo A resembles the original model, possessing all its good qualities, together with the additional adjustments of double sliding front and rack and pinion movement, permitting the most delicate focusing. Even with these additional features the 4 x 5 Pony Premo A measures only 5 1/2 x 6 1/2 x 2 1/2 inches when folded, and weighs only 30 ounces.

The price includes camera, lens, shutter, one plate holder, and case.

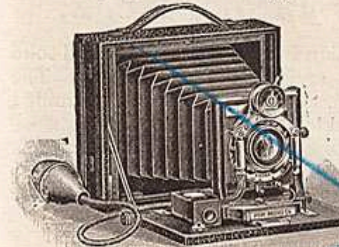


PRICES.	4 x 5	5 x 7
Pony Premo A,	\$25.00	\$35.00
Wide angle lens, extra,	10.00	12.00
Extra plate holders,	1.00	1.25
Cut film holder,	1.35	1.60
Cartridge roll holder, empty,	5.00	6.50
Light proof film cartridges,	.90	1.60

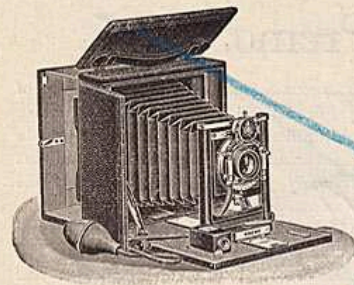
The Pony Premo, Sr.

The Pony Premo, Sr., is similar to the regular pattern in general design. It has, however, the additional adjustments of double swing back, rising and sliding front, and rack and pinion movement for focusing, thus adapting it for every variety of work.

The price includes camera, lens, shutter, one double plate holder, and carrying case with strap.



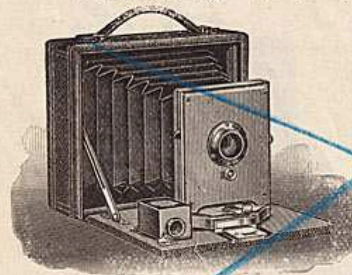
PRICES.	3 1/2 x 4 1/2	4 x 5	5 x 7	6 1/2 x 8 1/2
Pony Premo, Sr.,	\$28.00	\$28.00	\$38.00	\$48.00
Wide angle lens, extra,	—	10.00	12.00	15.00
Extra plate holders,	1.00	1.00	1.25	1.60
Cut film holder,	1.35	1.35	1.60	1.85
Cartridge roll holder, empty,	5.00	5.00	6.50	—
Light proof film cartridges,	.75	.90	1.60	—



Premo, Sr., Reversible Back.

This camera differs from the regular model Senior in that it has an extra door on the top, allowing the use of a reversible back. In all other respects — swing back, rack and pinion, etc. — the two cameras are identical. The lens is the Victor rapid rectilinear, interchangeable with the wide angle in the Victor shutter. The 4 x 5 is 5 x 7 1/2 x 7 1/2, including space for three holders, and weighs 2 3/4 pounds.

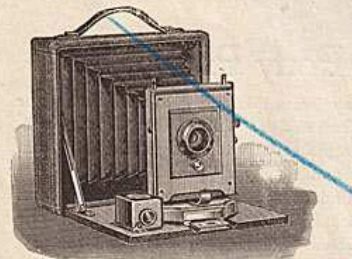
	4 x 5	5 x 7	6 1/2 x 8 1/2	8 x 10
Reversible Back Premo, Sr., lens, shutter, one plate holder,	\$35.00	\$45.00	\$55.00	\$65.00
Wide angle lens, extra,	10.00	12.00	15.00	18.00
Hinged bed, extra,	3.00	3.00	3.50	4.00
Extra plate holders,	1.00	1.25	1.60	2.00
Cut film holders,	1.35	1.60	1.85	2.30
Cartridge roll holder, not loaded,	5.00	6.50	—	—
Light proof film cartridge, . . . . .	.90	1.60	—	—
Leather covered case,	2.50	3.00	3.50	4.00
Sole leather case,	3.50	4.00	4.50	5.00



Pony Premo E.

Pony Premo E is very compact, measures but 2 x 5 1/2 x 6 inches, and weighs but a trifle over one pound. It is fitted with a new safety time and instantaneous shutter and a single achromatic lens. It has ground glass and screw plate for use on tripod. May be used with cartridge roll holder, using daylight loading films.

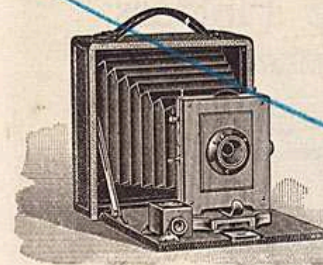
	PRICE.
Pony Premo E, case, and plate holder,	\$8.00
Extra plate holders,	1.00
Cut film holders,	1.35
Cartridge roll holder, daylight loading,	5.00



Pony Premo, No. 2.

This design has reversible back and solid sliding front and shutter combined. The shutter is a new safety device, set by a milled head on the side, and gives both time and instantaneous exposures. Weight is but a trifle over two pounds; and it measures, closed, 2 1/4 x 5 1/2 x 5 1/2 inches. Either glass plates, cut or cartridge films, may be used.

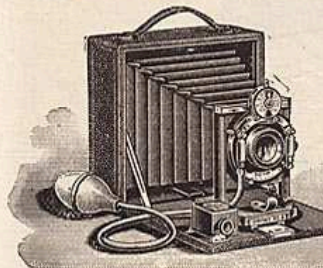
	PRICE.
Pony Premo, No. 2, with achromatic lens, case, and plate holders,	4 x 5 \$10.00
With rapid rectilinear lens,	15.00
Extra plate holders,	1.00
Cut film holder,	1.35
Cartridge roll holder, not loaded,	5.00
Light proof film cartridge, 12 exposures, . . . . .	.90



Pony Premo, No. 3.

This model has adjustable front and reversible back. It is fitted with a fine achromatic lens and a new safety time and instantaneous shutter, with rotating diaphragm. Weighs two pounds, and measures but 2 1/4 x 5 1/2 x 5 1/2 inches, and may be adapted to cartridge roll films by means of the new daylight roll holders.

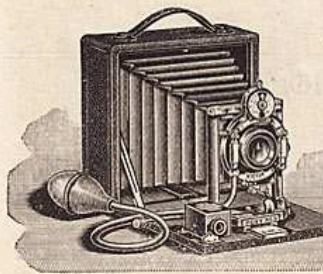
	PRICE.
Pony Premo, No. 3, achromatic lens, case, and one plate holder,	4 x 5 \$12.00
With rapid rectilinear lens,	17.00
Extra plate holders,	1.00
Cut film holders,	1.35
Cartridge roll holder, not loaded,	5.00
Light proof film cartridge, 12 exposures, . . . . .	.90



Pony Premo, No. 4.

Has rising and falling front, and may be ordered either with an achromatic or a rapid rectilinear lens, with the popular Victor shutter. Reversible back, for either horizontal or vertical pictures, and spring-actuated ground glass are also included in this outfit. Measurements, 2 3/8 x 5 1/2 x 5 1/2, and weight a little over two pounds. Price includes camera, lens, shutter, case, and one double plate holder.

	PRICE.
Pony Premo, No. 4, with achromatic lens,	\$15.00
Pony Premo, No. 4, with Victor rapid rectilinear lens,	20.00
Wide angle lens, extra,	10.00
Extra premo plate holders,	1.00
Cut film holders,	1.35
Cartridge roll holder, not loaded,	5.00
Light proof film cartridges, 12 exposures, . . . . .	.90



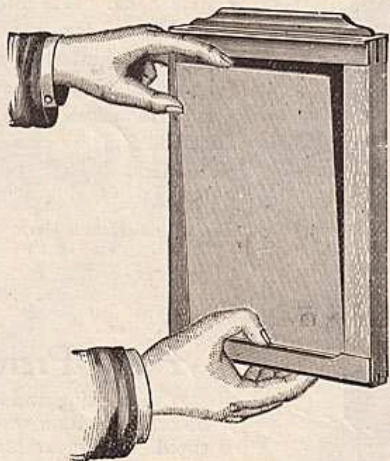
Pony Premo, No. 5.

This design resembles No. 4 model, but has in addition a double sliding front and a rack and pinion for delicate focussing. It has reversible back, and is fitted with a Victor rapid rectilinear lens and shutter. Case will carry camera and three extra holders.

	PRICE.
Pony Premo, No. 5, R. R. lens, Victor shutter, case, and plate holder,	\$25.00
Wide angle lens, extra,	10.00
Extra plate holders,	1.00
Cut film holders,	1.35
Cartridge roll holder, not loaded,	5.00
Light proof cartridge, 12 exposures, . . . . .	.90

Double Dry Plate Holders.

FOR R. O. CO.'S CAMERAS.



PERFECTION HOLDER.

Size.	Perfection Holders.	Perfection, Jr. Holders.	Facile Film Holders.	English Book Holders.	Perfection Holders, Polished Mahogany, Rubber Slides.	Facile Film Holders, Polished Mahogany, Rubber Slides.
3½ x 4½	\$1.00	\$1.00	\$1.25	\$1.60	\$1.50	\$1.75
4 x 5	1.00	1.00	1.25	1.60	1.50	1.75
4½ x 6½	1.25	—	1.40	1.75	1.90	2.00
5 x 7	1.25	1.25	1.50	1.85	2.00	2.15
5 x 8	1.35	1.50	1.60	2.00	2.00	2.25
6½ x 8½	1.60	1.60	1.85	2.25	2.40	2.75
8 x 10	1.85	2.00	2.20	3.00	2.85	3.25
10 x 12	3.00	4.25	—	4.00	4.50	—
11 x 14	4.00	5.25	—	5.00	—	—
14 x 17	5.00	—	—	6.00	—	—
17 x 20	—	—	—	7.50	—	—
18 x 22	—	—	—	10.00	—	—
20 x 24	—	—	—	13.50	—	—

EASTMAN'S ROLL HOLDERS.

Size.	Price.	Size.	Price.
3½ x 4½	\$10.00	5 x 7½	\$12.50
4 x 5	10.00	5 x 8	12.50
4½ x 5½	10.00	6½ x 8½	16.00
4½ x 6½	10.00	8 x 10	20.00
4½ x 6½	12.50	10 x 12	24.00
5 x 7	12.50		

ROCHESTER CAMERA CO.'S DRY PLATE HOLDERS.

Size.	Price.	Size.	Price.
3½ x 4½, with hard rubber slides,	\$0.75	5 x 7, with hard rubber slides,	\$1.00
4 x 5, " " " "	.75	5 x 8, " " " "	1.00
6½ x 8½, with hard rubber slides,	\$1.75	6½ x 8½, with press board slides,	\$1.25
8 x 10, " " " "	2.10	8 x 10, " " " "	1.50
10 x 12, " " " "	3.30	10 x 12, " " " "	2.50
11 x 14, " " " "	4.00	11 x 14, " " " "	3.00

Lens Boards.

For New Model Outfit, all sizes,	\$0.25
" New Model Improved, Peerless, and Standard Cameras, all sizes,	.40
" Rochester View and King Cameras,	.40
" Rochester Favorite and Poco Cameras,	.25
" Universal, Carlton, and Ideal, 3½ x 4½ to 8 x 10,	.50
10 x 12 and 11 x 14,	.60
14 x 17,	.80

HOLDER SLIDES.

In ordering Holder Slides always state for what camera they are wanted.

Size.	Anthony.		Scovill.		R. O. Co.		R. C. Co.		Eastman.	
	Press Slides for D. P. Holders.	Rubber Slides for D. P. Holders.	Wood Slides for Penster Holders.	Wood Slides for Novel Holders.	Registering Slides for D. P. Holders.	* Wood Slides for Holders.	Press Board Slides.	Hard Rubber Slides.	Press Board Slides.	
3½ x 4½	\$0.10	\$0.15	—	—	\$0.18	\$0.27	\$0.15	\$0.25	\$0.15	\$0.15
4 x 5	.10	.20	—	—	.20	.32	.15	.25	.15	.15
4½ x 5½	—	—	—	—	.24	.34	—	—	—	—
4½ x 6½	.15	.25	—	—	.28	.36	.20	.30	.20	.20
5 x 7	.15	.30	—	—	.35	.38	.20	.35	.20	.20
5 x 8	.15	.30	—	—	.40	.40	.20	.35	.20	.20
6½ x 8½	.20	.40	—	—	.55	.45	.25	.45	.25	.50
8 x 10	.20	.50	\$0.70	—	.75	.72	.30	.50	.30	.60
10 x 12	.35	1.00	1.25	\$0.75	1.00	1.35	.45	.80	.40	.80
11 x 14	.45	1.30	1.60	1.15	1.30	2.02	—	1.25	.50	1.00
14 x 17	.75	2.25	2.00	1.35	2.25	—	2.00	.60	1.20	—
17 x 20	—	—	2.50	1.60	2.70	—	3.00	.75	1.50	—
18 x 22	—	—	2.75	2.00	3.15	—	—	—	—	—
20 x 24	—	—	3.25	—	3.60	—	—	—	—	—
22 x 27	—	—	3.50	—	—	—	—	—	—	—
25 x 30	—	—	4.00	—	5.40	—	—	—	—	—

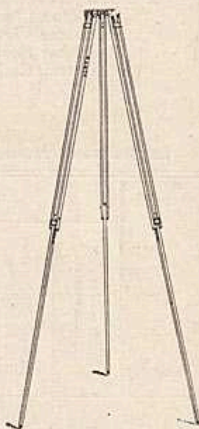
* Rubber Slides 40 per cent. additional.

KITS OR INSIDE FRAMES.

Any Size Opening.

Outside Measure.	Glass Cor. Anthony.	Rabbeted for Wet or Dry Anthony.	Scovill Glass Cor.	Scovill Rabbeted for Wet or Dry.	R. O. Co. Rabbeted.	R. C. Co. Rabbeted.	Eastman Rabbeted.
4 x 5	—	\$0.25	\$0.64	\$0.28	\$0.25	\$0.20	—
4½ x 5½	\$0.65	.25	.65	.29	—	—	\$0.30
4½ x 6½	—	.25	.67	.30	.25	—	.30
5 x 7	—	.30	.68	.31	.30	.25	.35
5 x 8	—	.30	.74	.32	.30	.25	.35
6½ x 8½	.75	.30	.84	.34	.35	.30	.35
7 x 10	—	.30	.90	.40	—	—	—
8 x 8	—	—	.90	.40	—	—	—
8 x 10	1.00	.35	.95	.40	.40	.35	.40
10 x 12	1.10	.55	1.25	.60	.50	.40	—
11 x 14	1.20	.60	1.30	.66	.60	.50	—
14 x 17	1.60	.75	1.80	.80	.75	.65	—
17 x 20	1.80	1.00	1.96	—	1.00	.95	—
18 x 22	—	1.00	2.30	—	1.50	1.20	—
20 x 24	2.25	1.25	2.45	—	—	—	—

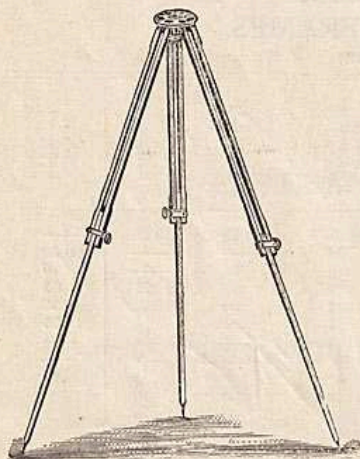
The Lloyd Single Folding Tripods.



We have deemed it practical in view of the tremendous demand for low-priced cameras to introduce a serviceable, low-priced tripod, which is herewith illustrated. This tripod may be readily set up for use, is very compact, and we feel sure will be appreciated by the numerous amateurs who are desirous of completing their outfit at a low cost.

Price, \$1.00.

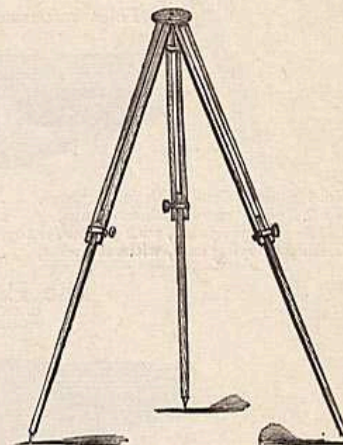
Lloyd Sliding Tripod, No. 0.



This tripod meets the demand for a light, serviceable article suitable for $3\frac{1}{2} \times 3\frac{1}{2}$ and 4×5 Cameras, like the Rays, Bull's-eyes, Bullets. It is made of well-seasoned spruce, and has a metal head. Telescopes to half its standing height. Legs are held from slipping by screw clamps, which hold them firmly in place.

Price, \$1.75.

Lloyd Sliding Tripod, No. 1.



This is the most simple and best form of sliding tripod. It is very light and consequently easy to carry. The legs are made in three pieces, the same as the folding, which makes the tripod very firm. The tripod top is of wood with cloth cover.

Price, \$2.00.

The Lloyd Combination Tripod, No. 1.



The above tripod is the most convenient form we introduce. It can be hurriedly set up for use, easily adjusted at any desired height, and remains rigid. It is made in three sections, the lower one sliding into the second, while the upper section falls back upon it. These tripods are made of selected spruce with good brass trimmings. The great advantage of this tripod is that the top is provided with an ingenious device that prevents the legs becoming detached when the camera and tripod are being moved.

Price, \$3.00.

Eastman Kodak Company's Tripods.

The Kodak Tripod.

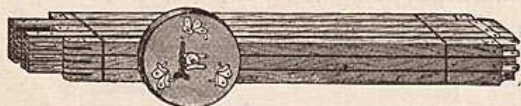
Folds in four sections. Made in cherry only.



No. 1 Kodak tripod, with folding lugs,	\$5.00
No. 2 Kodak tripod, with solid lugs,	4.00
Leather carrying case, with pocket for top, for No. 1,	3.00
Leather carrying case, without pocket,	2.00

The Eastman Tripod.

Folds in three sections.



No. 1 Spruce, for cameras up to 6½ x 8½, weight 1 lb., 10 oz.,	\$3.00
No. 1 Maple, for cameras up to 6½ x 8½, weight 2 lbs., 2 oz.,	3.00
No. 2 Spruce, for cameras up to 11 x 14, weight 2 lbs., 6 oz.,	3.50
No. 2 Maple, for cameras up to 11 x 14, weight 3 lbs., 3 oz.,	3.50
No. 3 Spruce, for cameras up to 6 in. head, weight 2 lbs., 3 oz.,	4.00
No. 3 Maple, for cameras up to 6 in. head, weight 3 lbs., 5 oz.,	4.00

NOTE.— When kind of wood is not specified, we will furnish in maple.

The Victor Tripod.

Folds in two sections.



No. 1 Spruce, for cameras up to 6½ x 8½, weight 1 lb., 11 oz.,	\$2.00
No. 1 Maple, for cameras up to 6½ x 8½, weight 2 lbs., 3 oz.,	2.00
No. 2 Spruce, for cameras up to 11 x 14, weight 2 lbs., 6 oz.,	2.50
No. 2 Maple, for cameras up to 11 x 14, weight 3 lbs., 3 oz.,	2.50

NOTE.— When kind of wood is not specified, we will furnish in maple.

The Bull's-eye Tripod.

Folds in two sections, and is provided with a leather hand-strap for carrying. Made of the best seasoned spruce, with brass fittings. Price, \$2.00

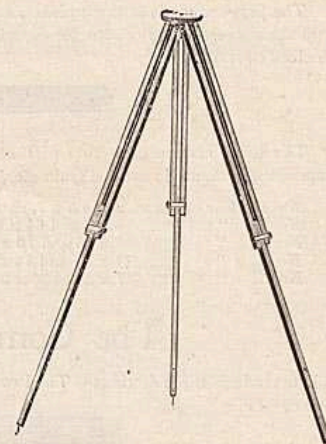
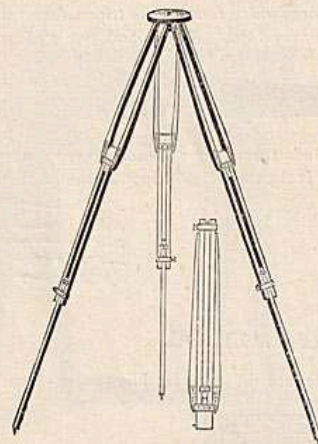
Feather Tripod.

Length, folded, 14½ inches. Length, extended, 52½ inches. Suitable for 4 x 5 cameras or sizes under. Weight, 17½ ounces. Aluminum head, with patent aluminum screw plate.

Eastman's Feather Tripod,	\$4.00
Eastman's Feather Tripod, mahogany finish,	4.50
No. 1 Adjustable, Jr., Tripod, head to fit this tripod,	1.00
Black sole leather hand carrying case,	1.50

The Compact Tripod.

The Sliding Tripod.



This tripod is made to fold and slide, and can be adjusted to any desired length. The tripod screw is arranged to always remain in the top.

Is made of best selected spruce in three pieces, the centre one sliding within the outer ones, and can be clamped at any desired position. The legs are fastened to the top, which leaves the tripod always together and perfectly rigid.

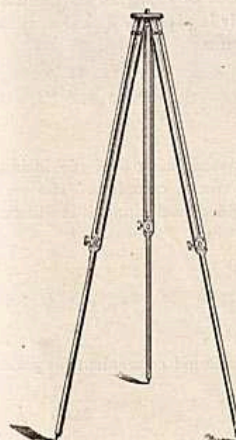
No.	Size of Cameras.	Price.	No.	For all sizes up to	Price.
1.	3½ x 4½ — 4 x 5 or 4½ x 6½	\$2.50	1.	5 x 8	\$2.25
2.	5 x 7 — 5 x 8 " 6½ x 8½	3.00	2.	8 x 10	2.50
3.	8 x 10 " 10 x 12	3.50	3.	10 x 12	3.00
4.	11 x 14 " 14 x 17	4.50	4.	11 x 14	3.50
			5.	18 x 22	4.00

Standard Folding Tripod.

