



## T'S SO EASY MAKIN' PICTERS"

## HOW TO DO IT.

Camera. Buy as good a one and as complete an outfit as you can afford. Make yourself thoroughly familiar with each item. Better read "First Step in Photography;" it costs but 25c.

Filling Plate Holder. Do this in dark room by aid of ruby or orange light. Place dry plate in holder, film or dull side out, and replace rubber slide to exclude light. Each holder accommodates two plates.

Making Exposure. Insert plate holder in back of camera. remove slide nearest lens, make your exposure and replace slide, pushing it in straight, not cornering. Turn the holder over, repeat operation and you have two pictures.

Developing. Take plate holders containing exposed plates to dark room, being careful that no light reaches the plate. By the aid of ruby or orange light, all other light being carefully excluded, withdraw slide, remove plate, holding it by the edges, and place in developing tray, always with film side up; pour over the plate enough Developer to completely cover it. Reck tray so that Developer flows gently over all parts of plate. Continue this operation, frequently removing the plate and holding up before the ruby light to watch progress of developing until image appears plainly on plate, and when it begins to disappear, the plate becoming nearly black, development is completed. Remove plate from tray, wash thoroughly in fresh, clean water.

Fixing. Have in another tray four ounces Hyposulphite of Soda dissolved in a pint of water. Into this, place the developed plates, always film side up, and leave there until all milky substance has disappeared from back of plate—the plate can be frequently removed and examined before the ruby light. Five minutes more in the Hypo. will insure permanence. This being done, wash the plate in clear, running water, or at least in three or four changes of water, for half an hour. The plate or negative, as it is now called, is no longer sensitive and can be exposed to any light. Wash it carefully and set up on edge in negative rack to dry in the air or on a shelf—never in the sun or with artificial heat.

Printing. Place the negative when thoroughly dried, in the printing frame Developing. Take plate holders containing exposed plates to dark room, be-

Printing. Place the negative when thoroughly dried, in the printing frame—film side up. Upon this, place a sheet of sensitive paper, glossy side toward the negative. Lock the printing frame and expose negative to bright sunlight. Frequently examine paper while printing, unlocking only half the frame at a time, so that paper will not be moved. Print one or two shades darker than final results desired. Velox paper can be printed either by artificial or day light.

Toning. Immerse the print in Toning and Fixing Solution until desired tone

or tint is reached. Self Toning paper re-

quires only the Hypo bath; Blue Print paper simply a water bath.

Mounting. While still wet, paste the print upon card mount, and that's all. Simple, isn't it? And you are delighted, have learned several things and don't regret the outlay.

Our Dark Room is at your disposal; use it, load your holders, etc., etc., in welcome, whether you buy from us or not.

FOR FURTHER INFORMATION, ADDRESS



# CONSULT THIS SHEET

BEFORE ORDERING FROM OUR

## PHOTOGRAPHIC STOCK CATALOGUE.

# WM. G. JOHNSTON & CO.

## PITTSBURGH, PA.

N. B. Ask for Discounts from all Cameras Catalogued.

	Scrap Be	ook St	tyle:	for :	Past	in	g Vi	ews.						
	Ne	0. 701A	with	25 10	eaves	. 41	VX5V	eac'	1 250	postage	60			
		701	**	50	44	43	1/2×51/	4	35C.	ri ii	Sc.			
		711A	1	25			2x7	- 66	35C.	- ((	IOC.			
		711	- 66	50	**	-	6×7		50C.	**	12C.			
		721A		25		7	XIO		50C.	- 11	16c.			
		721		50	**	7	XIO	**	75C.		20C.			
	Squeege	e Sty	le fo	r In	sert	tin	g V	iews						
										3½×4½	enel			
		1703		**	43/	X5	1/2 "	50 pr	"	3½×3½	, caci	75C.		
		1711		**		X7		50		4 X5	61	I 00	" "	15C
		1721		**		XIC		50	**	5 X7	44	I 50		20C
					'					3 ~1		1 30		29C
0.	Card Mounts-Ad	lvance	1.						*********			•••••	di	scontinue
0.	Card Mounts—Ad	lvanced 2W 12T	d. 22W 22T	23 V	V 33	w	33PI	34W	44W	V 45W	45P1	57W	57P1	scontinue
0.	Card Mounts—Ad	tvanced 12W 12T	22W 22T	23 V 23 T	V 33 33	W	33PI	34 W 34 T	44W 44T	V 45W 45T	45P1	57W 57T	57P1	scontinue
0.	Dozen	12W 12T 5c.	22W 22T 6c.	23 V 23 T 8c, 50c,	V 33 33 100	W T c.	33P1  15c.	34 W 34 T 10C.	44W 44T 12C. 75C.	45W 45T 15c.	45P1  20C.	57W 57T 25c.	57P1  30C.	
9.	Dozen	12W 12T 5c. 5c. embrai	22W 22T 6c. 40c.	23 V 23 T 8c, 50c,	V 33 33 . 100	W T c.	33Pl  15c.	34W 34T 10C. 70C,	7 44W 44T 12C. 75C.	V 45W 45T 15c. 85c. i	45P1  20C.	57W 57T 25c.	57P1  30C. 2.10C.	scontinue
9.	Dozen	12W 12T 5c. 5oc. embrai	22W 22T 6c, 40c, 1dt's,	23 V 23 T 8c, 50c,	V 33 33 . 100 . 650	W T c. c. 1	33Pl 15c. 1.00c.	34W 34T 10c. 70c.	44W 44T 12c. 75c.	V 45W 45T 15c. 85c. i	45P1  20C.	57W 57T 25c.	57P1  30c. 2,10c.	scontinue
9.	Dozen	12W 12T 5c, 60c, embrai on—Re	22W 22T 6c, 40c, idt's,	23V 23T 8c, 50c,	V 33 33 100 650 V Ari	W T c. c. 1	33Pl 15c. 1.00c.	34W 34T 10C. 70C.	7 44W 44T 12c. 75c. Solu	7 45W 45T 15c. 85c. i	45P1  20C.	57W 57T 25c.	57P1  30c, 2,10c, di	scontinue
9.	Dozen	12W 12T 5c, 5c, embrai on—Re ng So	22W 22T 6c. 40c. 1dt's. eplace lutio	23V 23T 8c, 50c,	V 33 33 . 100 . 650	W T c. c. 1	33Pl  15c. 1.00c,	34W 34T 10C. 70C.	44W 44T 12c. 75c. Solu	7 45W 45T 15c. 85c. i	45P1  20C.	57W 57T 25c. 1,60c.	57P1  30c. 2,10c. di	scontinue
9.	Dozen	12W 12T 5c, soc, embrai on—Re ng So Solution	22W 22T 6c. 40c. 1dt's. eplace lutio	23V 23T 8c, 50c,	V 333 333 . 100 . 650 y Ari	W T c. c. 1	33Pl 15c. 1.00c,	34W 34T 10C. 70C.	7 44W 44T 12c. 75C.	7 45W 45T 15c, 85c, i	45P1  20C.	57W 57T 25c. 1,60c.	57P1  30c. 2,10c. di	scontinue
9.	Dozen	12W 12T 5c. soc. embrar on—Re ng So Solutio ing Sol	22W 22T 6c, 40c, 1dt's, eplace lution by A	23 V 23 T 8c, 50c, 50c,	V 33 33 . 100 . 650 y Ari	w T c. sto	33Pl 15c. 1.00c.	34W 34T 10C. 70C.	7 44W 44T 12C. 75C. Solu	V 45W 45T 15c. 85c. i	45P1  20C. .20C,	57W 57T 25c.	57P1 30c, 22,10c, di	scontinueeach 5025
9. 10.	Dozen	trances taw tar	22W 22T 6c. 40c. 1dt's. eplace lution by A	23 V 23 T 8c, 50c, 50c,	V 33 33 100 . 650 y Ari	w T c. sto	33Pl  15c. 1.00c, Plat	34W 34T 10C. 70C,	7 44W 44T 12C. 75C. Solu	V 45W 45T 15c. 85c. i	45P1 20C. .20C.	57W 57T 25c. 1,60c.	57P1 30c, 22,10c, di	each 50
9. 10. 10.	Dozen	tranced 12W 12T 5c, 5c, 6oc, embrar on—Re ng So Solution ing Solution eplaced Nos, 2 10s, 44—	22W 22T 6c. 40c. 1dt's. eplace lution by A 42-34	23V 23T 8c, 50c, 50c, risto	V 33 33 . 100 . 650 y Ari	W T c. sto	33Pl  15c. 1.00c,	34W 34T 10c. 70c. inum	7 44W 44T 12c. 75c. Solu	7 45W 45T 15c. 85c. i	45P1  20C. .20C.	57W 57T 25c. 1,6oc.	57P1 30c, 22,10c, di	scontinue each 50 25 40 25
9. 10. 15. 6. 7.	Dozen	tranced 12W 12T 5c. 5c. 6oc. embrar on—Re ng So Solution ing Solution ing Solution placed Nos. 2 6os. 44— 4, Serie	22W 22T 6c, 40c, 1dt's, eplace lution by A 22—34 -I and s 2000	23V 23T 8c, 50c, bd by 0n risto	V 33 33 . 100 . 650 y Ari	W T c. sto	33Pl  15c. 1.00c,	34W 34T 10C. 70C. inum	44W 44T 12c. 75c. Solu	7 45W 45T 15c. 85c. i	45P1 20c 20c.	57W 57T 25c. 1,6oc.	57P1 30c, 22,10c, di	scontinue each 50 25 40 25
	Dozen	izW izW izT foc. ioc. embrai on—Re ng So Solutio ing S	22W 22T 6c. 40c. 1dt's. eplace lution by A 12—34 -I and s 2000	23V 23T 8c, 50c, 50c, risto	y Ari	W T c. sto	33Pl  15c. 1.00c,	34W 34T 10c. 70c. inum	44W 44T 12c. 75c. Solu	7 45W 45T 15c. 85c. i	45P1 20C. .20C.	57W 57T 25c. 1,6oc.	57P1 30c, 22,10c, di	scontinu each 5
9. 10. 11. 15. 16.	Dozen	tranced to the state of the sta	22W 22T 6c. 40c. 1dt's. eplace lution by A 22—34 -I and s 2000 5000	23V 23T 8c, 50c, 50c, risto	V 33 33 . 100 . 656 y Ari	W T c. c. sto	33Pl 15c. 1.00c, Plat	34W 34T 10c. 70c, inum	44W 44T 12c. 75c. Solu	V 45W 45T 15c. 85c. i	45P1 20c 20c.	57W 57T 25c. 1,6oc.	57P1 30c, 22,10c, di	scontinueeach 50
9. 10. 11. 15. 16.	Dozen	izaW izaW izaT izaT izaT izaT izaT izaT izaT izaT	22W 22T 6c. 40c. 1dt's. eplace lution by A 22—34 -I and s 2000 5000	23V 23T 8c, 50c, 50c, 50c, 10c, 10c, 10c, 10c, 10c, 10c, 10c, 1	y Ari	w T c. c. sto	33Pl 15c. 1.00c, Plat Ton-	34W 34T 10c. 70c, inum	Y 44W 44T 12c. 75c. Solu	V 45W 45T 15c. 85c. i	45P1  20C. .20C.	57W 57T 25c. 1,6oc.	57P1 30c, 22,10c, di	scontinueeach 50

Rack and Pinion extra.....\$200.

WM. G. JOHNSTON & CO

THING.

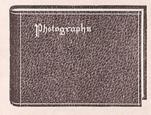
CONSULT THIS SHEET BEFORE ORDERING. I

Discounts, Changes, Additions, &c., applying to "SIMPLIFIED PHOTOGRAPHY" for 1899. Published by Wm. G. Johnston & Co., Pittsburgh, Pa.

## REMARKS.

Page 4. ALBUMS-Gilson's 50c line only...............Discontinued.

## ALBUMS-Ward's Perfection.



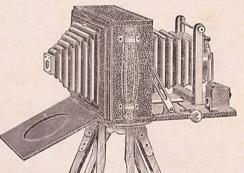
New, handsome and inexpensive, for unmounted photographs. Strongly bound in neat flexible art cloth, for the parlor or pocket. The leaves are of a beautiful grayish black that forms a handsome background for the prints, and greatly improves their appearance.

No.	701,	with	50	leaves,	41/2 X	51/	ź	each,	35c	Postage,	07C
"	711,	"	50	"	51/2 X	7		"	50c	"	12C
"	721,	"	50	**	7 XI	0		"	75c	"	20C
				Other	rsizes	aı	id styles furnish	ed.			

Page 7. BACKGROUNDS ...... Deduct to per cent.

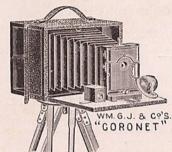
## CAMERA FOCUSING WITHOUT A CLOTH.