It is thoroughly well made of seasoned spruce, and is light, strong, rigid, and perfectly durable in all its parts. The top is wood, neatly covered with cloth. The screw remains attached, ready for use, and is not liable to loss.



Price, for cameras from 4 x 5 to 6½ x 8½, \$1.50



The Facile Sliding Tripod.



A NEW DESIGN.

The lower section of the Facile is made to slide into the upper, and by means of a neat milled head is held at any desired height.

No. 1. For 4 x 5 and 5 x 7 cameras, weight 17 oz.,	\$2.00
No. 2. For 6½ x 8½ cameras, weight 1 lb., 9 oz.,	2.25

Carlton's Sliding Tripod.

The legs are made in three pieces, same as the folding, which renders the tripod firmer when set up than where made of two pieces, which is the ordinary form. The tripod top is of wood, with cloth over.



The brass clamps each side of the leg have the ends turned toward each other; and, when clamped, the pressure is exerted from all sides, rendering it the most rigid tripod in the market.

No. 1.	For cameras, up to 5 x 7, spruce,	1.25	\$2.25
No. 2.	" " 5 x 8 and 6 1/2 x 8 1/2, spruce,	1.50	2.50
No. 3.	" " 8 x 10 and 10 x 12, ash,	2.00	3.00
No. 4.	" " 11 x 14 and 14 x 17, ash,	2.50	4.00
No. 5.	" " 17 x 20 to 20 x 24, ash,	3.00	5.00

The Combination Tripod.

It is made in three sections. The lower section slides into the second, while the upper section folds back upon it.



The top is provided with an ingenious device, which prevents the legs from becoming accidentally detached when in position for use. The legs can be detached only by raising the lower end to nearly a horizontal position.

No. 0.	Spruce, for 4 x 5 cameras, weight 1 lb.,	2.75	
No. 1.	Ash, " " 5 x 7 " " 1 " 6 oz.,	3.00	1.75
No. 2.	" " 6 1/2 x 8 1/2 " " 1 " 9 " ash, 2.30	3.25	2.00
No. 3.	Ash, " " 8 x 10 " " 4 " 6 " ash, 2.50	3.50	2.50

The Premo Tripod.

The Premo Tripod is the lightest yet made, and has three joints. The lower section slides into the second, and these two into the third, while the upper section folds back upon the third. Has aluminum head.



The legs of the tripod may be grasped at the top for the purpose of changing its position, without fear of separating them from the head. They are held securely in place by a device which prevents them from becoming detached, except at the will of the operator.

No. 1.	For 4 x 5 cameras, weight 15 oz.,	\$4.50
No. 2.	" 5 x 7 and 6 1/2 x 8 1/2 cameras, weight 1 lb., 7 oz.,	5.00

The Petite Tripod.

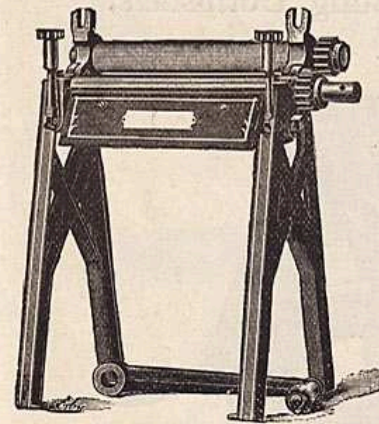
The Petite Tripod is exceedingly compact, the length, when closed, being only 16 1/2 inches. When extended for use, the length is 55 inches. Weight, only 17 ounces, complete. The construction of the Petite Tripod renders it not only compact, but rigid as well; and it is without question one of the best tripods yet introduced.



The head can be detached from the legs if desired. This will be found convenient for packing in a small valise or hand satchel.

No. 1.	For 4 x 5 and 5 x 7 cameras,	\$5.00
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Model Duplex Burnisher.

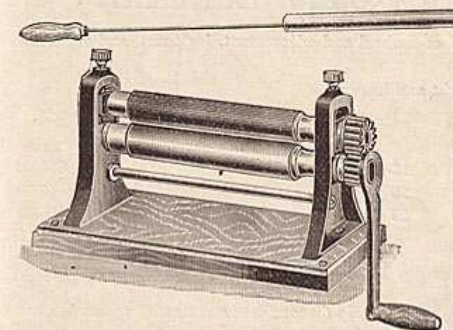


This is a new machine, built to meet the growing demand for a good double-roll burnisher in small sizes, at lower prices than those heretofore offered. It is thoroughly well made in every detail. The top roll is hinged, and the pressure can be quickly and perfectly adjusted. The roll is heated by either oil or gas.

PRICES.

6-inch, with oil or gas heater,	\$7.50
8 " " " " " "	10.00
10 " " " " " "	12.50
12 " " " " " "	15.00

Sunshine Burnisher.



A burnisher for the amateur. Has a six and one-half inch roll, and is heated by means of a removable iron with handle, so it may be heated in the stove. This little machine will burnish twenty-five to thirty prints at one heating. Price, \$5.00.

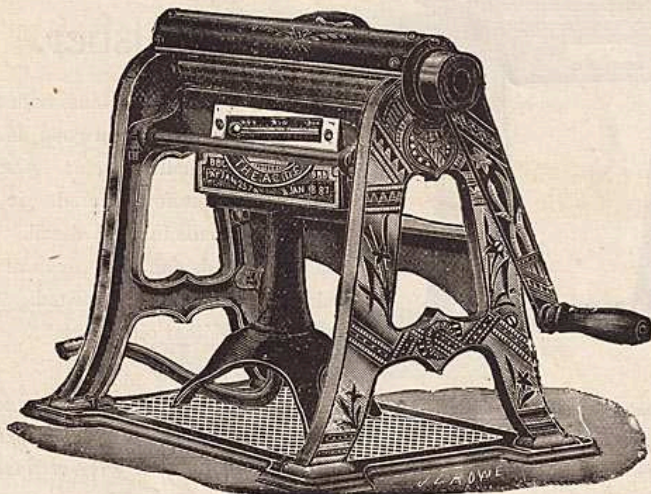
We shall be pleased to send on application sample photographs of all the leading

INTERIOR, EXTERIOR, PLAIN AND CLOUDED BACKGROUNDS.

We are constantly on the alert for all the newest and choicest designs. It will pay you to see our line before purchasing.

Acme Rotary Flue-heating Burnishers.

One hand wheel adjustment; even tension. Acme thermometer attached.



11-in. oil, gas, or alcohol heater,	\$25.00
15-in. " " " "	35.00

Entrekin's Improved Rotary Burnisher.

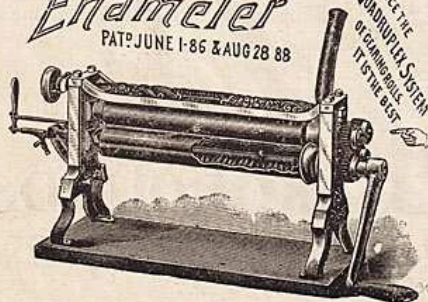
This machine has the turn-back roll, the one wheel end adjustment, lock nut, and set screw and swing fire pan.

The 10-inch size is made in two styles, light and heavy. It may be heated with alcohol, oil, or gas.

	Price.		Price.
8-in. roll	\$12.00	15-in. roll	\$30.00
10 " " light,	15.00	20 " "	40.00
10 " " heavy,	25.00	25 " "	55.00

THE GLOBE Enameler

PAT. JUNE 1-86 & AUG 28 88



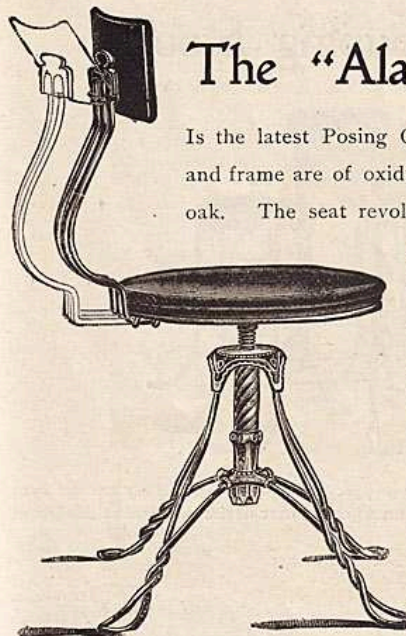
NOTICE: THE QUADRUPLEX SYSTEM IS THE BEST

No scratches. No sweat. No smoke. No soot. No lubricating. No dirt. No discomfort from heat. Quick heater. Elegantly finished.

	Price.
10-inch,	\$30.00
15 "	40.00
20 "	50.00
25 "	60.00

In ordering, don't forget to specify whether gas or gasoline attachment is wanted.

The "Alaska" Posing Chair



Is the latest Posing Chair for bust portraits. The legs, back, and frame are of oxidized steel; seat and back support are of oak. The seat revolves, and can be raised or lowered to any desired height. The back slides backwards and forwards, as shown in the cut; and the back support automatically adjusts itself to give a maximum of comfort to the sitter.

Price, \$7.00

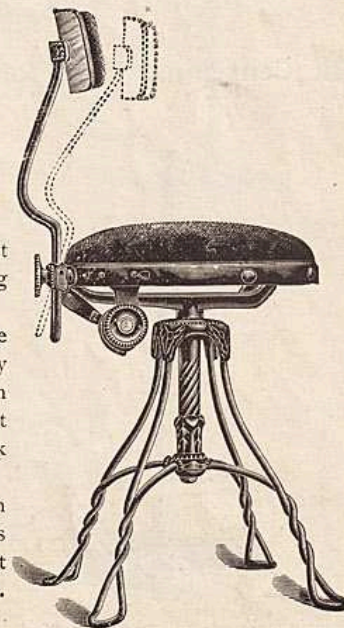
The Elite Posing Chair.

Unique, Handsome, Indestructible.

This is the latest and one of the best chairs ever offered the trade for use in posing subjects for bust pictures.

The seat revolves on a screw, which at the same time elevates or depresses it to suit any height of subject. A clamp under the seat can be used to tighten the screw, so that the subject will not turn the seat involuntarily. The back is adjustable, both vertically and horizontally.

The frame of bent steel rods, plated in antique copper, is practically indestructible, as well as handsome in design and finish; and it will not look shabby, even after years of use. It is warranted to please.



Antique copper finish, oak seat and back,	Price.	\$8.00
" " " plush or leather seat and back,		9.50

The Globe Grouping Stools.

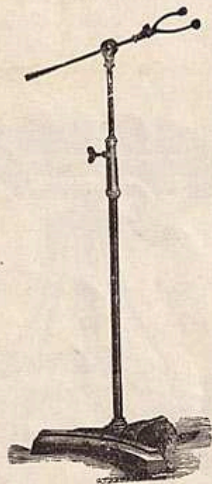


These are made of twisted steel rods, antique copper finish, oak seats. They are the most compact, durable, attractive and sensible grouping arrangement ever devised, as well as the lowest (quality considered) in price.

No. 1 is 11 inches high, No. 2, 17 inches, and No. 3, 24 inches.

Price for any height, \$2.50 each.

The Centennial Head Rest.



Plain and neat, with no chance for dust.

THE PRICES ARE:

Tall, \$2.75
Short, 2.50

Success Head Rest.



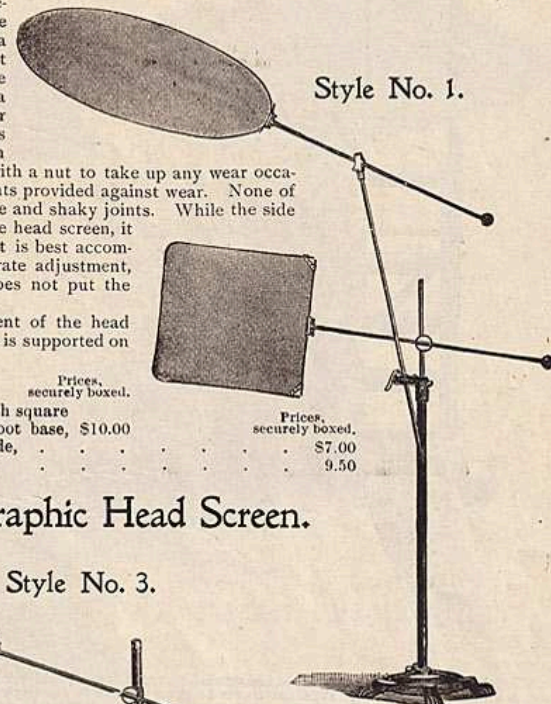
Tall, \$3.25
Short, 3.15
With back support 75 cts. extra.

White's Perfection Head Screen and Side Shade.

The base standard has the double or duplex joint, providing a separate rod for the new compound clamping and swivelling joint.

In this style the head screen is held by a projecting joint on the base support, having the sectional ball and slide rod movement, which extends its range more than twofold in the area it will cover, giving adjustment from a height of 8 feet to the floor to any position within a circle of 8 feet, and without other means of adjustment than is instantly afforded by the cam lever, which latter is provided with a nut to take up any wear occasioned by use, as are all the joints provided against wear. None of the parts have back lash or loose and shaky joints. While the side shade is used conjointly with the head screen, it is evident that the desired effect is best accomplished by this facility for separate adjustment, as the placing of one shade does not put the other out of position.

The side shade is independent of the head screen in its movements, while it is supported on the same base.

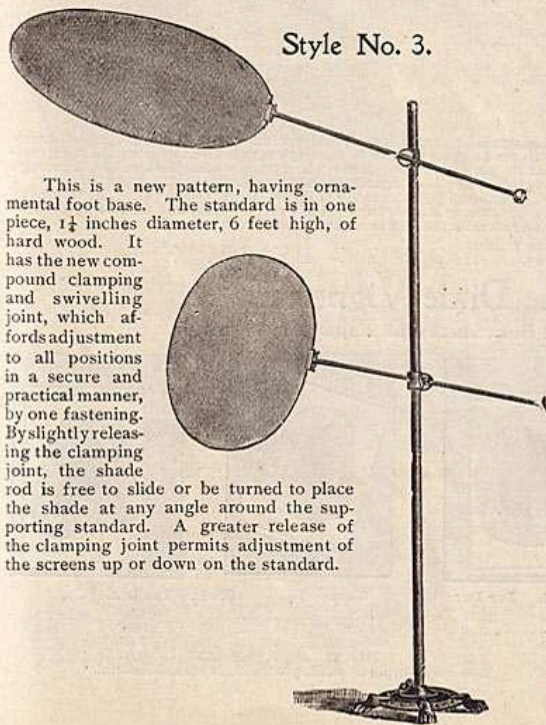


Style No. 1.

- No. Prices, securely boxed.
- 1. Head screen, as illustrated, with square side shade and ornamental foot base, \$10.00
 - 1. Head screen, without side shade, 7.00
 - 1. Head screen, with oval shade, 9.50

Prices, securely boxed, \$7.00
9.50

White's Photographic Head Screen.



Style No. 3.

This is a new pattern, having ornamental foot base. The standard is in one piece, 1 1/4 inches diameter, 6 feet high, of hard wood. It has the new compound clamping and swivelling joint, which affords adjustment to all positions in a secure and practical manner, by one fastening. By slightly releasing the clamping joint, the shade rod is free to slide or be turned to place the shade at any angle around the supporting standard. A greater release of the clamping joint permits adjustment of the screens up or down on the standard.

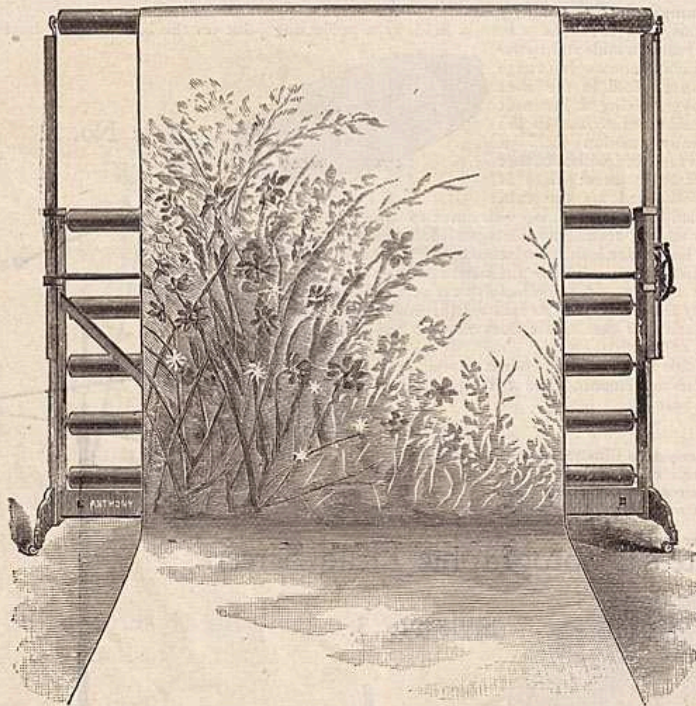
No. 1 Perfection Head Screen and Square Side Shade.

PRICES.

- No. 3. Head screen, as illustrated, with oval side shade, \$7.00
- If with square side shade, 7.50
- No. 3. Head screen, without side shade, 4.50

In ordering side shades for this style, specify that they are for No. 3 pattern.

The Anthony Background Carrier.



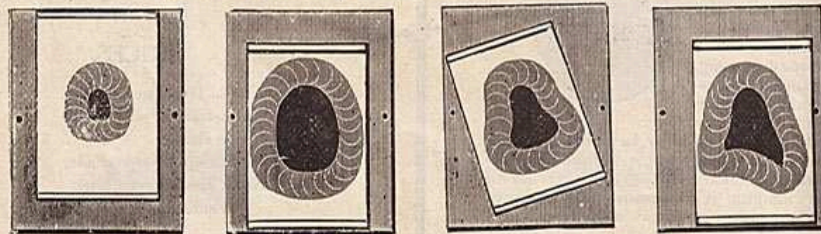
This carrier is by far the best on the market as regards style and workmanship. Every desirable feature is embodied in this carrier. It is constructed with a view to obtaining every desired result with the greatest simplicity and ease. The manipulating is all done with one crank or hand wheel. This one wheel, always in the same position, both elevates the roller and winds and unwinds the ground.

The roller can be raised to any height, the end posts or roller supports being telescopic. The improved roller for the Anthony Carrier is a specially made hollow tube, with canvas cover, and cannot be bent or indented. Made regularly for grounds 8 feet wide, 10 feet carriers to order only.

Price, complete, with one roller, \$25.00
 " extra (3 in.) rollers, 2.50

The Dixie Vignetter.

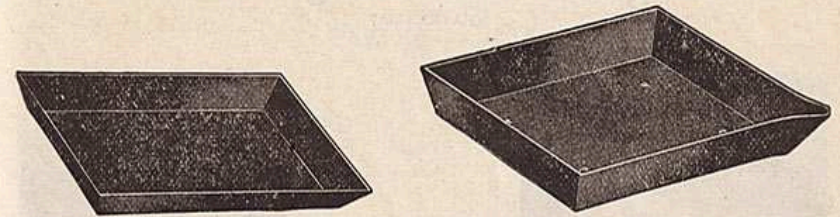
The First and Only Successful Adjustable Vignetter.



Size.	Each	Per Doz.	Size.	Each.	Per Doz.
3 1/2 x 4 1/2	\$0.30	\$3.50	5 x 8	\$0.30	\$3.50
4 x 5	.30	3.50	6 1/2 x 8 1/2	.45	5.00
4 1/2 x 6 1/2	.30	3.50	8 x 10	.60	7.00
4 3/4 x 6 3/4	.30	3.50	10 x 12	.75	9.00
5 x 7	.30	3.50			

Sample by mail, postpaid, 10 cts. additional.

Composition and Glossy Rubber Developing Trays.



SHALLOW.

DEEP.

The latest, the cheapest, the best.
 Guaranteed to be acid and alkali proof.

Smooth, handsome, strong.
 Guaranteed to be acid and alkali proof.

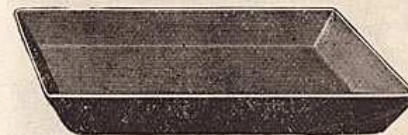
The above cuts show the relative shape and depth of the two styles. Both have slight knobs on the bottom, and the deep trays all have a lip.

Glossy hard rubber trays. Same list as composition, shallow only.

Size, 3 1/2 x 4 1/2	shallow, price \$0.20	deep, price \$0.50
" 4 x 5	.28	.70
" 5 x 8	.56	.85
" 6 1/2 x 8 1/2	.72	1.15
" 8 x 10	1.08	1.75
" 10 x 12		2.40
" 11 x 14		

Porcelain Trays.

Size	shallow	deep	Price	Size	shallow	deep	Price
5 x 7	\$0.44	\$0.62		11 x 14	\$2.16	\$2.64	
5 1/2 x 8 1/2	.60	.75		14 x 17	5.10	6.60	
7 x 9	.66	.82		15 x 19	6.28	8.00	
8 x 10	.82	1.00		19 x 24	12.88	16.00	
10 x 12	1.32	1.66					



Papier Mache Trays.

A recent importation of superior quality, and at reduced prices. These goods are very durable, light in weight, and deep. They are black in color, and in general appearance not unlike the hard rubber tray.

Size	each	Price	Size	each	Price	Size	each	Price
3 1/2 x 4 1/2	\$0.25		8 1/2 x 10 1/2	\$0.90		16 1/2 x 20 1/2	\$3.25	
4 1/2 x 5 1/2	.30		10 1/2 x 12 1/2	1.25		19 1/2 x 24	5.00	
5 1/2 x 7 1/2	.35		12 1/2 x 14 1/2	1.75		23 x 27	6.00	
5 3/4 x 8 3/4	.40		14 1/2 x 18	2.75		26 x 30	9.75	
7 x 9	.60					28 x 34	10.50	

Vulcanite Trays.



Size	Price	Size	Price	Size	Price
4 1/2 x 5 1/2 deep	\$0.50	8 1/2 x 10 1/2 deep	\$1.15	18 x 22 deep	\$5.00
5 1/2 x 7 1/2	.60	10 1/2 x 12 1/2	1.75	19 x 24	5.75
5 3/4 x 8 3/4	.70	12 x 16	2.40	21 x 26	7.50
7 x 9	.85	15 x 19	4.25		

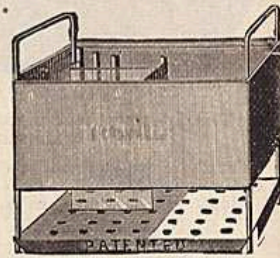
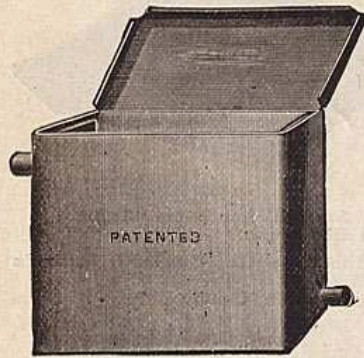


Glass Trays.

Size	Price
Amber for 4 x 5 plates or under	\$0.25
" 5 x 8	.40
" 7 x 9	.65
" 8 x 10	.75

Negative Washing Boxes.

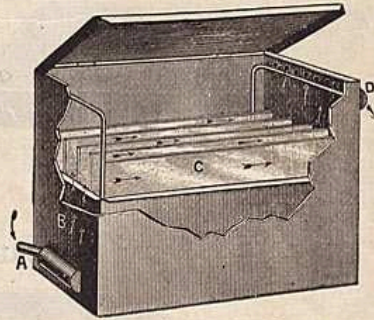
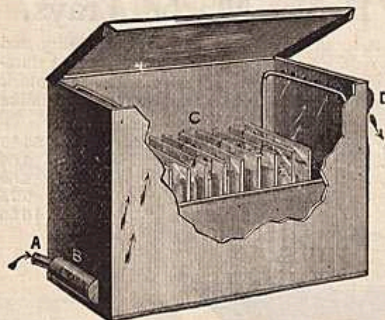
(PATENTED.)



For 3 1/2 x 4 1/2 plates,	Each.	\$1.60	For 6 1/2 x 8 1/2 plates, and smaller sizes,	Each.	\$2.25
" 4 x 5 " and smaller sizes,		1.75	" 8 x 10 " " " "		2.50
" 4 1/2 x 5 1/2 " " " "		1.90	" 10 x 12 " " " "		4.00
" 4 1/2 x 6 1/2 " " " "		2.00	" 11 x 14 " " " "		5.00
" 5 x 7 " " " "		2.10	" 14 x 17 " " " "		7.50
" 5 x 8 " " " "		2.15	" 8 x 10 adjustable washing box,		4.00,

adjustable for 6 1/2 x 8 1/2, 5 x 8, 5 x 7, 4 x 5, 3 1/2 x 4 1/2 plates. All sizes to be washed at once.

The Perfection Washing Box.



In the arrangement of these washing boxes, several advantageous principles have been carried out.

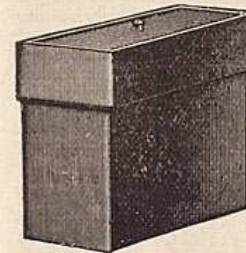
1. Each box takes several sizes of plates.
2. The water enters the bottom of the box in its full width, and strikes all the plates at once. It leaves the box in the same manner. As a result, the box washes the plates thoroughly.
3. The plates rest on a metallic rack, and can be removed in one single motion, the rack then serving as a drying rack.
4. Two sizes will suffice to wash all plates from 3 1/2 x 4 1/2 to 8 x 10.

No. 1 takes twenty-two plates 3 1/2 x 4 1/2, or 4 1/2 x 6 1/2, or twelve 6 1/2 x 8 1/2,	Price.	\$2.00
" 2 " " 4 x 5, or 5 x 7, or 5 x 8, or twelve 8 x 10,		2.25

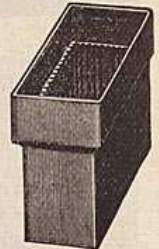
The Pet Washing Box.

Takes six plates 5 x 7 or twelve plates 4 x 5,	Price.	\$1.00
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The Universal Hard Rubber Fixing Box.



No. 1.



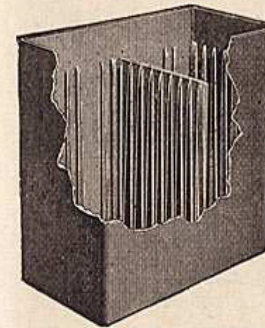
No. 2.

Differs from our regular Fixing Box in that it has ridges or grooves on all four sides. Each size takes several sizes of plates; large ones the long way, small ones the short way of the box (see Fig. 2). The box also has a cover to keep out dust and prevent evaporation.

All these boxes save your hypo, plates, and temper.

Is made in two sizes. No. 1 allows of twenty 3 1/2 x 4 1/2, 4 1/2 x 5 1/2, or 4 1/2 x 6 1/2, or eleven 6 1/2 x 8 1/2 plates being fixed at one time.

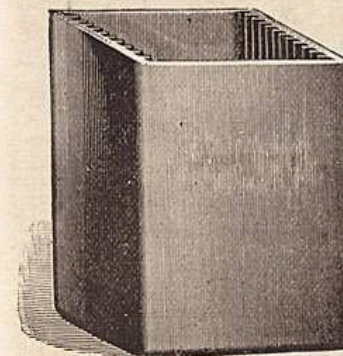
Price,	\$4.50
No. 2 allows of twenty-two 4 x 5, 5 x 7, or 5 x 8, or eleven 8 x 10 plates being fixed at one time.	
Price,	\$5.00



Composition Fixing Boxes.

Fixing bath for 4 x 5,	\$2.00
" " " 5 x 7 or 5 x 8,	2.25
" baths " same, with partitions,	3.00
" " " 8 x 10,	3.50
" " " same, with partitions,	4.00

Hard Rubber Fixing Baths.

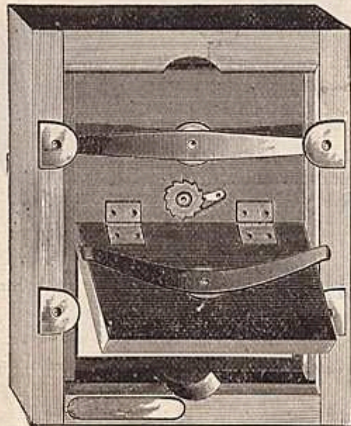


The advantages of this bath are: *first*, that it is made of hard rubber; *second*, that it is smooth and can easily be kept clean; *third*, that it holds one dozen plates, thus saving many trays; *fourth*, that it has a ridge at the bottom which keeps the plate above any sediment that may collect there; *fifth*, that the edges of the film will not be scratched in the groove.

For 3 1/2 x 4 1/2, or lantern-slide plates,	\$1.75
" 4 x 5 plates,	2.00
" 4 1/2 x 6 1/2 " "	2.15
" 5 x 7 " "	2.25
" 5 x 8 " "	2.50
" 6 1/2 x 8 1/2 " "	3.00
" 8 x 10 " "	3.50
" 11 x 14 " 1/2 dozen,	7.50
" 14 x 17 " "	10.00

Improved Printing Frames.

These printing frames have been greatly improved by the placing of a washer under the spring, thereby saving the wear and tear of the wood-work, and the springs are fastened with rivets instead of screws. A tongue and groove are fitted into the back of frame where the two parts are hinged, preventing the entrance of any light. There has also recently been added a spring tally for recording the number of prints made (see cut). A celluloid tablet is recessed into each frame, constituting an admirable means for recording details of negative and of printing. Being recessed, the tablet is out of the way; and no erasure of the notes is possible, unless desired. The celluloid takes the pencil easily, and marks are readily washed off.



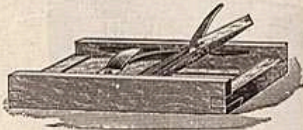
Size.	Flat.	Deep.	Size.	Flat.	Deep.
3 1/2 x 4 1/2	\$0.36	—	11 x 14,	\$1.80	\$2.40
4 x 5,	.38	—	14 x 17,	2.40	3.00
4 1/2 x 5 1/2,	.40	—	16 x 20,	3.00	4.20
4 1/2 x 6 1/2,	.42	—	17 x 20,	3.00	4.50
5 x 7,	.50	—	18 x 22,	4.00	5.00
5 x 8,	.52	—	20 x 24,	5.00	5.25
6 1/2 x 8 1/2,	.60	\$1.20	24 x 30,	—	8.80
8 x 10,	.75	1.40	35 x 45,	—	15.00
10 x 12,	1.00	1.60	30 x 60,	—	20.00

When the backs open lengthwise, 10 per cent. additional is charged.

Ray Printing Frame.

This frame is made of best seasoned cherry, and springs of best spring brass. It is designed principally for the amateur's use. It is light and strong.

Size, 2 1/2 x 2 1/2.	Price, \$0.25	Size, 3 1/2 x 4 1/2.	Price, \$0.25
" 3 1/2 x 3 1/2.	" .25	" 4 1/2 x 4 1/2.	" .25
		" 4 x 5.	" .25



The Photoscript.

Is an ingenious apparatus by means of which the operator may title and number his negatives in plain type, with little or no trouble, directly on the film surface. The letters and numbers so produced are clean cut and white, and may be put in any corner or margin desired.

Price, \$3.75

RETOUCHING PENCILS AND LEADS.

Pencils, each,	\$0.10	Leads, half dozen,	\$0.60
" per dozen,	1.00	Holder and one lead,	.25
India Ink, per stick,	\$0.20.		

RETOUCHING FLUID.

Snell's,	\$0.25	Bordeaux,	\$0.50	A, P. & W.,	\$0.50	Fritz,	\$0.35
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SPOTTING-OUT AND RETOUCHING COLORS.

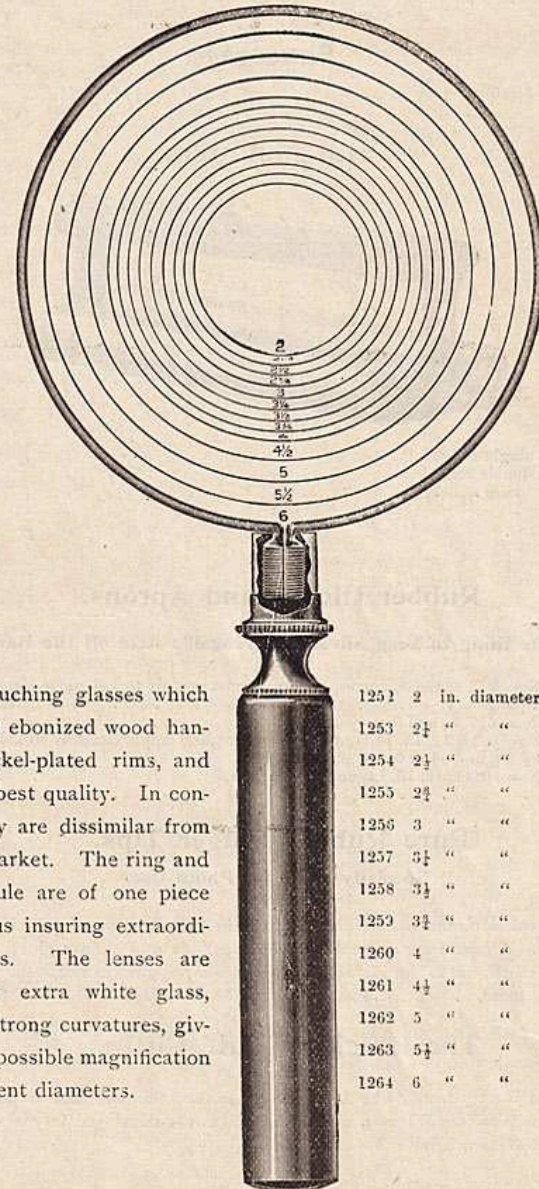
Aristo spotting-out colors, 3 shades,	per set,	\$0.50
Spurr's spotting-out and retouching colors, 7 shades,	" "	.50
Talbot's spotting-out colors, 5 small tubes,	" "	.75
" " " large size, 7 colors,	" "	3.00

STRAUSS MARL.

Is an invaluable aid to operator, printer, and retoucher. For working in shadows and backgrounds on the negative it has no equal. Invaluable for blocking out and vignetting. Far superior to any opaque. Sold in glass jars with metal screw top.

Price, per jar, \$1.00

Retouching Glasses.



The retouching glasses which we offer have ebonized wood handles and nickel-plated rims, and are the very best quality. In construction they are dissimilar from any on the market. The ring and threaded ferule are of one piece of metal, thus insuring extraordinary firmness. The lenses are ground from extra white glass, and of very strong curvatures, giving the best possible magnification for the different diameters.

	Price.
1251 2 in. diameter,	\$0.40
1253 2 1/4 " " . . . . .	.45
1254 2 1/2 " " . . . . .	.55
1255 2 3/4 " " . . . . .	.65
1256 3 " " . . . . .	.80
1257 3 1/4 " " . . . . .	.90
1258 3 1/2 " "	1.05
1259 3 3/4 " "	1.25
1260 4 " "	1.50
1261 4 1/4 " "	1.90
1262 5 " "	2.40
1263 5 1/2 " "	3.00
1264 6 " "	3.50

Cut one-half of actual size.

Lantern Slide Plates.

Carbutt's, Cramer's, Climax, Standard, Wuestner, Seed's,	\$0.55
Eastman, . . . . .	.70
Seed's G. B. P. R. plates, six tones by development alone, . . . . .	.60

For lantern slide accessories, see page 123.

Stripping Plates.

Size.	Carbutt's Plain.	Carbutt's Non-Halation.	Seed's.	Cramer's Lightning.	Cramer's Iso.	Wuestner's Regular and Orthochromatic.	Climax.
5 x 7	\$1.45	\$1.55	\$1.50	\$1.45	—	\$1.45	\$1.45
5 x 8	1.65	1.75	1.65	1.65	\$2.00	1.65	1.65
6½ x 8½	2.20	2.35	2.20	2.20	2.65	2.20	2.20
7 x 10	2.80	2.95	2.85	2.80	3.36	2.80	2.80
8 x 10	3.20	3.45	3.20	3.20	3.85	3.20	3.20
10 x 12	5.00	5.40	5.50	5.00	6.00	5.05	5.00
11 x 14	6.60	7.50	6.65	6.65	8.00	6.65	6.60
14 x 17	12.00	12.95	12.00	12.00	14.40	12.00	12.00
16 x 20	16.60	18.00	16.65	16.65	20.00	16.65	16.60
17 x 20	17.30	18.70	17.50	17.50	21.00	17.30	17.30
18 x 22	20.00	23.75	20.00	20.00	24.00	20.00	20.00
20 x 24	24.50	26.60	25.00	25.00	30.00	24.50	24.50

Discounts Quoted upon Application.

Transparency and Opal Plates.

Per dozen.

Size.	Seed's Cramer Carbutt A.	Seed G. G. Trans.	Carbutt's G. G. Climax G. G.	Seed's G. B. P. R.	Carbutt's Plain Opals.	Carbutt's Seed's Ground Opals.
3½ x 4½	Halves also. \$0.45	\$0.55	Halves also. —	\$0.50	Halves also. \$0.55	Halves also. \$0.60
4 x 5	.65	.80	\$0.70	.70	.80	.85
4½ x 6½	.90	1.10	1.15	1.00	1.20	1.45
5 x 7	1.10	1.40	1.40	1.25	1.50	1.80
5 x 8	1.25	1.55	1.60	1.40	1.70	2.25
6½ x 8½	In halves also. \$1.65	In halves also. \$2.10	Per half-dozen. \$1.15	1.80	Per half-dozen. \$1.20	Per half-dozen. \$1.45
8 x 10	2.40	3.00	1.65	2.65	1.75	2.15
10 x 12	3.80	4.75	2.50	4.20	2.65	3.25
11 x 14	5.00	6.25	3.20	5.50	3.50	4.20
14 x 17	9.00	11.25	5.50	9.90	6.00	7.00

Transparency frames and chains, see page .

Ortho- and Iso-chromatic Plates.

For correct color values, auburn hair, colored draperies, cloud effects, etc. Best results obtained with Ray filter, which see (pages 28, 29).

Cramer's iso-chromatic, instantaneous, medium, and slow; Wuestner's ortho-chromatic; Carbutt's ortho-chromatic; Seed's ortho-chromatic.

Same list as regular plates.

Process Plates.

For photo-mechanical engraving processes, copies of line drawings, etc. Gives extreme contrast.

Carbutt's, Wuestner's, Climax, Seed, Standard, Cramer contrast.

Same list as regular plates.

Carbutt's X-ray Plates.

Size.	Price.	Size.	Price.
5 x 7,	\$1.30	11 x 14,	6.00
5 x 8,	1.56	14 x 17,	11.65
6½ x 8½,	2.00	16 x 20,	15.90
8 x 10,	2.90	18 x 22,	21.00
10 x 12,	4.50	20 x 24,	23.40

Non-halation Plates.

Size.	Eastman's, Seed's and New York Non-Halation. Per Doz.	Cramer's Non-Halation. Per Doz.	Hammer Aurora D. C. Non-Halation. Per Doz.	E. I. Non-Halation. Per Doz.	Carbutt's Non-Halation. Per Doz.
3½ x 4½	\$0.55	\$0.45	\$0.55	\$0.55	\$0.55
4 x 5 . . . . .	.80	.65	.80	.80	.80
4½ x 5½ . . . . .	.95	.75	.95	.90	.90
4½ x 6½	1.10	.90	1.10	1.10	1.10
4½ x 6½	1.20	1.00	1.20	1.20	1.20
5 x 7	1.40	1.10	1.40	1.40	1.30
5 x 8	1.55	1.25	1.55	1.55	1.50
6½ x 8½	2.10	1.65	2.10	2.10	2.00
7 x 10	2.65	2.10	2.65	2.70	2.50
8 x 10	3.00	2.40	3.00	3.00	2.90
10 x 12	4.75	3.80	4.75	4.75	4.50
11 x 14	6.25	5.00	6.25	6.25	6.00
14 x 17	11.25	9.00	11.25	11.25	10.80
16 x 20	15.65	12.50	15.65	15.75	15.00
17 x 20	16.25	13.00	16.25	16.25	15.60
18 x 22	19.40	15.50	19.40	19.25	19.80
20 x 24	23.15	18.50	23.75	23.50	22.20

Discounts Quoted upon Application.

Light Proof Film Cartridges.

For Pocket Kodaks, Cartridge Kodaks, Bullets, Bull's-eye, and Falcons.

		Price.
12 exposures,	1 1/2 x 2 in. Pocket Kodak,	\$0.25
12 "	2 1/2 x 3 1/2 " Folding Pocket Kodak,	.40
12 "	2 x 2 1/2 " No. 1 Falcon,	.40
12 "	3 1/2 x 3 1/2 " No. 2 Bullet, Bull's-eye, Falcon, or Specials,	.60
18 "	3 1/2 x 3 1/2 " " " " " " " " " " " "	.90
12 "	4 x 5 " No. 4 Bullet, No. 4 Bull's-eye, or Specials,	.90
12 "	5 x 4 " No. 4 Cartridge Kodak,	.90
12 "	7 x 5 " No. 5 Cartridge Kodak,	1.60

Films for Cartridge Roll Holders are special cartridges. See Cartridge Roll Holder.

Eastman's Transparent Films.

On Patent Spools to fit the Eastman-Walker Roll Holder.

Size.		Price.
3 1/2 in.,	3 1/2 x 4 1/2 exposures,	24 exposures, \$1.00 48 exposures, \$2.00
4 "	4 x 5 " " " " " " " " " " " "	1.50 " 3.00
4 1/2 "	4 1/2 x 6 1/2 " " " " " " " " " " " "	2.00 " 4.00
4 3/4 "	4 3/4 x 7 1/2 " " " " " " " " " " " "	2.70 " 5.40
4 1/2 "	4 1/2 x 6 1/2 " " " " " " " " " " " "	2.25 " 4.50
5 "	5 x 8 " " " " " " " " " " " "	3.00 " 6.00
6 1/2 "	6 1/2 x 8 1/2 " " " " " " " " " " " "	4.00 " 8.00
8 "	8 x 10 " " " " " " " " " " " "	6.00 " 12.00

Kodak Films.