The greatest photographic improvement in years, and a valuable invention applied SOLELY TO KORONA CAM-ERAS. The new Korona Magnifying Focusing Back enables the operator to determine the focus with extreme nicety on the ground glass, without the use of a head cloth or separate magnifier. Used on all folding '00 Koronas having Instantaneous Symmetrical or finer lenses, except series 1000, 4000 and 7000.



CAMERAS—

The New Focusing "CORONET." \$7.50



The only good low priced Focusing Camera with pneumatic release. Gundlach Optical Co,'s Special Achromatic Lens, Adjustable focus, Hooded reversible View Finder for vertical or horizontal pictures. Two tripod secket plates. New special Shutter with changeable dia-

Time, Instantaneous and Bulb exposures. Finger and pneumatic release, accurate focusing

Size, 43/4 x7x53/s, and weighs 21/2 lbs.

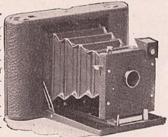
Coronet, 4x5, with G. O. Co.'s Special Achromatic Lens ..... \$7.50

Less - per cent.

## CAMERAS-A NEW KODAK.

No. 2. FOLDING POCKET KODAK-For Films Only.

Capacity, 12 exposures, 31/2x31/2, without reloading. Size, 11/2x41/2x61/4 when closed; weight, 1616 ounces; 416 inch focus, Tested achromatic lens of fine definition and full covering capacity. Safety automatic rotary shutter for time or instantaneous exposures. A single pressure of the lever makes a snap shot, and the shutter sets itself for the next. Three diaphragm stops. Brilliant view finder. Universal Tripod Socket. Made of aluminum in order to combine extreme lightness and necessary strength; covered with finest black Morocco leather, making



a beautiful, compact instrument of smallest compass that will produce negatives capable of enlargement to any size.

No. 2 Folding Pocket Kodak, without film\$	15.00
Leather Carrying Case, with strap	1.25
Light-proof Film Cartridge, for 12 exposures, 3½x3½	.60

The Original Folding Pocket Kodak, 21/4x31/4, will be known as No. 1.

## CONSULT THIS SHEET BEFORE ORDERING. III

#### CAMERA SHUTTERS THAT SHUT.

The '99 Model "A" KORONA SHUTTER IS A TRIUMPH OF COMBINED SIMPLICITY, LIGHTNESS, STRENGTH AND DURABILITY that is head, shoulders and thorax above its competitors.

Setting the shutter does not open the blades of the diaphragm, so there is no danger of accidental exposures. So arranged that it can be released by either the bulb or lever. A disc controls the length of exposure from 1 to 1-100th of a second. Furnished only in combination with Iris Diaphragm, the price including both. Made for sizes 4x5 and 5x7. Used on all folding '99 Koronas having Instantaneous Symmetrical, or finer lenses, except series 1000 and 4000.



4x5 or 5x7 Model "A" '99 Shutter with Iris Diaphragm ......\$8.00 Other sizes turnished.

## CARD MOUNTS-Nubian Gray Black.

These new and elegant mounts are of a beautiful grayish black, that does not soil, and forms a pleasing contrasty background to the prints, which may be mounted on either side or merely tipped at the corners.

Absolutely free from Hypo, cannot stain nor discolor the prints; are quite rigid, and even in the largest sizes will stand

Having no embossed borders they can be trimmed down as desired. The sizes given allow an extra wide generous margin, and in many cases can be used for the next larger views. Order by number.

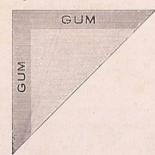
No.	Size,	For Views.	Weight Per Doz.	Each.	Doz.	100.
12N	3 x 3½	1½x2	4 oz.		\$ .06	\$ .40
22N	41/2 x 41/2	21/2 X21/2	6 "		.IO	.70
23N	41/4× 51/4	21/4 x 31/4	7 "		.12	.80
33N	51/2× 51/2	31/2×31/2	8 "		.15	1.00
34N	51/2 x 61/2	31/4×41/4	11 "		.18	1.25
44N	634 x 634	41/4×41/4	14 "		.24	1.75
45N	71/2 x 81/2	4 ×5	17 "	\$ .03	.30	2.25
57N	91/2XII1/2	5 x7	27 "	.04	.45	3.35
1114N	11 X14	Specials.	21/2 lbs.	.06	.65	5.00
1422N	14 X22	- "	5 "	12	1.30	10,00
2228N	22 X28	"	10 "	.25	2.60	20.00

Postage on Card Mounts, 1c per ounce.

## CORNER PIECES-Gummed.

These are neatly cut and properly gummed for holding pictures without their being pasted to the Album leaves. This allows of rearranging at will,

> Per box of 100 corners......20c Postage, per box, ic



## IV CONSULT THIS SHEET BEFORE ORDERING.

Page	15.	CAMERAS—LEADERS Discount, — per cent.
"	16.	
**	16.	CAMERAS-Korona, No. 45Discount, per ct.
"	17.	CAMERAS—Korona Series 2000.  Have Model A '99 Shutter and Magnifying Focusing Device on Nos. 2205 to 2217 inclusive. No extra charge
"	18.	CAMERAS—Korona Series 3000.  Have Model A '99 Shutter and Magnifying Focusing Device on all numbers. No extra charge. Discount, — pr ct.
"	19.	CAMERAS—Korona Series 5000.  Have Model A '99 Shutter and Magnifying Focusing Device on all numbers. Prices reduced.
		No. 5205 No. 5207 No. 5705 No. 5707 Discount,
		\$16.00 \$23.00 \$36.00 \$48.00 } —pr ct. Rack and Pinion
"	19.	CAMERAS—Korona Series 6000.  Have Model A '99 Shutter, Magnifying Focusing Device, Double Swing, Rack and Pinion. Prices advanced.
		No. 6215 No. 6217 No. 6715 No. 6717 Discount,
		\$25.00 \$32.00 \$45.00 \$57.00 } — pr ct.
"	N	CAMERAS—Korona Long Focus—Series 7000.  Add size, 6½x8½, measuring 11½x7¾x12, weight, 12 lbs.  To. 7618 with finest Rectigraphic Lens, Rack and Pinion
"	28.	(DRY PLATES—) 3½x3½ 3½x4¼ 4x5 5x7
**	34,	
"	38.	NEGATIVE WASHING BOXES, "Favorite" and "Simplex" " 20 "
"	48	RUBBER TRAYS—Advanced, No. 45R, now 30c net; No. 58R, now 60c net.
"	49.	LEADER TRIPOD No. 2. Now reinforced, provided with strap and metal parts nickel plated\$1.25 net.