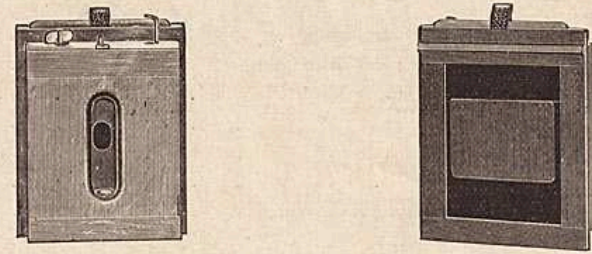
No.	Length of Spool.	Price.	No.	Length of Spool.	Price.
No. 1,	2 1/2 in., 2 1/2 in., 150 exposures,	\$3.75	No. 4, Jr.,	4 in., 4 x 5, 48 exposures,	\$3.00
" 1,	2 1/2 " 2 1/2 " " 100 " " "	2.50	" 4, Jr.,	4 " 4 x 5, 100 " " "	6.25
" 1,	2 1/2 " 2 1/2 " " 50 " " "	1.25	" 4, Folding,	4 " 4 x 5, 48 " " "	3.00
" 2,	3 1/2 " 3 1/2 " " 100 " " "	4.25	" 4, " "	4 " 4 x 5, 100 " " "	6.25
" 2,	3 1/2 " 3 1/2 " " 200 " " "	8.50	" 5, " "	5 " 5 x 7, 32 " " "	4.00
" 2,	3 1/2 " 3 1/2 " " 150 " " "	6.35	" 5, " "	5 " 5 x 7, 54 " " "	6.00
" 2,	3 1/2 " 3 1/2 " " 60 " " "	2.50	" 5, " "	5 " 5 x 7, 100 " " "	11.00
" 3,	4 1/2 " 3 1/2 x 4 1/2 " " 60 " " "	2.50	" 6, " "	6 1/2 " 6 1/2 x 8 1/2, 24 " " "	4.00
" 3,	4 1/2 " 3 1/2 x 4 1/2 " " 100 " " "	4.25	" 6, " "	6 1/2 " 6 1/2 x 8 1/2, 48 " " "	8.00
" 3,	4 1/2 " 3 1/2 x 4 1/2 " " 250 " " "	10.50	A, "Daylight,"	3 1/2 " 2 1/2 x 3 1/2, 24 " " "	.75
" 3, Jr.,	3 1/2 " 3 1/2 x 4 1/2 " " 60 " " "	2.50	A, "Ordinary,"	3 1/2 " 2 1/2 x 3 1/2, 24 " " "	.65
" 3, " "	3 1/2 " 3 1/2 x 4 1/2 " " 100 " " "	4.25	B, "Daylight,"	4 " 3 1/2 x 4, 24 " " "	1.10
" 4,	5 " 4 x 5 " " 48 " " "	3.00	B, "Ordinary,"	4 " 3 1/2 x 4, 24 " " "	1.00
" 4,	5 " 4 x 5 " " 100 " " "	6.25	C, "Daylight,"	5 " 4 x 5, 24 " " "	1.60
" 4,	5 " 4 x 5 " " 250 " " "	15.50	C, "Ordinary,"	5 " 4 x 5, 24 " " "	1.50
" 4,	5 " 4 x 5 " " 24 " " "	1.50			

Kodet Films.

No.	Price.
No. 4, Regular, 4 x 5, 48 exposures, 4-in. spool,	\$3.00
" 4, Folding, 4 x 5, 48 " " " "	3.00
" 5, " " 5 x 7, 32 " " " "	4.00
" 5, " " 5 x 7, 54 " " " "	6.00

In ordering Kodak or Kodet Spools, always give the exact designation of the instrument.

The Eastman Cartridge Roll Holder.



Cartridge roll holders, which can be fitted to any ordinary camera by an intelligent cabinet-maker, are now available. They take special light proof cartridges of twelve exposures, are provided with red celluloid windows in the back for counting exposures in same manner as in the Cartridge System Kodaks, have an improved tension device to make the film lie flat during exposure, and are equipped with dark slides, making them interchangeable with plate holders when in the field. Well made of hard wood, with brass fittings, and handsomely finished.

Special Spools for Cartridge Roll Holders.

In ordering, specify for Cartridge Roll Holders, giving length of spool, as the spools are different from the ordinary spools.

PRICE LIST.

No. 2.	3 1/2 x 3 1/2,	\$5.00
No. 4.	4 x 5 (specify whether horizontal or vertical),	5.00
No. 5.	5 x 7 (vertical only),	6.50
3 1/2-in. cartridge,	12 exposures, for No. 2 roll holder,	.60
4 " "	12 " " " 4 horizontal roll holder,	.90
5 " "	12 " " " 4 vertical " " "	.90
7 " "	12 " " " 5 vertical " " "	1.60
Glycerine,	prevents curling after development,	per oz., .12

Blair Light Proof Film Cartridges.

For Baby Hawk-eyes, Hawk-eye Jrs., and Tourist Hawk-eyes.

12 exposures,	2 x 2 1/2 in., Baby Hawk-eye,	\$0.40
12 "	3 1/2 x 3 1/2 " Hawk-eye, Jr.,	.60
25 "	3 1/2 x 3 1/2 " " " " "	1.20
12 "	3 1/2 x 3 1/2 " Tourist Hawk-eye,	.60
12 "	4 x 5 " Hawk-eye, Jr.,	.85
18 "	4 x 5 " " " " "	1.25
12 "	4 x 5 " Tourist Hawk-eye,	.85
12 "	5 x 7 " special roll holder,	1.60

Blair Films.

Inches Wide.	Long.	Equal to following exposures.	Price.	Inches Wide.	Long.	Equal to following exposures.	Price.
3 1/2	108	25 3 1/2 x 4 1/2,	\$1.20	5	180	{ 44 5 x 4 or 25 5 x 7 or 22 5 x 8,	\$3.00
3 1/2	215	50 " " "	2.40			{ 88 5 x 4 or 50 5 x 7 or 44 5 x 8,	6.00
3 1/2	90	25 3 1/2 x 3 1/2,	1.10	5 1/2	105	25 5 1/2 x 4,	1.65
3 1/2	180	50 " " "	2.20	5 1/2	180	25 5 1/2 x 7 or 43 5 1/2 x 4,	3.00
4	130	25 4 x 5,	1.65	5 1/2	205	50 5 1/2 x 4,	3.30
4	255	50 " " "	3.30	5 1/2	355	50 5 1/2 x 7,	6.00
4	380	75 " " "	5.00	6 1/2	218	25 6 1/2 x 8 1/2,	4.40
4	505	100 " " "	6.60	6 1/2	435	50 " " "	8.80
4 1/2	135	{ 40 4 1/2 x 3 1/2 or 25 4 1/2 x 5 or 22 4 1/2 x 5 1/2 or 20 4 1/2 x 6 1/2,	1.65	8	255	25 8 x 10,	6.60
4 1/2	265	{ 80 4 1/2 x 3 1/2 or 50 4 1/2 x 5 or 48 4 1/2 x 5 1/2 or 40 4 1/2 x 6 1/2,	3.30	8	505	50 " " "	13.00
4 1/2	505	100 4 1/2 x 5,	6.60	8 1/2	167	25 8 1/2 x 6 1/2,	4.40
				8 1/2	330	50 " " "	8.80

Photographic Books.

Lloyd's Guide for Beginners in Photography,	\$0.10
The Photographic Primer. Mellen & Worthington,	1.00
First Step in Photography. F. Dundas Todd, . . . . .	.25
Second Step in Photography. " " . . . . .	.50
Photo Beacon Exposure Tables, . . . . .	.25
The Knack, . . . . .	.25
Everybody's Guide to Photography. E. J. Wall, . . . . .	.40
Negative Making. Captain Abney, . . . . .	.40
The Amateur Photographer. Ellerlie Wallace,	1.00
Popular Photographic Printing Processes. H. McLean,	1.00
Amateur Photographers. W. I. L. Adams,	1.00
Manual of Photo Engraving. H. Jenkins,	2.00
Photographic Lenses. J. A. Hodges, . . . . .	.80
Progress of Photography. H. W. Vogel,	3.00
Photography Indoors and Out. Alexander Black, . . . . .	.75
An Adventure in Photography. Octave Thanet,	1.50
Artistic Lighting. James Inglis,	1.00
Part I, Reference Book of Practical Photography. Todd, . . . . .	.50
Letters on Landscape Photography. H. P. Robinson,	1.00
How to Make and Color Lantern Slides. Elmendorf,	1.00
Lantern Slides and How to Make Them. A. R. Dresser, . . . . .	.25
Photographic Amusements. W. E. Woodbury,	1.00
Sunlight and Shadow. W. I. L. Adams,	2.50
Chemistry of Light and Photography. Dr. Vogel,	2.00
Photographic Printing Methods. W. H. Burbank, . . . . .	.75
American Annual of Photography, . . . . .	.75
Anthony's International Annual, . . . . .	.75
British Annual of Photography, . . . . .	.50

Magazines.

	Per copy.	Per year.
The Photogram,	\$0.15	\$1.50
The Photographic Times, . . . . .	.35	4.00
The Photo Beacon, . . . . .	.10	1.00
Wilson's Photographic Magazine, . . . . .	.30	—
Anthony's Photographic Bulletin, . . . . .	.25	2.00
Professional Photographer, . . . . .	.10	1.00
American Journal of Photography, . . . . .	.25	2.00

Subscriptions received for these magazines. Issued monthly.

Mitchell's Developers.

Metol,	half-pints, \$0.35	pints, \$0.60
Eikonogen,	" " .35	" .60
Hydrokinone,	" " .30	" .50
Lantern Slide,	" " .40	" .75
Amateur Handy,	" " .25	
Hydrokinone and Eikonogen,		2 8-oz. bottles, .50

Powders.

Eiko-Quinone, 6 powders,	\$0.50
Snap Shot, 6 " . . . . .	.50
Bromide Paper, 6 " . . . . .	.35
Eikonogen, 6 " . . . . .	.25
Hydrokinone, 6 " . . . . .	.25
Pyro, 6 " . . . . .	.25
Presto, 6 " . . . . .	.50

Toning and Fixing Preparations.

Collodio-Toner,	half-pints, \$0.50	pints, \$1.00
Standard Toning and Fixing Fluid,	" " .35	" .60
Handy Toner,	" " .25	
Auric Toning Fluid,		per package, .75
"Ton-an-fix" (powder), . . . . .		.25
Standard Fixing Salt for Acid Fixing Bath,		
	for one pint, \$0.08; quart, \$0.15; $\frac{1}{2}$ gallon, \$0.25; gallon, \$0.70	

Intensifiers and Reducers.

Intensifying and Reducing Solutions,	3 8-oz. bottles, .75
"Handy" Intensifier,	half-pints, .35

Photo Materials Co.'s Papers.

R. M. AND W. PAPERS.

Kloro Special, Victor Special, gelatine, glossy.

Kloro, Victor, gelatine, glossy.

Kloro Matte, Victor Matte, gelatine, for platinum and carbon effects.

Celoxa and Vera, collodion, glossy.

Celoxa Matte and Vera Matte, collodion, for platinum and carbon effects.

PRICE LISTS.

Size.	GELATINE.						COLLODION.			
	KLORO SPECIAL. VICTOR SPECIAL.		KLORO. VICTOR.		KLORO MATTE. VICTOR MATTE.		CELOXA. VERA.		CELOXA MATTE. VERA MATTE.	
	Doz.	Gross.	Doz.	Gross.	Doz.	Gross.	Doz.	Gross.	Doz.	Gross.
2 1/2 x 3 1/2	\$0.10	\$0.45	\$0.15	\$0.75	\$0.15	\$0.75	\$0.15	\$0.75	\$0.15	\$1.00
3 x 4	.10	.60	.15	1.00	.15	1.00	.15	1.00	.15	1.40
3 1/2 x 3 1/2	.10	.60	.15	1.00	.15	1.00	.15	1.00	.15	1.40
2 3/4 x 5 1/2	.10	.65	.20	1.20	.20	1.20	.20	1.20	.20	1.60
3 1/4 x 4 1/4	.10	.65	.20	1.20	.20	1.20	.20	1.20	.20	1.60
3 1/2 x 5 1/4	.12	.75	.25	1.00	.25	1.00	.25	1.35	.25	2.00
3 1/4 x 5 1/2	.12	.75	.25	1.35	.25	1.60	.25	1.35	.25	2.00
4 x 5	.12	1.00	.25	1.50	.25	1.60	.25	1.50	.25	2.00
4 x 6	.15	1.00	.25	1.50	.25	1.90	.25	1.50	.25	2.00
4 1/2 x 6 1/2	.15	1.40	.30	2.00	.30	2.20	.30	2.00	.30	2.50
5 x 7	.20	1.75	.35	2.65	.35	2.80	.35	2.65	.40	3.50
5 x 8	.25	2.00	.40	3.00	.40	3.20	.40	3.00	.45	4.00
5 1/2 x 7 1/2	.30	2.50	.45	3.40	.45	4.00	.45	3.40	.50	5.00
6 x 8	.30	2.75	.50	3.75	.50	4.40	.50	3.75	.55	5.50
6 1/2 x 8 1/2	.35	3.00	.55	4.10	.55	4.80	.55	4.10	.65	6.00
7 x 9	.35	3.50	.65	5.25	.65	5.60	.65	5.25	.75	7.00
7 1/2 x 9 1/2	.40	3.75	.70	5.75	.70	6.00	.70	5.75	.80	7.50
8 x 10	.45	4.00	.75	6.00	.75	6.40	.75	6.00	.90	8.00
10 x 12	.65	6.00	1.10	9.00	1.10	9.60	1.10	9.00	1.25	12.00
11 x 14	.75	7.50	1.25	11.25	1.25	12.00	1.25	11.25	1.50	15.00
14 x 17	1.15	12.00	1.85	18.00	1.85	19.20	1.85	18.00	2.25	24.00
16 x 20	1.50	16.00	2.50	24.00	2.50	25.60	2.50	24.00	3.00	32.00
18 x 22	1.75	20.00	3.00	30.00	3.00	32.00	3.00	30.00	3.75	40.00
20 x 24	2.00	22.00	3.00	33.00	3.00	35.20	3.00	33.00	4.00	44.00
Seconds, 4 x 5 and cabinet,				.75	—	1.00	—	.75	—	—
Proofs, " " "				.50	—	.75	—	.50	—	—
In rolls, per foot,				.12	—	.16	—	.12	—	.20

Kloro hardener, Victor clearer, 12-oz. bottle, \$0.50
 Kloro or Victor combined toning and fixing solution, 12-oz. bottle, .50
 Victor gold, 1-oz. bottle, \$0.50; 2-oz. bottle, 1.00
 Vera platinum, 1-oz. bottle, .50; 2-oz. bottle, 1.00

Owing to the advances in raw paper stock in the European market, these list prices are subject to change without further notice.

Willis & Clements Platinum Papers.

Artistic photographers use Willis & Clements platinum paper for their finest black and white effects. It is remarkably simple, and requires no tedious washing, toning, and fixing, etc. The whole operation is complete in less than three-quarters of an hour. No hypo is used at any stage, which avoids all possibility of fading from that source. Willis & Clements prints are absolutely permanent, since the image consists of metallic platinum, which is the most stable metal known. Platinum prints will stand the action of all corrosive fluids except a boiling mixture of concentrated nitric and muriatic acids.

Two varieties, **Black and Sepia.**

In three grades:—

A. A., THIN SMOOTH.

B. B., HEAVY SMOOTH.

C. C., HEAVY ROUGH.

PRICE LISTS.

	Per doz.	A. A., SEPIA.		Per doz.
		A. A. BLACK.	B. B., BLACK AND SEPIA. C. C., BLACK AND SEPIA.	
3 1/2 x 3 1/2	\$0.30			\$0.30
3 1/4 x 4 1/4	.30			.30
4 x 5	.45			.50
3 1/2 x 5 1/2	.45			.55
4 1/4 x 5 1/2	.50			.60
4 1/4 x 6 1/2 (stretches in length)	.60			.70
5 x 7	.70			.80
5 x 8	.85			.95
5 1/2 x 7 1/2	1.00			1.25
6 1/2 x 8 1/2	1.15			1.25
8 x 10	1.70			1.85
10 x 12	2.50			2.80
11 x 14	3.40			3.75
14 x 17	5.25			6.00
16 x 20	6.75			7.00
20 x 26	9.00			10.00

Developer for 50-oz. solution, \$0.35; for 100-oz. solution, \$0.60.
 Sepia tablets, 50, \$0.50; 20, \$0.25; 10, \$0.15.

Owing to the advances in raw paper stock in the European market, these list prices are subject to change without further notice.

French Satin, Jr.

This new improved blue paper is the most brilliant of its class now upon the market. It is especially recommended for beginners, as it requires only simple fixing in water in place of the more complex operations of the ordinary silver papers. No other chemicals are necessary. French Satin has great keeping qualities, and is guaranteed for a year from date on package. Works with clean high lights, and is just the thing for snow and water views. We receive weekly shipments from the factory in Denver.

PRICE LIST.

Delivered by mail, postage paid, on receipt of price.

Size	Per package of 25 sheets.	Per gross.
3 1/4 x 4 1/4	\$.16	\$.80
3 1/2 x 3 1/2	.16	.80
4 x 4	.20	1.00
4 x 5	.20	1.00
4 1/4 x 6 1/4	.30	1.50
5 x 7	.35	1.75
5 x 8	.40	2.00
6 1/2 x 8 1/2	.56	3.00
8 x 10	.68	3.75
10 x 12	1.00	5.50
11 x 14	1.50	8.25
14 x 17	2.00	10.75
18 x 22	per dozen, 1.50	
20 x 24	" " 1.75	

The gross packages should be very popular; for, owing to our guarantee, parties at a distance can have at all times a full supply, with no danger of loss from bad paper. The special method of wrapping makes it necessary to open but twelve sheets at a time.

Owing to the advances in raw paper stock in the European market, these list prices are subject to change without further notice.

NEPERA PAPERS.

Rex, insoluble gelatine. Nepera, insoluble gelatine. Rubens, glossy collodion. Rembrandt, collodion mat, for platinum and carbon effects.

Size.	REX.		RUBENS AND NEPERA.		REMBRANDT.	
	Doz.	Gross.	Doz.	Gross.	Doz.	Gross.
2 1/4 x 3 1/2	\$0.10	\$0.45	\$0.15	\$0.75	\$0.15	\$1.10
3 x 4 or 3 1/2 x 3 1/2	.10	.60	.15	1.00	.15	1.25
3 1/4 x 4 1/4	.10	.75	.20	1.20	.20	1.60
3 7/8 x 5 1/2 (cabinet)	.12	.90	.25	1.35	.25	2.00
4 x 5	.12	.90	.25	1.50	.25	2.00
4 x 6	.15	1.20	.25	1.50	.25	2.00
4 1/4 x 6 1/4	.15	1.40	.30	2.00	.35	2.75
5 x 7	.20	1.75	.35	2.65	.40	3.50
5 x 8	.25	2.00	.40	3.00	.45	4.00
5 1/2 x 7 3/4	.30	2.50	.45	3.40	.50	5.00
6 x 8	.30	2.75	.50	3.75	.55	5.50
6 1/2 x 8 1/2	.35	3.00	.55	4.10	.65	6.00
7 x 9	.35	3.50	.65	5.25	.75	7.00
8 x 10	.45	4.00	.75	6.00	.90	8.00
10 x 12	.65	6.00	1.10	9.00	1.25	12.00
11 x 14	.75	7.50	1.25	11.25	1.50	15.00
14 x 17	1.50	12.00	1.85	18.00	2.25	24.00
16 x 20	1.75	16.00	2.50	24.00	3.00	32.00
18 x 22	1.75	20.00	3.00	30.00	4.00	40.00
20 x 24	2.00	22.00	3.00	33.00	4.00	44.00
Seconds (cabinets or 4 x 5)	—	.60	—	.80	—	1.20
Proofs " " "	—	.35	—	.50	—	—

One sheet, 25 in. x 10 ft. . . . Rex, \$1.00; Rubens and Nepera, \$1.20; Rembrandt, \$1.50.

EASTMAN KODAK CO.'S PAPERS.

Solio, gelatine. Eastern, collodion. Western, collodion.

Size.	SOLIO.			EASTERN COLLODION.		WESTERN COLLODION.	
	Doz.	1/2 Gross.	Gross.	Doz.	Gross.	Doz.	Gross.
2 1/4 x 2 1/2	\$0.15	—	\$0.75	—	\$0.75	—	\$0.75
2 1/4 x 3 1/2, carte de visite	.15	—	.75	\$0.15	.75	\$0.15	.75
2 3/4 x 3 1/2, "A Kodak,"	.15	—	1.00	—	—	—	—
3 x 4, mantello,	.15	—	1.00	.15	1.00	.15	1.00
3 1/2 x 3 1/2, for Bull's-eyes and Bullets,	.15	—	1.00	.15	1.00	.15	1.00
3 1/2 x 4, "B Kodak,"	.15	—	1.00	.15	1.00	.15	1.00
3 1/2 x 4 1/4	.15	—	1.00	.20	1.20	.20	1.20
4 x 5	.15	—	1.00	.25	1.35	.25	1.50
4 1/4 x 5 1/2	.20	—	1.25	.15	1.00	.15	1.00
3 7/8 x 5 1/2, cabinet,	.25	—	.75	.25	1.75	.25	1.20
3 7/8 x 5 3/8	.25	—	1.50	.25	1.75	.25	1.35
4 x 6	.25	—	1.50	.25	1.50	.25	1.50
5 x 7	.35	\$1.60	2.65	.35	2.65	.35	2.65
5 x 8	.40	1.75	3.00	.40	3.00	.40	3.00
5 1/2 x 7 3/4, Paris panel,	.45	1.95	3.40	.45	3.40	.45	3.40
6 1/2 x 8 1/2	.55	2.30	4.10	.55	4.10	.55	4.10
7 x 9	.65	2.90	5.25	.65	5.25	.65	5.25
8 x 10	.75	3.25	6.00	.75	6.00	.75	6.00
10 x 12	1.10	4.75	9.00	1.10	9.00	1.10	9.00
11 x 14	1.25	6.10	11.20	1.25	11.20	1.25	11.20
14 x 17	1.85	9.50	18.00	1.85	18.00	1.85	18.00
16 x 20	2.50	12.50	24.00	2.50	24.00	2.50	24.00
18 x 22, half-dozen, \$1.60,	3.00	15.50	30.00	3.00	30.00	3.00	30.00
20 x 24, " " 1.60,	3.00	17.00	33.00	3.00	33.00	3.00	33.00

Seconds: Solio, cabinets, gross, \$0.60; 4 x 5, 100 sheets, \$0.50. Western, cabinets, gross, \$1.00; 100 sheets, \$0.75. Eastern, cabinets, gross, \$0.60. Solio toning and fixing solution: 8-oz. bottle, \$0.60; half-gallon, \$2.00. Solio hardener, 8-oz., \$0.35; half-gallon, \$2.00. Powder to make 16 oz. hardener, \$0.40.

Owing to the advances in raw paper stock in the European market, these list prices are subject to change without further notice.

AMERICAN ARISTO PAPERS.

Collodion.

Aristo Junior, for average negatives. **Aristo Blue Label**, for soft negatives.
Aristo Platino, for platinum and carbon effects.

PRICE LIST.

	ARISTO, JR.		BLUE LABEL AND PLATINO.			
	Doz.	Gross.	Half-do.	Doz.	Half-gross.	Gross.
3 1/2 x 3 1/2	\$0.15	\$1.00	—	\$0.15	—	\$1.25
4 x 4	.20	1.20	—	.25	—	1.75
3 1/2 x 4 1/2	.20	1.20	—	.20	—	1.60
4 x 5	.25	1.35	—	.25	—	2.00
2 1/2 x 3 3/4, carte de visite,	.15	.75	—	.15	—	1.10
3 x 4, mantello,	.15	1.00	—	.15	—	1.25
3 1/2 x 5 1/2, cabinet,	.25	1.35	—	.25	—	2.00
3 3/4 x 5 3/8	.25	1.35	—	.25	—	2.00
4 x 6	.25	1.50	—	.25	—	2.00
4 1/2 x 6 1/2	.30	2.00	—	.30	—	2.50
5 x 7	.35	2.65	—	.40	1.85	3.50
5 1/2 x 7 3/4	.45	3.40	—	.50	2.65	5.00
5 x 8	.40	3.00	—	.45	2.10	4.00
6 1/2 x 8	.50	3.75	—	—	—	—
6 1/2 x 8 1/2	.55	4.10	—	.65	3.15	6.00
7 x 9	.65	5.25	—	.75	3.70	7.00
7 1/2 x 9 3/4	.70	5.75	—	—	—	—
8 x 10	.75	6.00	—	.90	4.20	8.00
10 x 12	1.10	9.00	—	1.25	6.30	12.00
11 x 14	1.25	11.20	—	1.50	7.90	15.00
14 x 17	1.85	18.00	—	2.25	12.60	24.00
16 x 20	2.50	24.00	—	3.00	16.80	32.00
18 x 22	3.00	30.00	2.00	4.00	21.00	40.00
20 x 24	3.00	33.00	2.25	4.00	23.00	44.00
Seconds, cabinet,	—	1.00	—	—	—	1.44
" 100 sheets,	—	.75	—	—	—	1.00
Aristo single platinum solution,	—	—	—	—	—	\$1.00
Aristo gold, No. 1 (amateur),	—	—	—	—	—	.50
" " " 2,	—	—	—	—	—	1.00
" " " 3,	—	—	—	—	—	2.00
" " " platinum, No. 1 (amateur),	—	—	—	—	—	.50
" " " " " 2,	—	—	—	—	—	1.00
Aristo spotting colors,	—	—	—	—	—	.50

PLATNI.

A new black and white paper, giving platinum tones on mere washing with water. No other operation is necessary. Supplied in two grades, regular and XX. (heavy rough).

PRICE LIST.

Size.	Regular Weight.		XX. Brand.		Size.	Regular Weight.		XX. Brand.	
	Doz.	Gross.	Doz.	Gross.		Doz.	Gross.	Doz.	Gross.
2 1/2 x 3 1/2	\$0.15	\$1.00	\$0.25	\$1.50	6 1/2 x 8 1/2	\$0.70	\$6.60	\$1.00	\$10.00
3 x 4	.15	1.40	.25	2.00	7 x 9	.80	7.70	1.25	11.50
3 1/2 x 3 1/2	.15	1.40	.30	2.50	7 1/2 x 9 1/2	.90	8.25	1.35	12.50
3 1/2 x 4 1/2	.20	1.60	.30	2.50	8 x 10	1.00	8.80	1.50	13.25
3 3/4 x 5 1/2, cabinets,	.25	2.00	.40	3.00	10 x 12	1.40	13.20	2.00	20.00
4 x 5	.25	2.00	.40	3.00	11 x 14	1.65	16.50	2.50	25.00
4 x 6	.25	2.00	.40	3.00	14 x 17	2.50	26.40	3.75	39.50
4 1/2 x 6 1/2	.35	2.75	.50	4.00	16 x 20	3.30	35.20	5.00	52.75
5 x 7	.45	3.85	.70	5.75	18 x 22	4.10	44.00	6.25	66.00
5 x 8	.50	4.40	.75	6.50	20 x 24	4.40	48.40	6.50	72.50
5 1/2 x 7 3/4	.55	5.50	.85	8.25	Roll per foot,	.20	—	.30	—
6 x 8	.60	6.00	.90	9.00					

Owing to the advances in raw paper stock in the European market, these list prices are subject to change without further notice.

NEW JERSEY ARISTOTYPE PAPERS.

Albuma, Gelatine. **Delta Mat**, Collodion mat, carbon, and platinum effects.
Atlas, Collodion, glossy. **Essex**, Collodion, high gloss.

PRICE LISTS.

	ALBUMA.		ATLAS AND ESSEX.		DELTA MAT.		
	Doz.	Gross.	Doz.	Gross.			
2 1/2 x 3 3/4	\$0.10	\$0.60	\$0.15	\$0.75	\$0.15	—	\$1.10
3 x 4	.10	.70	.15	1.25	.15	—	1.25
3 1/2 x 3 1/2	.10	.75	.15	1.00	.15	—	1.25
3 1/2 x 4 1/2	.10	.80	.20	1.20	.20	—	1.60
4 x 5	.15	1.00	.25	1.35	.25	—	2.00
3 1/2 x 5 1/2	.15	1.00	.25	1.35	.25	—	2.00
3 3/4 x 5 3/8	.15	1.00	.25	1.35	.25	—	2.00
4 x 6	.15	1.00	.25	1.35	.25	—	2.00
4 1/2 x 6 1/2	.20	1.00	.30	2.00	.30	—	2.50
4 1/2 x 6 3/4	.20	2.00	.30	2.00	.30	—	2.50
5 x 7	.20	1.75	.35	2.65	.40	\$1.85	3.50
5 x 8	.25	2.00	.40	3.00	.45	2.10	4.00
5 1/2 x 7 3/4	.30	2.50	.45	3.40	.50	2.65	5.00
6 x 8	.35	2.75	.50	3.75	—	—	—
6 1/2 x 8 1/2	.40	3.00	.55	4.10	.65	3.15	6.00
7 x 9	.45	3.50	.65	5.25	.75	3.70	7.00
7 1/2 x 9 3/4	.50	3.75	.70	5.75	—	—	—
8 x 10	.50	4.00	.75	6.00	.90	4.20	8.00
10 x 12	.65	6.00	1.10	9.00	1.25	6.30	12.00
11 x 14	.75	7.50	1.25	11.20	1.50	7.90	15.00
14 x 17	1.15	12.00	1.85	18.00	2.25	12.60	24.00
16 x 20	1.50	16.00	2.50	24.00	3.00	16.80	32.00
18 x 22	2.00	20.00	3.00	30.00	4.00	21.00	40.00
20 x 24	2.00	24.00	3.00	33.00	4.00	23.00	44.00

AMERICAN SELF-TONING PAPER.

No toning bath required. Merely fixing in plain hypo does the work.

New Price List for Glossy and Mat.

	Glossy.			Mat.			
	Gross.	Half-gross.	Doz.	Gross.	Half-gross.	Doz.	
1 1/2 x 2 1/2	\$0.50	—	—	6 x 8	\$1.25	\$2.15	\$0.60
2 1/2 x 2 1/2	.90	\$0.45	\$0.10	6 1/2 x 8 1/2	.475	2.40	.65
2 1/2 x 3 1/2	1.25	.65	.15	7 x 9	.60	3.00	.75
3 x 4	1.50	.75	.15	7 1/2 x 9 1/2	.65	3.25	.80
3 1/2 x 3 1/2	1.50	.75	.15	8 x 10	.70	3.50	.85
3 1/2 x 4 1/2	1.80	.90	.20	10 x 12	1.05	5.25	1.25
4 x 4	1.90	.95	.20	11 x 14	1.30	6.55	1.50
4 1/2 x 4 1/2	2.00	1.00	.25	14 x 17	2.10	10.50	2.35
4 x 5	2.00	1.00	.25	16 x 20	2.80	14.00	3.25
3 3/4 x 5 1/2 (cabinets),	2.00	1.00	.25	18 x 22	3.50	17.50	3.75
4 x 6	2.25	1.15	.30	20 x 24	3.80	19.00	4.00
4 1/2 x 6 1/2	3.00	1.50	.35	18 x 22, half-do.,	—	—	2.00
5 x 7	3.50	1.75	.35	20 x 24, " " "	—	—	2.25
5 x 8	3.75	1.90	.40	10-yard rolls, 26 inches wide, mill run,	—	—	5.50
5 1/2 x 7 3/4	4.00	2.00	.60	10-foot " " " " " "	—	—	1.90

Self-toning mat solution, in bottles, at 35 cents, 60 cents, and \$1.00, according to strength of solution.

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Eastman's Bromide Papers.

List and description of the various kinds and statement of use to which each is best adapted.

Each of the various kinds and grades of bromide papers named below is made in two varieties of emulsion:—

HARD.—Strong contrast, for use with soft or flat negatives.

SOFT.—Soft and rapid, for use with strong or hard negatives.

Standard Bromide Paper is a natural surface bromide paper, which is especially adapted for all kinds of enlargements, particularly copies on which crayon or pastel work is to be done.

The emulsion is coated on three different weights of paper,—A, thin smooth; B, heavy smooth; C, heavy rough.

The A, thin smooth, should be used for contact prints or small enlargements which are to be spotted or finished in India ink or water colors.

The B, heavy smooth, should be used for large enlargements which are to be spotted or finished in water colors, India ink, or oil.

The C, heavy rough, is best adapted for large work which is to be finished in crayon or pastel. It can also be finished in India ink, water colors, or oil.

Platino Bromide Paper gives results so near like Platinum that the difference, if any, would be difficult to detect. It has a fine surface, and is best adapted for contact prints and enlargements from life negatives.

This is made in two weights of paper,—A, thin smooth; C, heavy rough.

The A, thin smooth, should be used for contact prints or small enlargements which are to be spotted or finished in India ink or water colors.

The C, heavy rough, is intended for large enlargements which are to be spotted or finished in crayon or pastel, India ink, water colors, or oil.

It is not expected that Platino or Standard Bromide will be used when sepia tones are wanted.

Matte-enamel Bromide Paper.—Rich carbon blacks and a smooth velvety mat surface tinted just enough to lend warmth to the high lights and half-tones, giving with Matte-enamel an effect not heretofore obtained with bromide papers. When used with life negatives, enlargements can be made that closely resemble mat contact prints.

This paper gives excellent sepia tones, and is especially recommended for enlargements 16 x 20 and under, when it is desired to make prints ready for delivery by simply spotting. It is furnished on medium weight paper only. Its fine grain gives an excellent tooth on which to work crayon and pastel. It can also be finished in India ink, water colors, or oil. Try this paper on solid prints from life negatives made for mat surface work.

Enamelled Bromide Paper.—A glossy bromide paper, which, when used with life negatives, gives enlargements which closely resemble glossy contact prints. It gives excellent sepia tones, and can be finished in water colors washed in or with the air brush. When squeegeed to ferrotype plate, it gives a gloss which is fully equal to that produced by the glacé process. It is furnished on medium weight paper only.

Royal Bromide Paper.—A mat paper with rough texture for broad effects. May be toned a rich sepia in the hypo fixing bath, and prints made through silk give effects resembling rare old etchings.

PRICE LIST OF EASTMAN'S BROMIDE PAPERS.

Size	Per doz.	Size	Per doz.	Size	Per doz.
2 1/2 x 3 1/2	\$0.15	5 x 8	\$0.40	17 x 20	\$3.40
3 x 4	.15	5 1/2 x 7 1/2	.45	18 x 22	4.00
3 1/2 x 4 1/2	.15	6 1/2 x 8 1/2	.60	20 x 24	4.80
3 3/4 x 5 1/4	.25	7 x 9	.65	22 x 27	6.00
4 x 5	.25	8 x 10	.80	24 x 30	7.20
4 x 6	.25	10 x 12	1.20	25 x 30	7.50
4 1/2 x 6 1/2	.30	11 x 14	1.55	24 x 36	8.70
4 3/4 x 6 3/4	.35	12 x 15	1.80	30 x 40	12.00
5 x 7	.35	14 x 17	2.35	40 x 60	24.00
5 x 7 1/2	.40	16 x 20	3.20	40 x 72	28.80

IN ROLLS.

Size	Per yard.	Size	Per yard.	Size	Per yard.
10 in. wide	\$0.30	18 in. wide	\$0.54	30 in. wide	\$0.90
11 " "	.33	20 " "	.60	31 " "	.93
12 " "	.36	22 " "	.66	41 " "	1.23
14 " "	.42	24 " "	.72	Not less than 10 yards on a spool.	
16 " "	.48	25 " "	.75		

In ordering, always specify whether Hard or Soft is wanted; and, if the Standard or Platino is to be ordered, state which grade of paper is desired.

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Nepera Bromide Papers.

Platinoid, Enamelled, Rough.

SIZE.	Doz.	Gross.	SIZE.	Doz.	Gross.
2 1/2 x 3 1/2	\$0.15	\$1.10	8 x 10	\$0.80	\$8.00
3 x 4 or 3 1/2 x 3 1/2	.15	1.25	10 x 12	1.20	—
3 1/2 x 4 1/2	.15	1.60	11 x 14	1.55	—
3 3/4 x 5 1/4 (CABINET)	.25	2.00	14 x 17	2.35	—
4 x 5	.25	2.00	16 x 20	3.20	—
4 x 6	.30	—	18 x 22	4.00	—
4 1/2 x 6 1/2	.30	2.75	20 x 24	4.80	—
5 x 7	.35	—	22 x 27	6.00	—
5 x 8	.40	4.00	24 x 30	7.20	—
5 1/2 x 7 1/2	.50	—	25 x 30	7.50	—
6 x 8	.55	5.50	24 x 36	8.70	—
6 1/2 x 8 1/2	.60	6.00	30 x 40	12.00	—
7 x 9	.75	7.00			

BROMIDE, in rolls at least 10 yards long.

10 inches wide	\$0.30 per yard.	22 inches wide	\$0.66 per yard.
11 " "	.33 " "	24 " "	.72 " "
12 " "	.36 " "	25 " "	.75 " "
14 " "	.42 " "	35 " "	1.07 " "
16 " "	.48 " "	41 " "	1.23 " "
18 " "	.54 " "	54 " "	(only "Rough"), \$1.75
20 " "	.60 " "		

Velox.

Prints by any light, natural or artificial.

Made in six grades:

Rough, Carbon, Glossy, Special Rough, Portrait Special, and Special Glossy.

SIZE.	Doz.	Gross.	SIZE.	Doz.	Gross.
2 1/2 x 3 1/2	\$0.15	\$1.10	6 1/2 x 8 1/2	\$0.65	\$6.00
3 x 4 or 3 1/2 x 3 1/2	.15	1.25	7 x 9	.75	7.00
3 1/2 x 4 1/2	.20	1.60	8 x 10	.90	8.00
3 3/4 x 5 1/4 (CABINET)	.25	1.75	10 x 12	1.25	12.00
4 x 5	.25	1.75	11 x 14	1.50	15.00
4 x 6	.25	2.00	14 x 17	2.25	24.00
4 1/2 x 6 1/2	.35	2.75	16 x 20	3.00	32.00
5 x 7	.40	3.50	18 x 22	4.00	40.00
5 x 8	.45	4.00	20 x 24	4.00	44.00
5 1/2 x 7 1/2	.50	5.00	Seconds (cabinets or 4 x 5)	1.00	—
6 x 8	.55	5.50			

One sheet, 25 in. x 10 ft., \$1.50.

NETOL-QUINOL DEVELOPER. For dry plates, bromide paper, and black tones on Velox paper. Ready prepared in powder form. Per tin, 50 cents; per dozen tins, \$4.00.

NETOL-QUINOL TUBES. A developer for the same purposes, in powder form, ready for use. Per box, containing five tubes, 75 cents.

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PAPERS.

Post-office,					per doz.,	\$0.25
English tissue, for vignetting,					" "	.20
Blotting, heavy,	per doz.,	\$0.60;	light,		" "	.30
Filter, per package of 100 sheets,						
No. 19,	\$0.20	No. 33,	\$0.35	No. 45,		\$0.52
" 25,	.25	" 40,	.46	" 50,		.60
Albumen, extra brilliant and second choice,						
	Per doz.	Per 1/2 ream.	Per 1/2 ream.	Per ream.		
N. P. A., Eagle, Lion, S. & M., and others,	\$1.10	\$10.50	\$20.50	\$40.00		

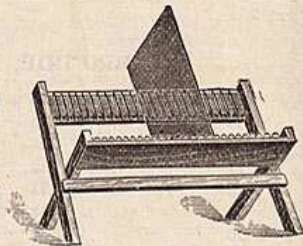
NEGATIVE BOXES, holding 24 plates.

3 1/4 x 4 1/4,	\$0.60	8 x 10,	\$1.10
4 x 5,	.65	10 x 12,	2.00
5 x 7, 5 x 8,	.85	11 x 14,	3.00
6 1/2 x 8 1/2,	.90	14 x 17 (12),	3.50

NEGATIVE RACKS.

They fold up flat, are made of best seasoned cherry, neat, and will hold any size negative.

Price, \$0.25



RETOUCHING FRAMES.

8 x 10, and under,	\$3.00
11 x 14, "	7.00

VARNISHES.

Flint, Mountfort's, Adamantine,	6-oz. bottle,	\$0.40	pint,	\$1.00	quart,	\$1.90
Diamond,	6 "	.35	" 1.00	" 1.75		
Crystal,	6 "	.30	" .65	" 1.10		
Weston's,	6 "	.40	" 1.00	" 1.75		
Phoenix Ferrottype,	8 "	.50				
Ground-glass substitute,	per bottle,	.50				

COLLODION.

Anthony's New Negative, Negative, New Ferrottype, Anthony's Positive, 1/2 lb., \$0.65

COTTONS.

Anthony's Negative, Nos. 1 and 2 Soluble, Positive, Glacé,	per oz.,	\$0.50
" Snowy,	" "	1.00
" Climax,	" "	.75

ABSORBENT COTTONS.

1-lb. package,	\$0.55	1/2-lb. package,	\$0.35	1/4-lb. package,	\$0.20
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FOCUSSING CLOTHS.

Good quality, rubber-coated, per sq. yd.,	\$0.50
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Embossing Presses.

McCullin,	\$25 00	McKee's,	\$12 00
Dorticus,	12.50	Extra Dies, each	2.00



TRANSPARENCY FRAME.

Patent Transparency Frames.

These are made with one side removable, enabling the transparency to slide into the frame easily and without danger of breaking. They are also made to hang either vertically or horizontally.

4 x 5, each	\$0.28	8 x 10, each	\$0.48
5 x 7, "	.30	10 x 12, "	.75
5 x 8, "	.34	11 x 14, "	.90
6 1/2 x 8 1/2, "	.38		

Etched Glass Mats for Transparency Frames.

6 1/2 x 8 1/2, each	\$0.33	8 x 10, each	\$0.42
		11 x 14, each	\$0.70

Ruby, Orange, and Ground Glass.— Select Quality.

Very fine. For transparencies, focusing screens, retouching frames, etc.

4 x 5, per light,	\$0.08	11 x 14, per light,	\$0.40
5 x 7, "	.10	12 x 16, "	.50
5 x 8, "	.15	14 x 17, "	.70
6 1/2 x 8 1/2, "	.20	18 x 22, "	1.00
8 x 10, "	.25	20 x 24, "	1.25
10 x 12, "	.30		

Cover Glass for Lantern Slides.

3 1/2 x 4, finest quality French, per doz.,	\$0.30
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Mats for Lantern Slides.

REGULAR SIZE.

Black, with gilt lines, per 100,	\$1.00	Black, with gilt lines, per 1,000,	\$7.50
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Gummed Binders for Lantern Slides.

Per 100,	\$0.20
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Ruby and Orange Fabric.

A very desirable article for lighting dark rooms. Price, per square yard, either shade, \$0.60

BRUSHES.

Red Sable Pencil Brushes.

Nos. 1, 2, and 3, each,	\$0.10
" 4 and 5, "	.12
" 6, "	.15
" 7 and 8, "	.20
" 9 and 10, "	.25
" 11 and 12, "	.30

Flat Camel's Hair Dusters.

1 inch,	\$0.20	2 1/2 inch,	\$0.50
1 1/2 "	.30	3 "	.60
2 "	.40		

Flat Paste Brushes.

1 inch,	\$0.12	2 1/2 inch,	\$0.30
1 1/2 "	.20	3 "	.40
2 "	.25		

Rubber-bound Paste Brushes.

1 inch,	\$0.20	2 1/2 inch,	\$0.45
1 1/2 "	.25	3 "	.50
2 "	.35		

Rubber-bound Camel's Hair Brushes.

1 inch,	\$0.38	2 1/2 inch,	\$0.95
1 1/2 "	.57	3 "	1.35
2 "	.75		

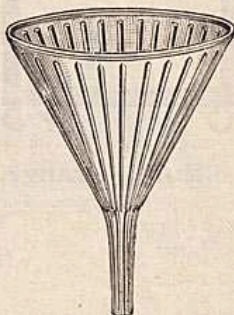
Camera Levels.

These levels are quite compact, and may be attached to the body of hand cameras; but, if a tripod camera is used, they should be attached to the swing-back.

	Price.
No. 1. In metal mounting, round, with flange screw holes,	\$0.75
No. 2. In metal mounting round, large size,	1.00
No. 3. In metal mounting, without flange, . . . . .	.75
No. 5. Pocket level, . . . . .	.75
No. 6. Double level, . . . . .	.40
Round and flat, in brass, . . . . .	.75

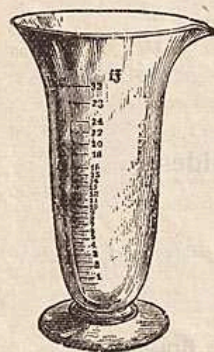
Fluted Funnels.