## ALBUMS.

## Gilson's Removable Leaf.

Extensible, contractible, adjustable, alterable. The only Album that will contain collections of all sizes.



These are made in a variety of hand-some, substantial bindings, neatly stamped, each containing twelve leaves, which num-ber can be increased as desired up to forty-

ber can be increased as desired up to fortyeight.

Extra leaves can be purchased as needed
and may be added, removed, grouped or
rearranged quickly and easily.

Either Squeegee or Card Mount leaves,
or both, can be used in the same binding.
Pictures can be burnished after mounting
on the card board leaves.

## Gilson's Squeegee Albums.

As illustrated, the Squeegee Album is made for inserting unmounted prints, instead of pasting them upon card board

Each Album has twelve jointed leaves with one or more openings for pictures.

FC	)R	No. on Page.	Fine (			eather.		eather. Each.	Extra I	eaves. Dozen
			No.	Each.	No.	Each.	No.	Paci.	140.	Dozen
1/2 × 3 1/2	Pictures	1	114a,	\$0.95	124a,		134a,			\$0.45
1/2 x 3 1/2	44	2	314a,	1.35	324a,	1.80	334a,	2.60	304a,	100000000000000000000000000000000000000
1/2 × 3 1/2	• 6	4	514a,	2.00	524a,	3.00	534a,	4.25	504a,	1.25
14 x 4 14		1	114,	.95	124,	1.25	134,	1.80	104,	-45
x 5	11	1	214.	1.05	224,	1.40	234,	2.05	204,	- 50
X 5	44	2	314C.	1.35	324C,	1.80	334c,	2.60	304c,	
x 5	44 Side	2.8	1314c,	1.55	1324C,	2.05	1334c,	2.95	1304c,	.8,
	open's	4	614c,	2.25	624c,	3.50	634c,	5.00	604c,	1.50
x 5 x 7	**	1	314.	1.35	324,	1.80	334,	2,60	304,	.75

## Gilson's Scrap Book Albums.

Each with twelve jointed leaves upon which prints are to be mounted, and burnished it

given are from the joint and denote exact mounting spa

		Cloth. Each:	Half L		Full L, No.	eather. Each.	Lea	tra ives Dozen.
Leaf 4½x5½, for one view, 2½x 3¼, 3½x3½, 3¼x4¼, or four views, 1½x2		\$0.80	122,	\$1.10	132,	\$1.65	102,	\$0.30
Leaf 51/x7, for one view, 31/x 41/4, 41/x41/4, or 4x5. Leaf 7x10, for one view, 5x 7 or 5x8, or two views, 31/x31/2, 51/4 x41/2, -41/x41/4, or 4x5, or four		.90	222,	1.25	232,	1.90	202,	.35
views, 21/4 x 31/4		1 05	322,	1.50	332,	2.30	302,	.45
Leaf 10x7, side opening Leaf 10x12, for one view, 8x10 or	1312,	1.25		1.75		2.65		
four views, 3½x3½ or 3¼x4¼ Leaf 11x14, for one view, 10x12,	512.	1.50	522,	2.50	532,	3.75	502,	-75
or four views, 31/4x41/4-41/4x 41/4 4x5 or eight views, 21/4x31/4	1000	1.75	622,	3.00	632,	4.50	602,	.Ico

Any other size or style furnished promptly. Ask for special Gilson circular,

## ALBUMS.



## Our Special Gilson Adjustable Album.

For prints 4x5 or any size smaller.

To supply the demand for a neat, substantial, adjustable and extensible Album at a popular price, we offer this special line at 50c for Squeegee and 45c for Scrap Book.

They are bound in durable cloth of handsome color, embossed with floral designs.

Each Album contains six jointed adjustable leaves, which number can be increased up to forty-eight.

All covers and leaves are the same size, but the Squeegees have openings for holding the following to each leaf:

#### Squeegee Style.

Sizes for Pictures.	Number on Leaf.	Number.	Price, each.	Extra Leaves,	Package of Half Dozen.
1½ x 2	8	1216B	50 cents	No. 1206B	25 cents
21/4 x 31/4	4	1216D	50 "	" 1206D	25 "
3½ × 3½	2	1216A	50 "	" 1206A	25 "
31/4 × 41/4	2	1216	50 "	" 1206	25 " 25 "
41/4 × 41/4	2	1216V	50 "	" 1206V	25 "
4 × 5	2	1216C	50 "	" 1206C	25 "

## Scrap Book Style.

No. 1215, with plain card board leaves, 51/8 x 61/8, upon which prints of any of the above sizes can be mounted.....each, 45c No. 1205, extra leaves for No. 1215 ......per pkg. of ½ doz. 20c

## ALBUMS.

## Regular Squeegee.



Well bound in fine stamped cloth. Good quality jointed leaves, with openings for inserting unmounted or squeegee pictures.

No.	33-24,	with	openings	for	24	Pictures,	31/2	x 31/2	 each,	\$ .50
	33-48,		- 66	46						
- 66	34-24,	**	44	**	24	66	31/4	x 41/4	 66	.50
**	34-48.	66	**	66	48	- 66	31/4	x 41/4	 **	.70
**	45-24,	**	44	**	24	**	4	x 5	 66	.70
**	45-48,	66		**	48	**	4	x 5	 **	1.00

## ALBUMS.

## Regular Scrap Book.

Well bound and neatly finished, 24 heavy card board leaves of good quality, jointed to open freely. Two styles.

The sizes given are from the joint and denote the exact mounting space.



Nos. 151, 152, 153.



Cloth sides, leather back and corners. " 152, " 7 x 93/4 ... " 1.60

" 153, " 97/8×113/4... " 2.40



Nos. 1101, 1103, 1107.

Full Cloth, neat dark colors.

No. 151, leaf 6 x 65/8....each, \$1.20 No. 1101, leaf 6 x 63/4...each, \$1.00 " 1103, " 634 x 934 ... " 1.20 " 1107, " 10 x 11 1/4 ... " 1.80

## APRONS.

#### For Ladies or Gentlemen.

For protecting the clothing from water, chemicals, stains, paste, &c. Made of thin, strong gossamer rubber.

Each......6oc Postage, 12 cts.

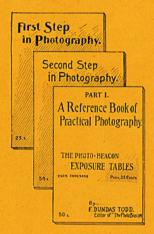
SLEEVES 16 inches long, per pair, 35c Postage, 5 cts.



## A Splendid Developer-Marvol.

Sample powder, sufficient for eight ounces of solution for plates and films, or four ounces for Velox, Dekko and Bromide papers, postpaid for 6c. See description, page 12.

## BOOKS OF INSTRUCTION.



#### First Step in Photography.

Tells in the simplest language everything the amateur need know. The chapter on development is especially valuable as it describes a new method of telling when to stop, that is so simple that the veriest beginner can be sure of good results,

Price.....25c

#### Second Step in Photography.

For those who have made some advances in the art and desire to perfect themselves.

Price......50c

## Reference Book of Practical Photography

ART I

Contains the experience of many years, condensed and told in plain short paragraphs. When in trouble, consult this little encyclopedia of photography.

Price......50c

#### Photographic Encyclopedia.

A complete Cyclopedic Guide, alphabetically arranged, including terms, processes, ormulæ, exposures, posing, lighting, tables, weights, measures, &c., &c.

Price......25c

#### Exposure Tables.

Gives the correct length of exposure for all kinds of plates, under every possible condition, each month in the year. Thoroughly tested and pronounced correct,

Price......25c

## BRUSHES-Paste.



No. o.

Fine bristle, cedar handle with nickel plated brass ferrule which cannot rust and discolor the paste,  $\frac{1}{2}$  inch wide.

## BRUSHES-Negative.



For removing dust from dry plates, thus preventing "pin holes"

Fine Camels hair, in cedar handle.

## BRUSHES-For Coloring Photos.

Best Camels Hair, small, medium, large, each, 5c

Postage, 1c each.

BLOTTERS.



## PERFECTION-PHOTO FINISHED.

These are made from chemically pure stock with non-linting surface and have an unprecedented absorbent quality.

The only perfect article on the market for absorbing moisture; from negatives and prints without depositing lint.

19x24.....each 5c, dozen 55c



## BICYCLE CLAMP.

(Adjustable.)

This device clamps firmly to any handle bar and transforms the bicycle into a very satisfactory tripod.

Full nickel plate..... 75c

Postage, 7c





## BACKGROUNDS.

These are necessary in order to obtain clean, harmonious Rembrandt effects. Size, 5x5 feet, painted on strong cloth, with roller.

Price, complete in case.....\$3.00

## BURNISHERS.

We offer a complete, well made burnisher with double 8 inch nickel plated, finely geared *steel* rolls, adjustable by two pressure screws with springs.

Uses either gas or oil.

Secures and maintains indefinitely the proper temperature for satisfactory burnishing.

Price, including gas or oil heater.....\$5.00



PITTSBURGH, PA.



## CARD MOUNTS.

These have been selected with special reference to the requirements of amateurs and are the best ever offered at the price.

New styles will be added from time to time—Order our catalogued mounts by Number and Initial,

Postage on Card Mounts, 1c per ounce.

Size, 1½x2 2½x2½ 2¼x3¼ 3½x3½ 3¼x4¼ 4¼x4¼ 4x5 5x7 Weight doz, 4 oz. 6 oz. 7 oz. 8 oz. 9 oz. 10 oz. 12 oz. 20 oz.

Weight doz. 4 oz. 6 oz. 7 oz. 8 oz. 9 oz. 10 oz. 12 oz.	20 OZ.
For Pictures 1½ x 2-Series No. 12.	
Doz.	100
No. 12 W, white, with embossed border, 27/8 x 33/8	.30
" 12T, various tints, with embossed border, 27/8 x 33/8	.30
For Pictures 2½ x 2½—Series No. 22.	
Doz.	100
No. 22W, white, with embossed border, 3½x3½	.35
" 22T, various tints, with embossed border, 31/2 x 31/2	.35
For Pictures 2¼ x 3¼-Series No. 23.	
Doz.	100
No. 23W, white, with embossed border, 4x5	.55
" 23T, various tints, with embossed border, 4x5	.55
	-55
For Pictures 3½ x 3½—Series No. 33.	
Doz.	100
No. 33S, sage, with beveled white edges, 3¾x3¾	.35
" 33W, white, with embossed border, 5x5	.60
" 33T, various tints, with embossed border, 5x5	.60
보기 등 경기에 가장 경기 가장 가장 보고 있다면 보는 그 것 같아 있다고 있는 것 같아 가장 하다 되었다.	-95
For Pictures 3½ x 4½—Series No. 34.	A Burn
Doz.	100
No. 34W, white, with embossed border, 43/x53/4	.70
" 34T, various tints, with embossed border, 4¾ x5¾	.70
For Pictures 4 x 4-Series No. 44.	
Doz.	100
No. 44W, white, with embossed border, 5½x5½	.70
" 44T, various tints, with embossed border, 5½x5½	.70
For Pictures 4 x 5-Series No. 45.	
Doz.	100
No. 45S, sage, with beveled white edges, 41/4 x51/4	.45
" 45W, white, with embossed border, 5½x6½	.80
" 45T, various tints, with embossed border, 5\%x6\%	.So
" 45Pl, white panel, " "(tinted)" "	1,10
For Pictures 5 x 7-Series No. 57.	
Doz.	100
No. 57S, sage, with beveled white edges, 5½x7½	.75
" 57W, white, with embossed border, 7x9	1.50
" 57T, various tints, with embossed border, 7x9	1.50
" 57Pl. white panel, " "(tinted)" " "	2.00
Postage extra. See note at head of page.	

## CARD MOUNTS-Rembrandts.

		Each.	Doz.	100
No.	S10R, 8x10	.05		
66	1012R, 10x12	.06	.65	5.00
	1114R, 11x14			7.00
			1000	

Postage extra; per dozen, No. 810R, 11c; No. 1012R, 17c; No. 1114R, 21c

#### CHEMICALS.

#### A Few Remarks on Developers.

No two developing agents are *exactly* alike in their results, and the variety is further increased by various combinations,

Marvol. The most powerful and economical developer known, combining the most desirable qualities of Hydrochinone, Eikonogen, Metol and Pyro; highly recommended for all around work, professional or amateur, for time, instantaneous and flash light exposures. Soluble in cold water, keeps indefinitely, may be used repeatedly and with any alkali; gives negatives of perfect printing quality, does not fog, frill, nor stan; can be instantly checked with Bromide, or accelerated with Soda.

A RULE FOR DEVELOPING WITH MARYOL. After covering the plate with Maryol developing solution, note carefully the length of time required for the image to make its first appearance; it will then take four times as long, approximately, to complete development.