These funnels are exceptionally strong, are made in moulds, have solid glass ribs on the inside, running vertically, forming passages through which the solution descends freely.



Size.	Each.
$\frac{1}{2}$ pint,	\$0.12
$\frac{1}{4}$ " . . . . .	.15
1 " . . . . .	.20
1 quart, . . . . .	.30
2 " . . . . .	.45

Graduates.



Our graduates are moulded, the scale being ground on the glass. The measurements are guaranteed perfectly accurate.

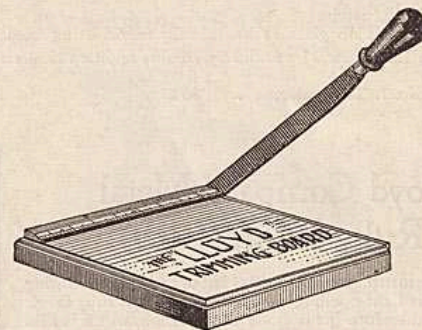
Size.	Each.
1 drachm,	\$0.20
1 oz., . . . . .	.15
2 " . . . . .	.20
3 oz., . . . . .	.25
4 " . . . . .	.30
6 " . . . . .	.35
8 oz., . . . . .	.40
16 " . . . . .	.70
32 "	1.00
2 " beaker, \$0.15; 4 oz. beaker, . . . . .	.20

Hydrometers for Silver Solution, single scale, packed in wooden cases, 38 cts. each
Standard Thermometers, for testing temperature of solutions, 25 "
 " " " in hard rubber case, 50 "

Exposure Meters.

Watkins, with F. Ring exposure ribbon, and book of table,	\$5.00
Extra exposure ribbons, each . . . . .	.50
Copy of exposure note, . . . . .	.50
Wynne's exposure meter,	2.50

LLOYD'S PHOTOGRAPHIC TRIMMING BOARD.



This cutter is designed to supply a long-felt demand for a low-priced, serviceable article. The knives are made of the best grade of hardened steel, and are guaranteed for wear. You can trim prints and ferrotypes quicker than with any other cutter made; and your print will always be perfectly square, and the edges clean and smooth.

No. 1, trims up to 7 inches,	\$2.00
" 2, " " 8 $\frac{1}{2}$ "	2.25
" 3, " " 10 "	2.50

Photographic Card, Paper, and Ferrotypes Plate Cutter.

Price \$10.00 for a complete machine, with adjustable gauges and latest improvements.

Wheel Print Trimmers.

Straight Cut Trimmer,	\$0.20	Revolving Trimmer,	\$0.30
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Robinson's Guides.

Made of sheet-iron. Guides furnished at 15 cents per inch the longest way of the aperture.

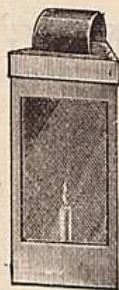
Glass Forms.

Card size, each	\$0.30	4 x 5 size, each	\$0.30
Cabinet size, each . . . . .	.40	5 x 8 " " . . . . .	.60

Lockwood's Clips.

3 in. long, $\frac{1}{8}$ open, per dozen,	\$0.50	2 $\frac{1}{2}$ in. long, $\frac{1}{8}$ open, per dozen,	\$0.45
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Compact Candle Lantern.



The **Compact Candle Lantern** is a new design in collapsible lamps, and is intended more especially for use when travelling. The top and bottom may both be removed and packed with the body of the lamp in a box measuring only one inch in depth.

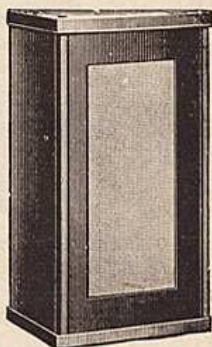
There is no glass to break, ruby fabric being used instead. The Compact Candle Lantern will be found a desirable addition to any outfit. Made in two sizes.

No. 1. Triangular, . . . \$0.25

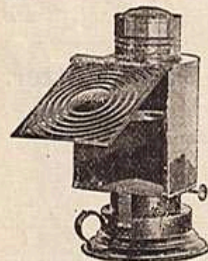
The Lloyd Compact Metal Ruby Lamp.

This is a **candle lamp which folds into a box** measuring $4\frac{1}{2} \times 7\frac{1}{2} \times 1\frac{1}{2}$ inches. The light opening is covered with both ruby fabric and orange paper, and therefore gives good illumination, which is also perfectly safe.

The entire lamp, excepting only the light opening, is made of metal, thus avoiding the great danger attending the use of similar styles made of cloth-covered pasteboard and wood. We believe this to be **the best, the safest, and the cheapest folding candle lamp** ever produced, and as such must commend itself to amateurs and all tourist photographers. Price, \$0.50.



Eastman's Kodak Dark-room Lamp.



This lamp is well made and safe. It is equipped with improved burner carrying extra broad wick, and has new ventilating top, insuring a bright, steady flame. It is the safest dark-room lamp made, being fitted with both ruby and orange glass. The flame can be controlled from the outside, and it is fitted with adjustable shield to protect the eyes from light and throw it directly on the work.

No. 1. Improved Kodak Dark-room Lamps, one-inch wick, each, \$1.50
 No. 2. " " " " $\frac{3}{4}$ -inch " " 1.00

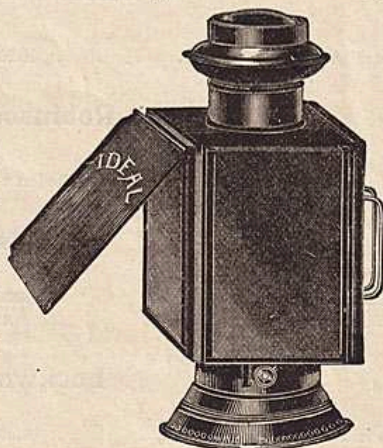
Ideal Lantern.

There are three sides for light, each of which has a double glass, one sheet each orange and ruby, which combination makes a perfectly safe light.

The front side is provided with a shield to protect the eyes, and also to reflect the light down toward the developing tray. It also has a silvered reflector, thus increasing the volume of light.

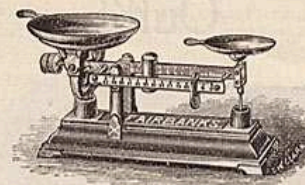
If desired, one side may be used for making transparencies, or for printing with bromide paper, by using a sheet of ground glass in place of the orange and a tin slide or shield in place of the ruby.

Price, \$3.00



Photographic Scales.

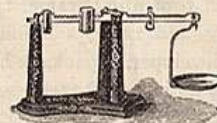
Dispensing Scale. (New.)



Handsomely finished. Has $3\frac{1}{2}$ -inch nickel-plated movable pans; side beam with sliding poise, beam graduated 120 by 1 grain, with an extra row of metric divisions on the lower edge graduated to one decigram. Platform or shelf is attached to base of scale, in which are fitted a set of solid brass Troy weights, 2 oz. down. Scale sensible to $\frac{1}{2}$ grain.

No. 6. Diam. of pans, $3\frac{1}{4}$ in. Capacity, 4 oz. Price, \$10.00

Prescription Scales, with Nickel-plated Beam.



JAPANED SCALE.

Capacity, 8 drachms by $\frac{1}{4}$ grain, indicated on the beam. No loose weights required.

No. 3040, Japanned Scale,	\$5.00
" 3042, Brass Scale,	8.00
" 3044, Brass Scale, nickel-plated,	10.00
" 3046, Brass Scale, nickel-plated, with marble base,	11.00

Army Prescription Scales.

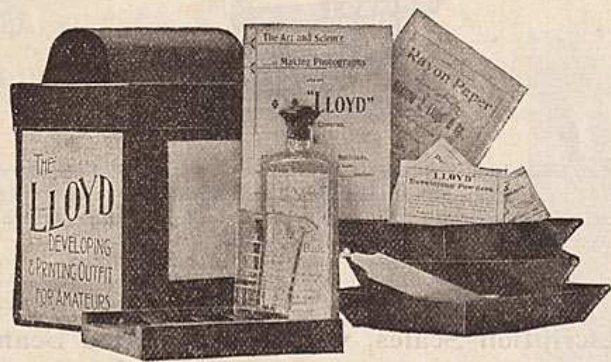
On polished walnut box. Scales take apart and pack away in drawer of box. A well-finished and reliable scale; well adapted for physicians' offices. A full set of weights included.

No. 0	Beam, 8 inches	Weights, 2 drachms to $\frac{1}{4}$ grain	Price, \$6.00
" 1	" 7 "	" 2 " $\frac{1}{4}$ "	" 5.00
" 2	" $5\frac{1}{2}$ "	" 2 " $\frac{1}{4}$ "	" 3.50

Hand Scales and Weights.

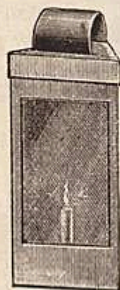
8-in. beam, for grains, scruples, drachms, and ounces,	\$1.50
6 " " drachms and grains, . . . . .	.75
5 " " " " . . . . .	.60

SPECIAL NOTICE.

The Lloyd Developing and Printing
Outfit,

Comprising 3 composition trays, 1 printing frame, 1 dozen RAYON printing out paper, 1 bottle RAYON toning and fixing solution, 2 packages TRENOL developing powders for 8-ounce developer, 1 package hyposulphite of soda, 2-ounce graduate, 1 instruction book, put up in neat box.

The above outfit is supplied with either $3\frac{1}{2} \times 3\frac{1}{2}$, $3\frac{1}{2} \times 4\frac{1}{2}$, or 4×5 Printing Frames and Rayon Paper. Please state, when ordering, which size is wanted.



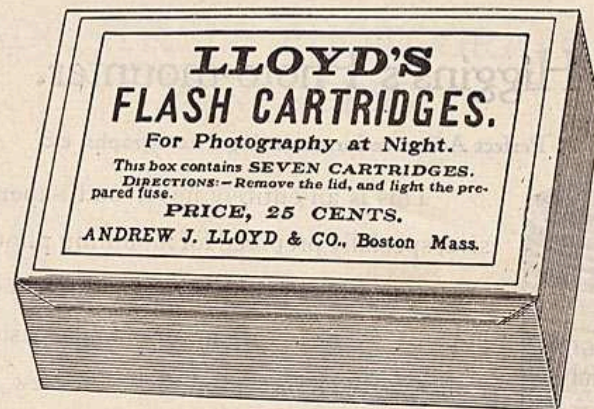
In addition to the above-mentioned articles, we are adding without extra charge our Compact Candle Lantern, herewith illustrated, thus maintaining the reputation of the Lloyd Outfit,—the very best for the money.

PRICE, COMPLETE, \$1.50.

The Lloyd, Jr., Developing and Printing Outfit,

PRICE, \$1.00.

Similar to LLOYD outfit, with smaller trays and $3\frac{1}{2} \times 3\frac{1}{2}$ printing frames and paper.



We beg to introduce our new LLOYD FLASH CARTRIDGES, with the use of which photographs can be made instantaneously which could scarcely otherwise be secured without great expense and trouble. With the aid of these cartridges, photographs may be made under the most happy auspices on the occasions of fancy dress parties, private theatricals, college dinners, weddings, etc.



The LLOYD FLASH CARTRIDGES unite the excellent qualities of powerful actinic light, convenience of ignition, and safety as to their non-explosive nature.

They are prepared in different quantities and put up in tin boxes, each box containing seven little wooden boxes, so that a light is always at hand and convenient for use. A cover which is properly fitted protects them from dampness. A fuse is at the bottom of the cartridge, so there is no danger of premature explosion, thus avoiding accidents.

There are no poisonous or otherwise unpleasant gases or vapors from the burning. Each package has full directions on cover.

PRICES FOR THE LLOYD FLASH CARTRIDGES.

No. 1, package of seven, small size, per package,	\$0.25
No. 2, " " " medium size, per package,	.40
No. 3, " " " large " " "	.60
No. 4, " " " largest " " "	.75

Higgins's Photo-mounter.

A Perfect Adhesive for mounting Photographs, etc.

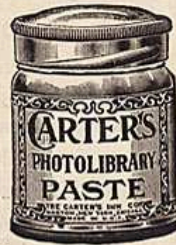
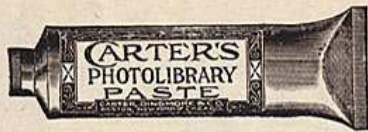


This is an entirely novel and superior adhesive, specially prepared for mounting photographs, aristotypes, blue prints, scrap pictures, engravings, etc. It is not a flour or starch paste, but is rather a vegetable glue, being a new patented discovery in the chemistry of adhesives.

PRICES.

In screw-capped jars, 3-oz., \$0.15; 6-oz., \$0.25; 14-oz., \$0.50;
 ½-gal., \$2.00; 1-gal., \$3.50.

Carter's Photo-library Paste.



4-oz. jar,	\$0.15
7 " " . . . . .	.25
16 " " . . . . .	.50
3 " tube, . . . . .	.10
1½ " " . . . . .	.05

Köllos, \$0.15, \$0.25, \$0.40
 Mitchell's anti-cockling solution, . . . 4 oz., \$0.30; 8 oz., \$0.50

ADJUSTABLE PHOTOGRAPHIC ENVELOPES.

Holds one to twelve mounted photographs.

No. 2, for 4½ x 5½ cards,	Per 100.
" 3, " 5 x 5 "	\$0.90
" 5, " 5½ x 6½ "	1.00
" 5½ x 7½ "	1.10
" 4½ x 6 "	1.25

ENCLOSURES.

White, pink, heliotrope.

Number.	Size.	Rice Bond.	Surah Linen.	Napoleon Bond.
5	2½ x 4½	\$1.25	\$1.60	\$1.60
15	3 x 4	1.25	1.60	1.60
20	3 x 5	1.25	1.60	1.60
21	3 x 5½	1.25	1.60	1.60
30	4½ x 6½	1.25	1.60	1.60
34	4 x 5½	1.25	1.60	1.60
35	4 x 6	1.25	1.60	1.60
36	4 x 6½	1.40	1.75	1.75
38	4½ x 6½	1.40	1.75	1.75
40	5 x 7	2.05	2.50	2.50
40½	5½ x 7	2.10	2.60	2.60
42	5 x 7	2.05	2.50	2.50
42½	5½ x 7½	3.25	2.60	2.60
43	5½ x 7	3.40	2.70	2.70
45	5½ x 8	3.50	2.90	2.90
46	6 x 8	3.65	3.15	3.15
49	6½ x 9	3.80	3.50	3.50
50	6½ x 10	3.80	3.80	3.80
52	7 x 9	3.80	3.40	3.50
60	8½ x 10	5.00	6.00	6.00
70	10½ x 12½	6.25	9.00	9.00

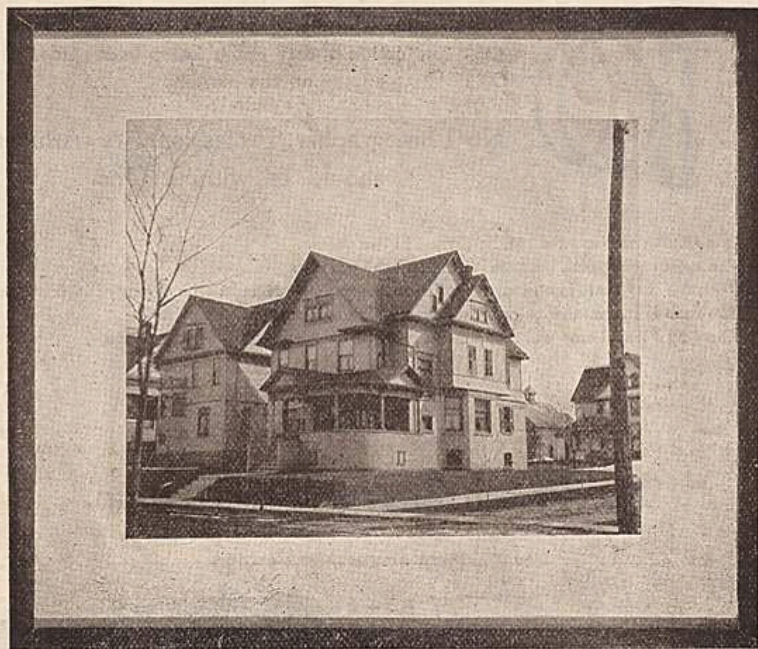
Other sizes at short notice.

Universal Bond, Cabinet, \$1.00

Mailing Envelopes.

Cabinet, 5½ x 7½, 9283, 28-lb. manila,	\$1.10
" 9363, 36 " "	1.20
" 9403, 40 " "	1.30
" 9503, 50 " "	1.50
Corona, 6½ x 8½, 9503, 50 " "	2.00
8½ x 10½, 9503, 50 " "	3.75

Imperial Passe-partouts.



These mounts are very artistic, and give the photograph the richness of a framed picture. We are introducing these for photographers, amateur and professional, who have long felt the need of something better than a card mount, at a price much below the cost of a framed picture.

The mounts or frames are heavy mats of various colors and with wide margins, are covered with glass, and neatly bound on the edges. The back is removable for inserting the mounted picture, and has a wire support attached, which serves to hold the frame and picture upright on a table, desk, or mantel.

These mounts also make a very acceptable form in which to give away portraits.

PRICE LIST.

Please specify whether horizontal or upright, for landscapes or portraits.

2½ x 3½ Folding pocket kodak,	\$0.25	5 x 7,	\$0.50
3 x 4,	.25	6½ x 8½,	.60
3½ x 3½, Bull's-eyes, Rays, etc.,	.25	8 x 10,	.75
4 x 5,	.35	10 x 12,	1.00

With Inside Mask.

Mantello,	\$0.20
Cabinet,	.25

Heavy Bevel Edge Mat, Oval or Oblong.

Cabinet,	\$0.75
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Lloyd's Pocket Book for Unmounted Prints.

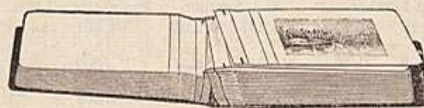
This little article fills a want, heretofore unsupplied, for a handy means of carrying about proofs and unmounted prints in the pocket, without cracking or injuring them. Neatly bound in cloth, price, \$0.20.

The New Gilson Adjustable Albums For Photographic Views.



Adjustable Covers. Interchangeable Leaves.

The only Albums that will fit collections of all sizes, employing
From 1 to 50 Leaves.



This album, *unlike any other on the market*, will exactly fit any sized collection of photographs employing from one to fifty leaves. The surplus back slides in on the back cover until needed for the addition of other leaves. Leaves can be removed or

added in a moment by simply loosening a silk cord.

For collections of photographs this album has no equal. There are no disappointing blank leaves, even though there are only one or two photographs in the collection; and yet the collection can be increased to one hundred photographs. It is equally adapted to small gift collections or large home collections.

The bindings are the best of their kind. The cloth album is bound in one of the new art cloths. The half leather is bound in the best seal grain leather and art cloth. The full leather is seal grain throughout. All the bindings employ a silk cord.

The word "Photographs" is stamped in gold in a very attractive design near the upper left-hand corner, leaving the centre of cover free for the stamping of the name of the collection which it may contain.

Interchangeable leaves, on which to mount and burnish photographs, are made in both white and gray cards. Interchangeable squeegee leaves, with openings on both sides of the leaf for unmounted photographs, are furnished in all sizes.

Covers and leaves may be had separately, enabling purchasers to make up their own albums. All the styles of leaves of any one size may be used together, making it possible to have a variety of leaves in one album.

NOTE.—In the following price list the first figure in each album number denotes the size, the second figure denotes style of binding, the third figure denotes kind of leaf. Thus "312" means the 3d size, 1st style of binding, and 2d kind of leaf; or, in other words, 7 x 10 size, cloth binding, plain gray leaves.

PRICE LIST.—Order by Number.

Size No. 100, 4 1-2 x 5 1-2 Leaves.

For one 3½ x 4½ or 3½ x 3½ Print, or four pocket Kodaks.

Albums with One Dozen Leaves.

	Cloth.		Half Leather.		Full Leather.		Extra Leaves.	
	No. 111	\$0.80	No. 121	\$1.10	No. 131	\$1.65	No. 101	\$0.30
White Cards,								
Gray Cards,	" 112	.80	" 122	1.10	" 132	1.65	" 102	.30
Squeegee for one 3½ x 4½ Print,	" 114	.95	" 124	1.25	" 134	1.80	" 104	.45
Squeegee for one 3½ x 3½ Print,	" 114A	.95	" 124A	1.25	" 134A	1.80	" 104A	.45
Squeegee for four Pocket Kodaks,	" 114B	.95	" 124B	1.25	" 134B	1.80	" 104B	.45
Squeegee for one 2½ x 3½ Print,	" 114D	.95	" 124D	1.25	" 134D	1.80	" 104D	.45

Covers without Leaves.

Cloth.	Half Leather.	Full Leather.
No. 110 \$0.50	No. 120 \$0.80	No. 130 \$1.35

Size No. 200, 6 x 7 Leaves.

For one 4 x 5 or 4 x 4 Print.

Albums with One Dozen Leaves.

	Cloth.	Half Leather.	Full Leather.	Extra Leaves.
	No. 211	No. 221	No. 231	No. 201
White Cards,	\$0.90	\$1.25	\$1.90	\$0.35
Gray Cards,	212 .90	222 1.25	232 1.90	202 .35
Squeegee for 4 x 5 Print,	214 1.05	224 1.40	234 2.05	204 .50

Covers without Leaves.

Cloth.	Half Leather.	Full Leather.
No. 210 \$0.55	No. 220 \$0.90	No. 230 \$1.55

Size No. 300, 7 x 10 Leaves.

For one 5 x 7 or 5 x 8 Print, or two 4 x 5, 4 x 4 or 3 1/2 x 3 1/2 Prints.

Albums with One Dozen Leaves.