We furnish Marvol in solution or in powder form combined with the essential ingredients for dissolving in water. To professionals or amateurs desiring to make their own solutions we recommend the following:

Two Solution No. 1. A—Sodium Bisulphite, 225 grains: Marvol, 150 grains Water, 9 ozs. B—Carbonate Potassium,  $1\frac{1}{2}$  ozs.; Water, 9 ozs. For use, take A—1 oz. B—1 oz.; Water, 16 ozs.

Add a few drops of a ten per cent. solution of Bromide Potassium.

Two Solution No. 2. A—Water, 10 ozs.; Sodium Bisulphite, 5 grains; Marvol 43 grains. Dissolve and filter. B—Water, 10 ozs.; Sodium Sulphite, 250 grains; Tribasic Phosphate of Sodium, 375 grains. For use, take A—2 ozs. B—4 ozs.

One Solution. Sodium Sulphite, 2 ozs.; Marvol, 75 grains; Carbonate Potassium, 1 oz.; Water, 32 ozs.

For all ordinary work this can be diluted with an equal volume of water,

In all cases restrain with Bromide Potassium. The formula having Tribasic Phosphate of Sodium as accelerator is especially recommended.

Metol. For quick development, especially of under-exposed plates, instantaneous or short exposures and films, giving fine detail and half tones not readily obtained with other developers; produces no fog nor stain and keeps well.

Metol and Hydrochinone (Metol-Hydro) gives rich warm blacks, great contrasts, and fine half tones; recommended for amateur work generally, snap shots and flash lights. Works quickly without fog or stain.

Eikonogen and Hydrochinone. (Eiko-Hydro, Eiko quinole, Hydriko, Ikohydro, etc.). Especially adapted to developing normal exposures; gives good contrasts and a bluish black color; excellent for transparencies.

**Hydrochinone.** (variously spelled.) for great density, fine contrast and clearness. Not recommended for instantaneous work. Makes rather harsh negatives when used alone, but is suitable for transparencies and bromide papers, and combines well with Eikonogen.

 ${\bf Eikonogen.}$  For soft, delicate negative effects; recommended for time exposures rather than rapid ones. Stains slightly.

Pyrogallic Acid, (or Pyro.) for strong vigorous printing negatives with good detail, much used by professionals, but as it will stain the hands it is not a favorite with amateurs. It is also said to be a poison with no known antidote.

#### CHEMICAL SOLUTIONS.

A Saturated Solution is one which contains all it will absorb of a given chemical.

A Ten Per Cent. Solution is ten parts of water to one part of any given chemical. Bromide of Potassium for restraining development is used in this strength.

A Stock Solution is the concentrated form, while a working solution is one which has been diluted to the proper strength for use.

A Salt Solution is one ounce of common table salt to sixteen ounces or a pint of water, used for toning.



## CHEMICAL PREPARATIONS.

#### Liquid Form.

## DEVELOPING SOLUTIONS.

#### Concentrated.

## A chemist photographer writes:

"I have given Marvol a test on twenty-five plates, nine of Seed's 26x and sixteen of Hammer's Extra Fast, both with time and instantaneous exposures.

It is a clean, steady developer, just right for good detail and brilliant contrasts.

I could see but small difference in the time of working from first to last, and none whatever in the results."

Can be ordered by number.

No.	I, MARVOL,	concentrate	ed8 oz. 1	oottle	e, 30c,	16 oz.	59
**	2, Metol-Hauff.	"	8	oz.	bottle,	each,	3
**	3, Metol-Hydro		8	3 "	66	66	3.
66	4, Eiko-Hydro,	- 11	8	3 66	**	1000	30
	5, Hydrochinon		8		- 66	**	30
	6, Eikonogen,	**	8		"		30

Either of the above 8 oz bottles will make from 24 to 32 ounces of fine working solution. Other developers furnished,

Try Marvol for Velox, Dekko and Bromide Papers.

## TONING AND FIXING SOLUTIONS-Concentrated.

For toning and fixing prints on gelatine and collodion papers of any make,

Our Pure Gold solution is unsurpassed for richness and general excellence; its manipulation is very simple and the results exceedingly satisfactory. The finest preparation in the market, May be diluted to three times its original bulk.

Our STANDARD GOLD solution is similar to "PURE GOLD" but can be diluted to only twice its original bulk.

Dry Toning and Fixing preparations see page 12. Toning Tablets, see KARMA list, page 13.

#### GOLD TONING SOLUTION-Concentrated.

For the separate toning of gelatine and collodion papers. Carefully refined and especially prepared in order to obtain an absolutely reliable preparation, ready for use by the addition of water and a little borax.

This solution is highly concentrated, each dram making 48 ounces of working solution.

Half ounce bottle.....35c

## PLATINUM OR MATT TONING SOLUTION-Concentrated.

For obtaining handsome Platinum, Carbon and Olive effects on Matt surface papers after they have been toned with gold until the whites are clear, after which operation the prints are washed and retoned with the above until the desired color is obtained, then wash again and fix as usual.

This solution is highly concentrated, each dram making 95 ounces of working solution.

Half ounce bottle ......35c



## CHEMICAL PREPARATIONS.

## AMERICAN SINGLE TONER-Concentrated.

Unexcelled for toning, without the gold bath, Aristo Platino and the various other matt surface papers.

This toner is highly concentrated, each dram making 20 ounces of working solution.

Quarter ounce bottle.....30c Half ounce bottle.....50c

## INTENSIFYING SOLUTION-Concentrated.

For increasing the strength or density of negatives which are too weak to make good prints. By its use poor thin negatives may be transformed into strong "plucky" ones. This solution is concentrated, each ounce making three of working solution.

8 ounce bottle......3oc

Dry Intensifier, see KARMA list, page 13.

#### REDUCING SOLUTION-Concentrated.

For reducing the thickness or density of negatives and lantern slides that have been over-developed and are too slow in printing.

This solution is highly concentrated, each ounce making ten of working solution.

8 ounce bottle.....3oc

Dry Reducer, see KARMA list, page 13.

#### SOLIO HARDENING SOLUTION.

Hardening Powders, see page 12.

## GLYCERINE FOR FILMS.

For the prevention of films curling after drying, we offer this special chemically pure glycerine as the best in the market.

2 ounce bottle......12c

## CHEMICAL PREPARATIONS-Powder Form.

Metol Quinol Developer-In Tubes.



A choice combination of Metol and Hydrochinone, excellent for all around purposes, and being hermetically sealed will keep indefinitely. Very economical, as only enough for immediate use need be dissolved.