	Cloth.	Half Leather.	Full Leather.	Extra Leaves.
	No. 311	No. 321	No. 331	No. 301
White Cards,	\$1.05	\$1.50	\$2.30	\$0.45
Gray Cards,	312 1.05	322 1.50	332 2.30	302 .45
Squeegee for one 5 x 7 Print,	314 1.35	324 1.80	334 2.60	304 .75
Squeegee for two 3 1/2 x 3 1/2 Prints,	314A 1.35	324A 1.80	334A 2.60	304A .75
Squeegee for two 4 x 5 Prints,	314C 1.35	324C 1.80	334C 2.60	304C .75
Squeegee for four 2 1/2 x 3 1/2 Prints,	314D 1.35	324D 1.80	334D 2.60	304D .75

Covers without Leaves.

Cloth.	Half Leather.	Full Leather.
No. 310 \$0.60	No. 320 \$1.05	No. 330 \$1.85

Size No. 500, 10 x 12 Leaves.

For one 8 x 10 Print or four 3 1/2 x 3 1/2 Prints.

Albums with One Dozen Leaves.

	Cloth.	Half Leather.	Full Leather.	Extra Leaves.
	No. 511	No. 521	No. 531	No. 501
White Cards,	\$1.50	\$2.50	\$3.75	\$0.75
Gray Cards,	512 1.50	522 2.50	532 3.75	502 .75
Squeegee for four 3 1/2 x 3 1/2 Prints,	514A 2.00	524A 3.00	534A 4.25	504A 1.25

Covers without Leaves.

Cloth.	Half Leather.	Full Leather.
No. 510 \$0.75	No. 520 \$1.75	No. 530 \$3.00

Size No. 600, 11 x 14 Leaves.

For one 10 x 12 Print or four 4 x 4 or 4 x 5 Prints.

Albums with One Dozen Leaves.

	Cloth.	Half Leather.	Full Leather.	Extra Leaves.
	No. 611	No. 621	No. 631	No. 601
White Cards,	\$1.75	\$3.00	\$4.50	\$1.00
Gray Cards,	612 1.75	622 3.00	632 4.50	602 1.00
Squeegee for four 4 x 5 Prints,	614C 2.25	624C 3.50	634C 5.00	604C 1.50

Covers without Leaves.

Cloth.	Half Leather.	Full Leather.
No. 610 \$0.75	No. 620 \$2.00	No. 630 \$3.50

REMBRANDT MOUNTS.

The most artistic mounting for mat surface prints, whether Platinum, Velox, or Aristo. These mounts are made in a variety of tints,—black, sepia, terra cotta, green, tan, and brown, delicately shaded from one side to the other; Rembrandts are undoubtedly the most popular mounts of the present day. We carry the black and sepia constantly, and supply others at short notice.

FELT BOARDS.

A new photographic specialty for platinotypes, consisting of a felt covered card mount, to which the print may be attached without danger of coming off. A very novel and attractive mounting.

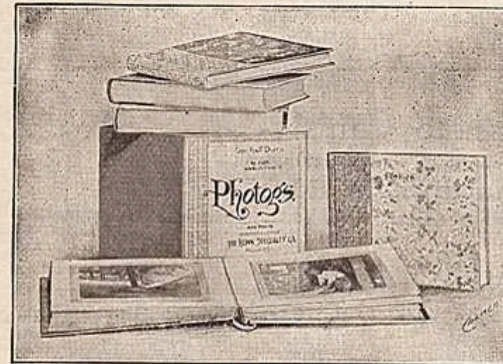
PRICE LIST.

Rembrandt and Felt.

Now made in a variety of tints, chief of which are black, sepia, terra cotta, green, tan, and brown.

Size.	Per doz.	Per 100.
6 1/2 x 8 1/2	\$0.45	\$3.50
8 x 10	.50	4.00
10 x 12	.65	5.00
11 x 14	.90	7.00
14 x 17	1.65	12.00
16 x 20	1.85	15.00
18 x 22	2.25	18.00
22 x 28	3.00	24.00

PHOTOGS.



These little books are designed for small gift collections, etc. They are attractively bound in fancy cloth, and are made in two sizes, holding 24 and 48 pictures respectively. Just the thing for a parlor table.

PHOTOGS.

Made in two sizes, 50 and 75 cents, the larger having double capacity.

	White and Cream.	White and Wine.	Gray and Silver.	Tea and Cream.	Bronze Green and White.	Dark Blue and Bronze Blue.	Price.
Pocket Kodak,	1001	1002	1003	1004	1005	1006	\$0.50
Folding Pocket Kodak,	1101	1102	1103	1104	1105	1106	.50
3 x 3 in.,	1201	1202	1203	1204	1205	1206	.50
3 x 4 "	1301	1302	1303	1304	1305	1306	.50
4 x 5 "	1401	1402	1403	1404	1405	1406	.50
Pocket Kodak,	1021	1022	1023	1024	1025	1026	.75
Folding Pocket Kodak,	1121	1122	1123	1124	1125	1126	.75
3 x 3 in.,	1221	1222	1223	1224	1225	1226	.75
3 x 4 "	1321	1322	1323	1324	1325	1326	.75
4 x 5 "	1421	1422	1423	1424	1425	1426	.75

Mantello Portrait Cards.

Trade-mark registered November 8, 1892.

Square corners. Per one thousand.

White, Plain Straight Edge.

Enamelled Face, Plain Back.

No.	CARDS	FOR PHOTOGRAPHS	Price
No. 1889.	2 1/2 x 3 3/8	1 1/2 x 2	\$3.60
" 1872.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	4.20
" 1873.	5 x 5	3 1/2 x 3 1/2	7.80
" 1874.	4 1/2 x 5 1/2	3 1/2 x 4 1/2	8.10
" 1875.	5 1/2 x 5 1/2	4 x 4	8.40
" 1876.	5 1/2 x 6 1/2	4 x 5	10.80
" 1892.	7 x 9	5 x 7	19.20
" 1791.	4 x 5	2 1/2 x 3 1/2	7.00
" 1727.	3 3/8 x 3 3/8	2 x 2 1/2	4.50

White, Queen's Gray Border, Plain Straight Edge.

Enamelled Face, Plain Back.

No.	CARDS	FOR PHOTOGRAPHS	Price
No. 1890.	2 1/2 x 3 3/8	1 1/2 x 2	\$5.70
" 1877.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	7.20
" 1878.	5 x 5	3 1/2 x 3 1/2	12.00
" 1879.	4 1/2 x 5 1/2	3 1/2 x 4 1/2	12.00
" 1880.	5 1/2 x 5 1/2	4 x 4	12.60
" 1881.	5 1/2 x 6 1/2	4 x 5	14.40
" 1809.	4 x 5	2 1/2 x 3 1/2	9.00

Tea or Queen's Gray, Plain Straight Edge.

Unenamelled.

No.	CARDS	FOR PHOTOGRAPHS	Price
No. 1891.	2 1/2 x 3 3/8	1 1/2 x 2	\$3.60
" 1882.	3 1/2 x 3 1/2	2 1/2 x 2 1/2	4.20
" 1883.	5 x 5	3 1/2 x 3 1/2	7.80
" 1884.	4 1/2 x 5 1/2	3 1/2 x 4 1/2	8.10
" 1885.	5 1/2 x 5 1/2	4 x 4	8.40
" 1886.	5 1/2 x 6 1/2	4 x 5	10.80
" 1893.	7 x 9	5 x 7	19.20
" 1792.	4 x 5	2 1/2 x 3 1/2	7.00

Photo Cards.

Round corners. Per one thousand.

Plain Straight Edge.

No. 1830.	White, Enamelled Both Sides.	No. 1831.	Primrose, Unenamelled.
2 1/2 x 2 1/2	\$2.10	3 1/2 x 4 1/2	\$3.30
3 1/2 x 3 1/2	3.30	4 1/2 x 4 1/2	3.60
		5 x 7	7.50

Plain Bevelled Edge.

No. 1832.	White, Enamelled Both Sides.	No. 1833.	Primrose, Unenamelled.
2 1/2 x 2 1/2	\$3.00	3 1/2 x 4 1/2	\$4.20
3 1/2 x 3 1/2	4.20	4 1/2 x 4 1/2	4.50
		5 x 7	8.70

Gilt Bevelled Edge.

No. 1834.	White, Enamelled Both Sides.	No. 1835.	Primrose, Unenamelled.
2 1/2 x 2 1/2	\$3.90	3 1/2 x 4 1/2	\$5.10
3 1/2 x 3 1/2	5.10	4 1/2 x 4 1/2	5.70
		5 x 7	12.00

No. 1378. Embossed Border Cards.

CARDS	FOR PHOTOGRAPHS	Price
4 1/2 x 5 1/2	4 x 5	\$6.60
5 1/2 x 7 1/2	5 x 7	13.20
5 1/2 x 8 1/2	5 x 8	14.40
8 x 10	7 x 9	27.00

Zarno Cards.

Gray or Chamois Color.

"A"	CARDS	FOR PHOTOGRAPHS	Price
"A"	5 1/2 x 6 1/2	4 x 5	\$20.40
"B"	5 1/2 x 5 1/2	3 1/2 x 3 1/2	18.00
"C"	6 1/2 x 8 1/2	5 x 7	30.00

Developing and Printing Price Lists.

Our developing department produces the most perfect photographs that skilled labor and conscientious care can. In case a poor negative results from under or over exposure or other photographic evil which sometimes attends the novice's attempts, the fault is noted on the wrapper in which the negatives are returned, in order that the amateur may the more readily learn the cause of failure. The following prices are for plates or films. All prints under 4 x 5 are mounted on cards with embossed margin; 4 x 5 and over, on gilt edge cards unless otherwise ordered.

Item	Each	Doz.	Item	Each	Doz.
Pocket Kodak.			4 x 5.—Adlake, Ray C and D, etc.		
Developed, printed, and mounted,	\$0.05	\$0.50	Developed, printed, and mounted,	\$0.13	\$1.25
Developed,	.12	.20	Developed,	.05	.50
Mounted prints,	.03	.30	Mounted prints,	.08	.90
Unmounted prints,	.02	.20	Unmounted prints,	.06	.70
2 x 2 1/2.—Baby Hawk-eye, Monroe No. 1.			5 x 7 and 5 x 8.		
Developed, printed, and mounted,	.06	.60	Developed, printed, and mounted,	.18	2.00
Developed,	.03	.30	Developed,	.06	.70
Mounted prints,	.04	.40	Mounted prints,	.12	1.30
Unmounted prints,	.03	.30	Unmounted prints,	.08	.95
2 1/2 x 2 1/2.—Ray, Jr.			6 1/2 x 8 1/2.		
Developed, printed, and mounted,	.07	.75	Developed, printed, and mounted,	.25	2.75
Developed,	.03	.35	Developed,	.10	1.10
Mounted prints,	.04	.45	Mounted prints,	.15	1.65
Unmounted prints,	.03	.35	Unmounted prints,	.10	1.10
2 1/2 x 3 1/4.—Folding Pocket Kodak.			8 x 10.		
Developed, printed, and mounted,	.08	.80	Developed, printed, and mounted,	.29	3.20
Developed,	.03	.30	Developed,	.12	1.30
Mounted prints,	.05	.55	Mounted prints,	.17	2.00
Unmounted prints,	.04	.40	Unmounted prints,	.12	1.30
3 1/2 x 3 1/2.—Ray, Bull's-eye, Hawk-eye, Jr., Bullet, Monroe No. 2, etc.					
Developed, printed, and mounted,	.10	1.00			
Developed,	.04	.40			
Mounted prints,	.06	.70			
Unmounted prints,	.05	.55			
3 1/2 x 4 1/4.—Ray B, Gem, Premo V, etc.					
Developed, printed, and mounted,	.10	1.00			
Developed,	.04	.40			
Mounted prints,	.06	.70			
Unmounted prints,	.05	.55			

ENLARGEMENTS.

Size	Price
4 x 5	\$0.40
5 x 7	.55
6 1/2 x 8 1/2	.60
8 x 10	.75
10 x 12	.85
11 x 14	.95
14 x 17	1.10

Enamel, Platinoid, or Heavy Rough. Platinoid unless otherwise ordered.

All our work is returned in proper size boxes, made for the purpose; and our customers are insured against misunderstandings and incorrect filling of orders by our new system of manifold order slips.

Dull finish black and white platinum prints are immensely more pleasing and artistic in appearance than the old standard glossy silver print. While the amateur who does his own work has long been printing his pictures on dull finish paper, those who have their work done for them have had to content themselves with the glossy silver print, as the printer has made a specialty of that style, almost to the exclusion of the dull finish.

We are now so situated that we can furnish dull finish prints on platinotype paper at a very little increase over the prices charged for the ordinary silver print, as a glance at the following price list will show.

Our dull finish prints are made on Willis & Clements platinotype paper (now universally conceded the most artistic and permanent photographic paper) by men using this kind of paper exclusively and especially skilled in its manipulation.

The prints are mounted on the new artistic felt board, with wide margin, unless otherwise ordered. In fact, everything is done to get the best possible print from the negative and to make that print look artistic.

Platinum Prints.

Mounted on Platinotype India Tint Cards, with Concave Centre, Black Felt or Rembrandt Mounts. These prints are very artistic, equalling the effect of fine steel engravings.

SIZE.	Each, Unmounted.	Each, Mounted, Plain White Mounts.	Per doz., from one Negative, Unmounted.	Per doz., Mounted, Plain White Mounts.	Size of Print.	Size of Card.	Each, Mounted.	Per doz., Mounted.
3 1/2 x 3 1/2	\$0.08	\$0.10	\$0.75	\$1.00	4 x 5	8 x 10	\$0.20	\$2.00
4 x 5	.08	.10	.80	1.05	4 1/2 x 6 1/2	10 x 12	.25	2.50
4 1/2 x 5 1/2	.10	.12	1.00	1.25	5 x 7	11 x 14	.30	3.00
4 1/2 x 6 1/2	.10	.14	1.00	1.40	5 x 8	11 x 14	.35	3.50
5 x 7	.12	.17	1.20	1.60	6 1/2 x 8 1/2	12 x 14	.40	4.00
5 x 8	.15	.20	1.40	1.90	8 x 10	12 1/2 x 15	.50	5.00
6 1/2 x 8 1/2	.20	.25	1.90	2.50	8 x 10	14 x 17	.55	5.50
8 x 10	.30	.40	3.00	3.75	7 1/2 x 13	14 x 20	.75	8.75
10 x 12	.45	.60	4.50	5.50	10 x 12	16 x 20	.90	9.25
11 x 14	.60	.80	5.75	7.25	11 x 14	18 x 22	1.25	12.75
14 x 17	.90	1.15	9.00	11.00	14 x 17	22 x 26	2.50	.....
18 x 22	1.25	1.55	12.75	16.75	18 x 22	28 x 32	2.50	.....

These prices are for plain prints. Vignettes will be 25 per cent. higher than above rates. It is advised that the prints be plain and not vignetted, and the negative be fairly strong.

PRICE LIST

OF

PHOTOGRAPHIC CHEMICALS.

We wish to call attention to the fact that we are now putting up standard photographic chemicals under our own label. It is well known that many of the common photographic chemicals deteriorate and lose their strength under atmospheric changes; for instance, sulphite of soda, which oxidizes and turns into sulphate upon exposure to moist air, thus becoming totally unfit for use. Carbonate of soda dries up, and carbonate of potash absorbs large quantities of water under like conditions. Hence the need of appropriate containers. With these facts in view, we are now putting up such chemicals as need particular care in appropriate containers, as air-tight cans, etc.

c.s.—Cork Stopper. g.s.—Glass Stopper. C.P.—Chemically Pure.

	per lb. bottle, . . .	\$0.20
	" 2 " " . . .	.30
	" 5 " " . . .	.60
	in carboys, per lb.,	.05
	carboy, . . .	1.50
<i>Acid, Acetic, No. 8,</i>	per oz. bottle, . . .	.15
	" 4 " " . . .	.20
	" 8 " " . . .	.30
	" lb., . . .	.40
" " <i>Glacial, c.s.,</i>	" oz., . . .	.10
" <i>Boracic,</i>	" " . . .	.12
	" 1/2 lb., . . .	.25
" <i>Citric,</i>	" 1/2 " " . . .	.43
	" lb., . . .	.75
" <i>Gallic,</i>	" lb. can, . . .	1.00
	" oz. bottle, . . .	.15
	" 1/2 lb. " . . .	.20
	" 1/4 " " . . .	.30
" <i>Muriatic, C.P., g.s.,</i>	" 1 " " . . .	.40
	" 6 " " . . .	1.20
	" oz., " . . .	.15
	" 1/2 lb. " . . .	.20
" <i>Nitric, C.P., g.s.,</i>	" 1/4 " " . . .	.27
	" 1 " " . . .	.38
	" 6 " " . . .	1.30
	" oz. " . . .	.15
	" 1/2 lb. " . . .	.20
" <i>Oxalic,</i>	" 1/4 " " . . .	.25
	" 1 " " . . .	.35
	" oz. " . . .	.15
	" 1/2 lb. " . . .	.20
" <i>Phosphoric, 50%,</i>	" 1/4 " " . . .	.25
	" 1 " " . . .	.30
	" oz. can, . . .	.30
	" 1/2 lb. " . . .	1.00
" <i>Pyrogallic (Merck), C.P.,</i>	" 1/4 " " . . .	1.90
	" 1 " " . . .	3.60
	" oz. " . . .	.30
	" 1/2 lb. " . . .	1.05
" " <i>(Schering), C.P.,</i>	" 1/4 " " . . .	2.00
	" 1 " " . . .	3.85
	" oz. bottle, . . .	.15
	" 1/2 lb. " . . .	.20
" <i>Sulphuric, C.P., g.s.,</i>	" 1/4 " " . . .	.30
	" 1 " " . . .	.40
	" 6 " " . . .	1.20
" <i>Sulphurous, g.s.,</i>	" 1 " " . . .	.27

<i>Alum, Chrome,</i>	per lb. carton, . . .	\$0.12
	" " bulk, . . .	.10
" <i>Crystal,</i>	" " carton, . . .	.10
" <i>Ground,</i>	" " bulk, . . .	.06
" <i>Powdered (Potash),</i>	" " carton, . . .	.12
<i>Ammonia, Concentrated Liq., g.s.,</i>	" 1/2 lb. bottle, . . .	.25
	" 1 " " . . .	.35
	" 4 " " . . .	.74
<i>Ammonium, Bichromate, c.s.,</i>	" 1 " " . . .	1.25
	" 1 " bulk, . . .	.55
	" 1 " bottle, . . .	.65
" <i>Bromide,</i>	" 1/2 " " . . .	.35
	" 1/4 " " . . .	.25
	" oz. " . . .	.12
" <i>Carbonate,</i>	" lb. " . . .	.40
" <i>Chloride, c.s.,</i>	" oz. " . . .	.10
" <i>Hydrate. See Ammonia.</i>	" lb. " . . .	.40
" <i>Hydrosulphide,</i>	" 1-lb. " . . .	.55
	" 5 " " . . .	2.25
	" oz. " . . .	.38
	" 1/2 lb. " . . .	1.35
" <i>Iodide, C.P., g.s.,</i>	" 1/4 " " . . .	2.50
	" 1 " " . . .	4.50
	" oz. " . . .	.12
" <i>Nitrate, Fused, c.s.,</i>	" 1/2 lb. " . . .	.18
	" 1/4 " " . . .	.25
	" 1 " " . . .	.40
	" oz. " . . .	.18
" <i>Sulphocyanide, c.s.,</i>	" 1/2 lb. " . . .	.35
	" 1/4 " " . . .	.60
	" 1 " " . . .	1.10
	" oz. " . . .	.75
<i>Amidol (Hauff's-Andresen's),</i>	" 1/2 lb. " . . .	2.75
	" 1/4 " " . . .	5.25
	" 1 " " . . .	10.00
<i>Barium, Chloride,</i>	" oz. " . . .	.10
	" lb. " . . .	.35
" <i>Nitrate,</i>	" oz. " . . .	.10
	" lb. " . . .	.35
<i>Benzole,</i>	" pt. " . . .	.60
	" gal. can, . . .	2.00
<i>Borax,</i>	" lb. bulk, . . .	.16
	" " carton, . . .	.20
<i>Cadmium, Bromide,</i>	" oz. bottle, . . .	.20
	" lb. " . . .	2.00
" <i>Iodide,</i>	" oz. " . . .	.40
	" lb. " . . .	5.00
<i>Calcium, Bromide,</i>	" oz. " . . .	.20
" <i>Chloride, C.P.,</i>	" " " . . .	.15
" <i>Iodide,</i>	" lb. " . . .	.65
	" oz. " . . .	.45
<i>Chloroform,</i>	" " " . . .	.18
	" lb. " . . .	.90
<i>Copper, Sulphate,</i>	" " " . . .	.15
<i>Celloidin (Schering),</i>	" oz. " . . .	1.10
<i>Diphenal,</i>	" " " . . .	.75
	" oz. can, . . .	.35
	" 1/2 lb. " . . .	1.20
<i>Eikonogen (Andresen),</i>	" 1/4 " " . . .	2.10
	" 1 " " . . .	3.95

	per 1/2-lb. bottle,	\$0.30
<i>Ether</i> , Sulphuric, Concentrated, g.s.,	" 1/2 " "	.50
	" 1 " "	.90
	" 3 " "	2.60
	" 5 " "	4.35
<i>Formaldehyd</i> (Formaline),	" oz. "	.25
<i>Gelatine</i> ,	" " "	.12
<i>Glycerine</i> ,	" 1-lb. "	.40
	" oz. "	.75
<i>Glycin</i> ,	" 1/2-lb. "	2.75
	" 1/4 " "	5.25
	" 1 " "	10.00
<i>Gold</i> , Chloride, C.P.,	" 15-gr. bottle,	.48
" " " Wing's,	" 30 " "	1.15
" Pure,	" dwt.,	1.15
<i>Gum</i> , Arabic, selected,	" lb. bulk,	.75
" Asphaltum,	" " "	.20
" Benzoin,	" " "	.75
" Camphor,	" " "	.45
" Damar,	" " "	.50
" Mastic,	" " "	1.50
" Sandarac,	" " "	.45
" Shellac, Brown, D.C.,	" " "	.40
" " Refined,	" " "	.50
" Tragacanth,	" " "	1.20
" Turpentine, White,	" " "	.40
	" oz. bottle,	.30
<i>Hydrochinon</i> ,	" 1/2-lb. "	1.00
	" 1 " "	1.75
	" 1 " "	3.25
<i>Iodine</i> , resublimed, g.s.,	" oz. "	.50
	" lb. "	4.50
<i>Iron and Ammonia</i> , Citrate,	" oz. "	.15
	" lb. "	.85
" " " Protosulphate,	" " "	.15
" " " "	" carton,	.12
" Perchloride,	" bottle,	.80
" Protosulphate,	" can,	.15
<i>Kaolin</i> ,	" " "	.15
	" oz. bottle,	.12
<i>Lead</i> , Acetate, C.P. (Sugar of Lead),	" 1/2-lb. "	.20
	" 1 " "	.30
	" oz. "	.12
" Nitrate, C.P.,	" 1/2-lb. "	.20
	" 1 " "	.40
<i>Lithium</i> , Bromide,	" oz. "	.25
" Chloride,	" " "	.30
" Iodide,	" lb. "	4.00
	" oz. "	1.00
<i>Litmus</i> , Paper, blue or red,	" book or sheet,	.05
	" doz. book or sheet,	.50
	" glass tube,	.10
	" oz. can,	.40
<i>Magnesium</i> , Powder, C.P.,	" 1/2-lb. "	1.25
	" 1 " "	2.15
	" 1 " "	4.00
" Ribbon,	" oz. "	.75
	" lb. "	8.00
	" oz. bottle,	.12
<i>Mercury</i> , Bichloride,	" 1/2-lb. "	.30
	" 1/4 " "	.55
	" 1 " "	1.00
	" oz. "	.75
<i>Metacarbolic</i> ,	" 1/2-lb. "	2.75
	" 1/4 " "	5.25
	" 1 " "	10.00
	" oz. "	.75
<i>Metol</i> ,	" 1/2-lb. "	2.75
	" 1/4 " "	5.25
	" 1 " "	10.00
	" 6 cartridges,	1.20