The contents of one tube will

make from ten to twelve ounces of fine solution for developing Plates, Films or Bromide Papers; sufficient for 25 to 35 plates 4x5. Will make 4 ounces of working solution that will develop 40 to 60 Velox or Dekko prints 4x5, or other sizes in proportion.

Nepera Chemical Co.'s Metol Quinol....per tube, 15c, per box of 5 tubes, 75c Our Chemically Pure " ... " 10c, " " 5 " 50c

Postage per tube, 2c; box of 5 tubes, 5c

N. B. Try Marvol for Velox, Dekko and Bromide Papers.

PITTSBURGH, PA.

## CHEMICAL PREPARATIONS.

#### DEVELOPING POWDERS.



These powders are carefully prepared from pure chemicals, and all combinations are accurately proportioned for obtaining the finest possible results. Will keep indefinitely in any climate; can be carried in the pocket or sent by mail.

Convenient and economical, as only enough for immediate use need be mixed.

A 5 cent package of Marvol dissolved in water makes *eight ounces* of fine working solution. The others make four ounces each,

## Try Marvol for Velox, Dekko and Bromide Papers.

No. I, MARVOL,	per pkg.	making	8 ozs	.,5c,	box	of	6	pkgs.,	25C
" 2, Metol-Hauff,		"	4 "	5c,	"	"	6	66	25C
" 3, Metol-Hydro	. "	**	4 "	5c,	66	**	6	**	25C
" 4, Eiko-Hydro		**	4 "	5c,	**	**	6	66	25C
" 5, Hydrochino			4 "	5C,	66	**	6	- 61	25C
" 6, Eikonogen,		66	4 "	5C,	66	**	6	- 66	25C
" 7, Pyro, (poiso		"	4 "		**				25C

Postage per pkg., 1c; per box of 6, 5c

## TONING AND FIXING POWDER.

For toning and fixing at one operation any printing out paper. These powders are carefully prepared from pure chemicals properly proportioned to obtain the best results possible, by simply dissolving in water, when the solution will be immediately available and can be used repeatedly.

Per box sufficient for eight ounces fine working solution......25c

Postage per box, 5c

## FIXING AND HARDENING POWDER-Or Acid Fixing Salts.

For fixing and hardening negative films, in one solution. This is the popular "Acid Fixing Bath" which may be used repeatedly and without discoloration until quite old.

Simply dissolve in water, one ounce making from four to eight ounces of working solution, according to strength required.

## BLUE PRINT POWDERS.

These enable any one to sensitize paper for the Ferro-Prussiate process of simplified photography, to be developed without chemicals.

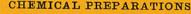
Portraits or landscapes can be printed on letter paper, envelopes, cards, &c. Blue print transparencies can be made from old useless plates. Other interesting and instructive experiments can be made with but little trouble or expense.

Also see page 42 for instructions regarding other colors than blue.

Each package contains sufficient prepared material for coating hundreds of sheets,

Per package.....25c

Postage, per package, 5c



Tablet Form.

ABLETS.

The latest and most satisfactory form for the amateur, reducing the art to a minimum, greatly economizing time and giving results heretofore unobtainable by ordinary methods. Always fresh, reliable, convenient and inexpensive.

Ask for special Karma booklet free, and postpaid.

## Karma Developing Tablets.

#### Karma Toning Tablets.

## Karma Intensifying Tablets.

#### Karma Reducing Tablets.

Price \_\_\_\_\_\_\_per box of 16, 25c

Each tablet will make 1 oz. of fine solution, and will reduce fifteen ordinary negatives 4x5.

## Karma Restraining Tablets.

Price......per box of 16, 25c

For over-exposed plates, &c., the contents of a box will make enough restraining fluid for thousands of negatives, Velox, Dekko or Bromide prints.

N. B.-We are constantly adding to our stock, and can furnish many goods not enumerated.

## CHEMICALS-Miscellaneous Photographic.

Selected with special reference to amateurs' use. Prices variable and subject to change without notice, according to market value.

#### CAUTION!

As many photographic chemicals are poisonous, each should be distinctly labeled and *all* handled with care.



ACETIC ACID, for increasing acidity of developer, clearing, etclb.	\$ .20
ALUM Powdered, for hardening films	.10
" Chrome, for hardening films and strengthening negatives, lb.	.15
BICHLORIDE MERCURY, for intensifying negatives (Poison)oz,	.12
BORAX, for neutralizing acids in toning, etc	.15
Bromide Potassium, for restraining developmentoz.	.12
CARBONATE POTASSIUM, for accelerating developmentlb.	.20
CARBONATE SODA, { for neutralizing acids, accelerat- }lb.	.10
CITRIC ACID, for preservative in developer, clearing, &coz.	.12
CHLORIDE OF GOLD, for toning	.50
EIKONOGEN, for developer	-37
FERRI-CYANIDE POTASSIUM, for reducing, (Poison)	.15
GLYCERINE, (special quality) for keeping films flat	.12
GOLD SOLUTION, for toning, highly concentrated	-35
Hydrochinone, for developeroz.	-35
Hyposulphite Soda, for clearing and fixing	.05
IODIDE POTASSIUM, for intensifying oz.	.30
Marvol, for developeroz.	.50
METOL (Hauff's), for developeroz.	.75
MURIATIC ACID, for clearing whites, cleaning travs, &c4 oz.	.25
OXALIC ACID, for preservative in developer, clearing, &c oz.	.10
PLATINUM OR MATT SOLUTION, highly concentrated, for toning, 1/2 oz.	.35
Pyrogallic Acid, for developer, (Poison)oz.	-35
RED PRUSSIATE POTASSIUM, for reducing, (Poison)oz.	.15
SULPHITE SODA, for neutralizing acidity of developerlb. Other photographic chemicals furnished promptly.	.15



## CHEMICAL PROOF COATING.

This is a black chemical proof and waterproof coating for making trays, fixing and washing boxes, etc., tight and impervious to the action of all photo chemicals. Even wooden trays with corners and cracks filled with wax or paraffine, when coated with this preparation are almost indestructible. It is easily applied with an ordinary paint brush, and dries in a few hours without heat.

Half pint	can		each,	.25
-----------	-----	--	-------	-----

## CAMERAS-THE LEADER.

A popular line of instruments made in such numbers that they can be sold at extremely low prices, although constructed of well seasoned material, covered with seal grain leather; provided with sliding handle, selected achromatic lens, rotary shutter for time and instantaneous exposures. Best double slide plate holders.