<i>Ortol</i> ,	per oz. bottle,	\$6.75
	" 1/2-lb. "	2.75
	" 1 " "	5.25
	" 1 " "	10.00
<i>Oil</i> , Lavender (Garden),	" lb. bottle,	1.50
	" oz. bottle,	.12
<i>Potash</i> , Caustic,	" 1/2-lb. "	.25
	" 1 " "	.35
	" 1 " "	.50
<i>Potassium Bisulphite</i> ,	" oz. "	.25
	" oz. "	.12
<i>Potassium</i> , Bromide,	" 1/2-lb. "	.25
	" 1/4 " "	.35
	" 1 " "	.60
" Carbonate,	" 1 " can,	.20
" Chloro-platinite,	" 15-gr. bottle,	.50
	" oz. "	9.00
" Cyanide,	" 1/2-lb. "	.35
	" 1 " "	.60
	" 5 " can,	2.25
" Iodide,	" oz. bottle,	.30
	" lb. "	3.40
" Meta-bisulphite,	" oz. "	.20
	" 2-oz. "	.35
	" 4 " "	.65
" Oxalate,	" lb. carton,	.20
	" 5-lb. "	.90
" Permanganate,	" 50 " bulk,	8.00
" Prussiate, Red (Ferri-cyanide),	" oz. bottle,	.15
	" " "	.12
" " Yellow (Ferro-cyanide),	" lb. "	.80
	" oz. "	.12
	" lb. "	.60
" Sulphocyanide,	" oz. bottle,	.15
	" 1/2-lb. "	.35
	" 1 " "	.60
	" 1 " "	1.10
" Sulphuret (sulphide),	" 1 " "	.28
	" 5 " can,	.90
	" 50 lb. "	6.50
<i>Rodinal</i> ,	" 3-oz. bottle,	.60
	" 8 " "	1.10
	" 16 " "	2.00
<i>Silver</i> , Nitrate,	" oz. "	.60
	" 1/2-lb. "	2.20
	" 1 " "	4.00
	" 1 " "	8.00
	" oz. "	.12
<i>Soda</i> , Caustic,	" 1/2-lb. "	.25
	" 1 " "	.35
	" 1 " "	.50
<i>Sodium</i> , Acetate,	" oz. "	.10
	" lb. "	.30
" doubly fused,	" " "	.50
" Bicarbonate,	" " carton,	.12
	" oz. bottle,	.10
" Bisulphite (Acid Sulphite),	" 1/2-lb. "	.20
	" 1/4 " "	.30
	" 1 " "	.50
" " " " solution,	" 1 " "	.30
" Bromide,	" oz. "	.10
	" lb. "	.60
" Carbonate,	" " "	.18
" Citrate,	" " carton,	.08
	" bottle,	.15
" Hyposulphite (Hypo),	" " carton,	.06
	" keg,	3.00

<i>Sodium</i> , Sulphite,	{ per lb. can, . . . \$0.12
	{ " 5-lb. "50
	{ " 5 " carton,40
" " Granular,	{ " 1b. "18
	{ " 5-lb. "75
" Iodide,	" oz. bottle,40
" Phosphate,	{ " " "10
	{ " $\frac{1}{2}$ lb. "15
	{ " $\frac{1}{4}$ " "20
	{ " 1 " "30
" " Tribasic,	" oz. "20
" Tungstate,	" " "15
<i>Strontium</i> , Chloride,	" " "10
	{ " 1b. "80
<i>Tannin</i> ,	" oz. "30
	" " "75
<i>Thiocarbamid</i> ,	{ " $\frac{1}{2}$ lb. "2.75
	{ " $\frac{1}{4}$ " "5.25
	{ " 1 " "10.00
	" oz. "40
<i>Trenol</i> ,	{ " $\frac{1}{2}$ lb. "1.40
	{ " $\frac{1}{4}$ " "2.65
	{ " 1 " "5.00
<i>Uranium</i> , Nitrate,	" oz. "80
<i>Zinc</i> , Bromide,	" " "25
" Iodide,	" " "25

We always have the latest novelties as well as all the staples in

PHOTOGRAPHIC CARD MOUNTS,

and shall be pleased to send samples and prices on application.
We constantly carry a complete line of

The A. M. Collins Manufacturing Company's

PHOTOGRAPHIC CARD STOCK. 🌿

We pay especial attention to Photographic Cards, Blanks, etc.,
and will send Catalogue and Price List for the asking.

Lloyd's Prepared Developers.

WE beg to call attention to our complete line of prepared developers and other accessories, compounded from the latest and most approved formulae, and neatly put up in attractive packages. We especially recommend Trenol, Eikonogen, and Hydroquinone for ladies, as they do not stain the hands.

Lloyd's Trenol,	8 oz., \$0.30	16 oz., \$0.55
Lloyd's Hydroquinone,	.30	.55
Lloyd's Eikonogen,	.30	.55
Lloyd's Metol,	.35	—
Lloyd's Ortol,	.35	—
Lloyd's Hydriko,	two 8-oz. bottles, No. 1 and No. 2,	.50
Lloyd's Metol Hydro,	" " " " " "	.50
Lloyd's Pyro Soda,	" " " " " "	.50
Lloyd's Intensifiers,	" " " per pair,	.50

Lloyd's Trenol Powders,		\$0.25
Lloyd's Pyro Powders,		.25
Lloyd's Hydroquinone Powders,		.25
Lloyd's Eikonogen Powders,		.25
Lloyd's Hydro-Eiko Powders,		.25
Lloyd's Metol Hydro Powders,		.25
Lloyd's Ortol Powders,		.25
Lloyd's Reducing Powders,		.25
Lloyd's Intensifying Powders,		.25

Lloyd's Toning and Fixing Solution,	8 oz., \$0.35	12 oz., \$0.50
Lloyd's Fixing Salts,	large size, .25	small, .10
Lloyd's Toning and Fixing		.25

Lloyd's Vignetting Paste,		\$0.60
Lloyd's Retouching Varnish,		.25

Plates, Dry (continued).

Seed, Non-halation,	10	per cent.
" Opal,	20	" "
" Transparency, B. T.,	10	" "
" " G. P. B. R.,	10	" "
Standard,	40 and 5	" "
Stanley,	40 and 5	" "
Stripping, 26x,	20	" "
" 27,	15	" "

On orders for case lots, or \$25 list, for Cramer, Seed, and Hammer plates, assorted sizes and brands, an extra discount of 10 per cent. will be allowed.

Plumb Indicators.

Thornton-Pickard,	20	per cent.
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Preservers.

Film,	10	per cent.
Negative,	10	" "

Print Washers.

California,	Net.
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Prisms.

	Net.
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Proof Envelopes.

	Net.
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Racks.

Negative,	20	per cent.
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Ray Filters.

	10	per cent.
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Reducers.

Lloyd's,	10	per cent.
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Reducing Glasses.

	Net.
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Retouching Colors.

	Net.
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Retouching Glasses.

	Net.
--	------

Retouching Solutions.

	Net.
--	------

Retouching Varnishes.

	10	per cent.
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Roll Holders.

	Net.
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Rollers, Print.

Double,	15	per cent.
Single,	20	" "

Rubber Goods.

Aprons,	Net.
Finger Tips,	"
Gloves,	"
Squeegees,	"

Scales.

Army Prescription,	10	per cent.
Chemical Balance,	10	" "
Hand and Pocket,	10	" "
Photographic,	10	" "

Sensitol.

Net.

Shutters.

Bausch & Lomb Diaphragm,	10	per cent.
Goerz,	10	" "
Gundlach,	20	" "
Thornton-Pickard,	20	" "
Triplex,	10	" "
Unicum,	10	" "
Victor,	20	" "

Solutions, Toning.

Single Toner,	10	per cent.
Solio,	10	" "
" doz. lots,		
Rayon,	10	" "
" doz. lots,		

Speed Testers.

Pickering's,	Net.
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Spotting Colors.

	Net.
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Squeegees.

	Net.
--	------

Tape Binding.

Crowell,	10	per cent.
Lloyd,	10	" "
Excelsior,	10	" "

Thermometers.

	Net.
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Thimbles.

	Net.
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Trays.

Fibre,	33 1/2	per cent.
Glass,	15	" "
Glossy Rubber,	Net.	
Hard Rubber	} deep, dull } finish,	10 per cent.
Papier-maché,			20	" "
Porcelain,	15	" "
Vulcanite,	10	" "

Trimmers.

Dandy,	Net.	
Diamond,		
Ideal,	10	per cent.
Lloyd's Rotary,	10	" "
Premium,	10	" "
Studio,	10	" "

Tripod Trucklette.

	10	per cent.
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Tripods.

Eastman,	20	per cent.
Lloyd's,	20	" "
R. C. Co.,	20	" "
R. O. Co.,	20	" "

Varnishes.

Lloyd's Retouching, etc.,	10	per cent.
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Vignettors.

Dixie,	10	per cent.
Farand,	Net.	
Waymouth's Vignette Papers,	"	

Washing Boxes.

Adjustable,	10	per cent.
Globe,	10	" "
Pet,	15	" "
Revolving,	10	" "
Scovill,	10	" "
Scovill Universal,	10	" "
Simplex,	10	" "

ANDREW J. LLOYD & CO. DISCOUNT SHEET.

Discount may be deducted from list prices quoted in our catalogue at the rate printed in this Discount Sheet opposite the names of the articles, which are arranged in alphabetical order.

Albums.

Badger,	15	per cent.
Badger Flexible,	15	" "
Film,	Net.	
Gilson,		
Photog,	15	per cent.
Rembrandt Photones,	10	" "

Backgrounds.

	10	per cent.
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Balls and Tubes for Shutter.

Thornton-Pickard,	15	per cent.
	20	" "

Binders for Lantern Slides.

Rolls,	Net.
Strips,	"

Blotters.

Heavy,	10	per cent.
Light,	10	" "

Books.

	Net.
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Brushes.

Camel's-hair, Rubber Bound,	Net.	
" " Tin	20	per cent.
Paste,	20	" "
" Rubber	Net.	
Sable,	"	

Burnishers.

Acme,	10	per cent.
Brilliant,	10	" "
Entrekin,	10	" "
Globe Enameller,	Net.	
Model Duplex,		

Cameras.

Adlake,	20	per cent.
Bullard,	Net.	
Bull's-eye Enlarging,	10	per cent.
Cyclone,	15	" "
Eastman Kodak,	20	" "
Gem Poco,	20	" "
Graphic,	10	" "
Graphic fitted with Special Lenses,	10	" "
Hawkeye,	20	" "
Ideal Enlarging,	10	" "
" Lantern Slide,	10	" "
Korona,	20	" "
Lantern Slide,	15	" "
Nodark,	Net.	
Outfits, Franklin,	10	per cent.
" New York Studio,	15	" "
" Revere,	10	" "
Poco Folding, Cycle and View,	20	" "
Portrait Studio,	15	" "
Premo and Poco, with Special Lenses,	15	" "
Premo Folding, Cycle and View,	15	" "
Ray, Folding and Box,	20	" "
Reflex, Regular Lens,	Net.	
" Special Lenses,	"	
Sky-scraper,	10	per cent.
Wizard,	20	" "

Caps.

For Lenses,	10	per cent.
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Card Mounts.

Collins,	15	per cent.
Tarjo,	20	" "

Cartridges.

Film,	Net.	
Lloyd Flash,	10	per cent.
Scovill	10	" "
Sun	10	" "
Sunlight,	10	" "

Cases, Carrying.

Eastman,	Net.	
Ray,	20	per cent.
Others, same discount as cameras,		

Cases, Photo.

Leather,	Net.
Leatherette,	"

Chairs.

Alaska,	15	per cent.
Elite,	10	" "

Chemicals.

	Net.
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Clamps.

For Bicycle Carrying Case,	20	per cent.
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Claw Plate Handles.

	10	per cent.
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Cloth.

Focussing,	20	per cent.
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Collodion.

	Net.
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Color Screens.

Carbutt's,	Net.	
Ideal,	20	per cent.
Ray Poco,	20	" "

Cotton.

Dennison's Absorbent,	Net.
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Cut-outs.

	Net.
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Developers.

Aduro,	10	per cent.
Amidol,	10	" "
Carbutt's Metol Hydro,	10	" "
Diogen,	10	" "
Diphenal,	10	" "
Eastman,	10	" "
Eikonogen,	10	" "
Glycin,	10	" "
Glyco Pyro,	10	" "
Hydroquinone,	10	" "
Imogen,	10	" "
Karma Tablets,	10	" "
Lloyd's Prepared,	10	" "
Metacarboll,	10	" "
Metol,	10	" "
Mitchell's Prepared,	10	" "
Ortol,	10	" "

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Developers (continued).

Pyro (Schering's),	10	per cent.
" (Lloyd's),	10	" "
Rodinal "	10	" "
Seed's Prepared,	10	" "
Stanley,	10	" "
Trenol,	10	" "
Velox (powders),	10	" "

Developing and Printing.**Eastman Film Cutting Board.****Enclosures.****Envelopes.**

Napoleon,	Net.
Rice Bond,	"
Surah Linen,	"
Universal,	"

Exposure Meters.

Expodak,	10	per cent.
Watkin's,	10	" "
Wynne's,	10	" "

Fabric.

Orange,	10	per cent.
Ruby,	10	" "

Fans.

Water Fans,	Net.
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Ferrotypes Plates.

Egg Shell,	Net.
Squeegee { Light,	"
{ Heavy,	"

Film Holders.

Ideal,	Net.
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Films.

Positive and Negative (Seed's),	15	per cent.
" (Carbutt's),	15	" "
Roll,		

Filter Paper.

	Net.
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Finger Tips.

Rubber,	Net.
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Fixing Boxes.

Fibre,	33½	per cent.
Hard Rubber,	10	" "

Flanges.

	Net.
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Flash-light Powder.

Aluminum Flash Cartridges,	10	per cent.
Aluminum Sun Flash,	10	" "
Blitz Pulver,	10	" "
Eastman Actino,	10	" "
" Flash Sheets,	10	" "
Lloyd's Compound,	10	" "
" Flash Cartridges,	10	" "
" " doz. lots,		
" Pure Magnesium,		
Luxo,	Net.	
Scovill's Flash Cartridges,	10	per cent.
Sun Flash Cartridges,	10	" "
Sunlight,	10	" "

Focussing Glasses.

	Net.
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Frames.

Leigh's Combination,	Net.	
Printing { Light,	40	per cent.
{ Heavy,	33½	" "
Retouching,	Net.	
Transparency,	"	

Front Boards.

Same discount as Cameras.

Funnels.

	Net.
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Glass.

Cover,	Net.	
Forms,	"	
Funnels,	"	
Graduates,	20	per cent.
Ground,	Net.	
Orange,	"	
Plain,	"	
Ruby,	"	

Gloves.

Rubber,	Net.
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Graduates.

	20	per cent.
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Hardeners.

Kloro,	10	per cent.
Solio,	Net.	

Head Rests.

	Net.
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Head Screens.

	Net.
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 HOLDERS, Plate.

Graphic Magazine,	Net.
Kodak,	
Poco,	
Premo,	
Ray,	
} etc.,	{ Same discount
	{ as on Cameras.

 HOLDERS, Roll.

	Net.
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Hydrometers.

	Net.
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Iconoscopes.

	10	per cent.
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Ideal Duplicator.

	20	per cent.
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India Ink.

	Net.
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Intensifiers.

Agfa,	Net.	
Lloyd's,	10	per cent.
Mitchell's,	10	" "

Kits.

R. C. Co.'s,	
R. O. Co.'s,	
Studio Set,	
} etc.,	{ Same discount
	{ as Cameras.

Kodaks.

Eastman,	20	per cent.
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Lamps, Dark-room.

Eastman,	20	per cent.
Ideal,	20	" "
Incandescent Ruby,	20	" "
Lloyd,	25	" "
" ½ doz. lots,		
" Metal Candle Lamps,	Net.	
Multum in Parvo,	15	per cent.

Lantern Slide.

Contact Frame,	10	per cent.
Vise,	10	" "

Lens, Condensing.

	20	per cent.
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Lenses.

B. & L. Alvan Clark,	20	per cent.
B. & L. Ex. Rapid Universal,	15	" "
B. & L. Portrait,	15	" "
B. & L. Rapid Universal,	20	" "
B. & L. Telephoto,	10	" "
Collinear,	10	" "
Dallmeyer Stigmatic,	Net.	
Goerz,	10	per cent.
Lloyd Special,	20	" "
Ross Portrait,	10	" "
" Anastigmat,	Net.	
Turner-Reich,	20	per cent.
Zeiss Anastigmat,	Net.	

Lenses, Finder.

	Net.
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Levels.

Double Angle,	10	per cent.
Lloyd,	Net.	

Lifters, Plate.

Claw,	10	per cent.
Efficient,	10	" "
Haworth,	10	" "
L.,	10	" "
Russell,	10	" "

Litmus.

Lloyd's,	Net.
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Lloyd's Developers.

Lloyd's Developers,	10	per cent.
doz. lots,		

Marl, Strauss.

	Net.
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Mats, Etched.

For Transparencies,	Net.
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Mats, Lantern.

Boston,	10	per cent.
Gilt Line,	10	" "
Ideal,	10	" "
Olmstead,	10	" "

Manning's Masks.

	Net.
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Mounting Pads.

Carter's	Net.
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Mounting Paste.

Anti-cockle,	10	per cent.
Carter's,	10	" "
Higgins's,	10	" "
Kollos,	10	" "

Mounting Rollers.

Lloyd's Double,	20	per cent.
" Single,	15	" "

Negative Boxes.

	10	per cent.
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Negative Files.

Crescent,	10	per cent.
Star,	10	" "

Negative Preservers.

	10	per cent.
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Negative Racks.

	20	per cent.
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Opaque.

Gihon's,	Net.
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Outfits.

Eastman,	15	per cent.
Lloyd,	Net.	

Papers, Miscellaneous.

English Tissue,	Net.
Post-office,	"

Papers, Printing.

Albuma,	Net.	
Albumen,	"	
Aristo, Jr.,	"	
Aristo Platino,	"	
Bromide,	"	
Dekko,	"	
French Satin, Jr.,	10	per cent.
Kloro,	Net.	
Opto,	10	per cent.
Platinum, Bradley,	Net.	
Platinum, Willis & Clements,	10	per cent.
Platni,	Net.	
Solio,	"	
Velox, pkg.,	"	
" gross,	"	

Passe-partouts.

Rings	10	per cent.
	10	" "

Paste.

Anti-cockle,	10	per cent.
Carter's,	10	" "
Higgins's,	10	" "
Kollos,	10	" "

Paste Spreader, Arrow.

	Net.
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Pencils and Holders.

	Net.
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Photo Cloth.

Silkdown,	Net.
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Photocript.

	Net.
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Plates, Dry.

American,	40 and 5	per cent.
Carbutt Eclipse, Jr.,	40 and 5	" "
" Nos. 23 and 27,	25	" "
" Keystone, B. & A.,	25	" "
" Non-halation,	20	" "
" Lantern (Opals),	20	" "
" Ortho Portrait,	25	" "
" Transparency,	15	" "
Cramer Banner,	20	" "
" Banner Crown,	15	" "
" Isochromatic,	10	" "
" Lantern Slides,	10	" "
" Non-halation,	10	" "
" Transparency,	10	" "
Hammer, Special Extra Fast,	15	" "
" Extra Fast, Fast, and		
Slow,	25	" "
" Aurora, Non-halation,	15	" "
Isochromatic,	15	" "
Lantern Slide,	10	" "
Lovell,	40 and 5	" "
Negative Films,	15	" "
New York,	40 and 5	" "
Positive Films,	15	" "
Process,	10	" "
Seed, No. 27,	15	" "
" Nos. 23 and 26x,	20	" "

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