## MIDGET LEADER, No. 22.

Makes pictures 21/2 x 21/2. Size, 51/2 x

## ROYAL LEADER, No. 33. ]

Makes pictures 3½ x 3½. Size, 7 x 4¾ x 5½ inches; weight, 18 ounces. Fine Achromatic Lens, Patent Rotary Shutter for time or snap shots, large square View Finder and Tripod Socket. Carries three double Plate Holders.





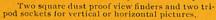
## IMPERIAL LEADER, No. 34.

Makes pictures 3½ x 4½. Size, 7½ x 4½ x 6½; weight, 21 ounces. Best Achromatic Lens of excellent covering capacity, Patent Rotary Shutter for time or snap shots. Diaphragm with two stops Two large square View Finders and two Tripod Sockets. Will carry three double Plate Holders, or any number less. Well adapted to lantern slide work.

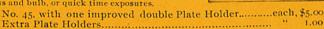
## CAMERAS-THE KORONA, No. 45.

#### Fixed Focus, with Ground Glass-(Old Series X.)

The KORONA is a thoroughly up-to-date and ahead of the times Camera at a marvelously low price. Makes pictures 4x5; size, 53/x8x71/s; weight, less than two pounds. Covered with black seal grain leather, all metal parts finished in black. Provided with a fine Single Achromatic Lens such as has never before been used in a Camera at less than \$10,00. Self focusing, but supplied with a ground glass for showing the exact size and position of subject.



Revolving diaphragm with three stops: f20, f26% and fao. Rapid, reliable shutter for time, instantaneous and bulb, or quick time exposures.





## THE VIVE MAGAZINE CAMERA No. 44-1.

Capacity, 1 to 72 exposures, 41/4x41/4, or any size smaller, without reloading, i, e., 1 to 72 cut films or 1 to 24 backed glass plates, or 1 to 12 dry plates. Vive Achromatic Lens. Simple multi-speed shutter, view finder, universal tripod socket. Multiplying attachment for making two views of same subject on one plate.

No. 44-1,	complete	with 12	Plate	Holders\$5.0	00
Carrying	Case with	shoulde	rstran	or bicycle attachment	90

## THE NEW AUTOMATIC VIVE, No. 44A.



A perfect mechanical magazine camera for plates or cut films. Guaranteed satisfactory or price refunded. Capacity, 12 exposures, 41/4x41/4, or any size smaller, without reloading. Size, 41/2x63/4x 716: weight, 31/2 pounds. 41/2 inch focus.

The smallest and most rapid of twelve plate magazine cameras. Special Vive Achromatic Lens. A simple, effective, self setting shutter for time or instantaneous exposures, and to which a pneumatic bulb release may be attached. Brilliant view finder, universal tripod socket. Automatic register for

counting the number of exposures. The mechanism is extremely simple, and durable. No. 44A, complete with 12 Plate Holders......\$6.00 Carrying Case with shoulder strap or bicycle attachment.... 1.00 Complete Vive Catalogue on application.

#### CAMERAS-KORONA FOCUSING

Neither expense nor pains have been spared to make these the most complete, convenient and handsomely finished in & the market.

The wood is finely polished mahogany, all brass parts are nickel plated, the bellows and covering are of the best leather made for the purpose.

The Gundlach Optical Co, is the only concern in the world making a complete camera including box, shutter and lens.

#### Guarantee.

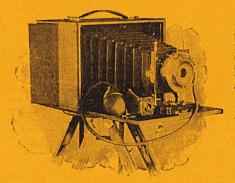
FEVERY Korona we sell, from the cheapest to finest, carries with it AN ABSOLUTE GUARANTEE OF PERFECTION from the maker and ourselves.

L. a You assume no risk in purchasing from us. If it does not fulfill every claim we will refund the price as cheerfully as we accepted it.



## CAMERAS-KORONA FOCUSING-Regular Style.

Series 1000. (Old Series I.-B.)



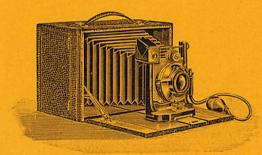
Adjustable Focus, Rising and Falling Front, Hooded Reversible View Finder for vertical or horizontal pictures. Two tripod screw socket plates. New Special Shutter with Iris Diaphragm, Time, Instantaneous and Bulb exposures, finger and pneumatic release. Three speeds of instantaneous exposure. Accurate focusing scale.

Size 4 x 5 measures 43/4 x 43/4 x 51/2 and weighs 21/2 pounds.

Size 5 x 7 measures 5 x 63/ x 9 and weighs 31/2 pounds.

					Achromatic					
- 66	1107,	5 x 7,	**		"	**				15.00
**	1205,	4 × 5,	**	66	Instantaneo	us Sy	mmetrical	Len	s	14.00
-	1207,	5 x 7,	**	**	**		**	**		19.00

Series 2000. (Old Series I-A.)



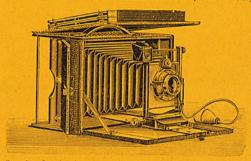
Similar to Series 1000, buthasthelatestimproved Korona Shutter, Swinging Back, and the front has both horizontal and vertical motions. Our most popular Camera, on account of convenience and capacity at very moderate cost.

Size 4 x 5 measures 45% x 51/2 x 7 and weighs 21/4 lbs.

Size 5 x 7 measures 634 x 9 x 5 and weighs 31/2 lbs.

					Achromatic I				
- 44	2107,	5 x 7,		**					20.00
- 66	2205,	4 x 5,	- 66	44.	Instantaneou	is Symmetr	ical Lens		16.00
- 44	2207,	5 x 7,	**	66	"	**	"		23.00
44	2215,	4 x 5,	- 66		66	"	Rack and	Pinion,	18.00
**	2217,	5 x 7,	**	**		- 46 mg		"	25.00

Series 3000. (Old Series I.)



This style embodies the most recent improvements, including all the adjustments required for any practical photographic work

Has the latest im proved Korona shutter, double swinging back, rack and pinion, and when focusing the whole ground glass is exposed to view, as the back, with its patent plate carrier, folds conveniently overthe top-

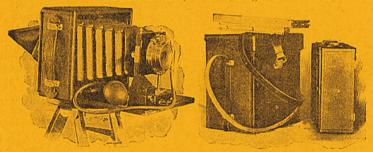
Can be fitted with any style lens, but we recommend especially the Instantaneous Symmetrical or Turner-Reich Anastigmat, the latter making this a most superior instrument at a comparativly low price.

Size 4x5 measures 7¼x4¾x6½ and weighs 3½ pounds. "5x7 "9¼x5¼x7 " 4 "

Any of Series 1000, 2000 or 3000 will carry three double plate holders containing six plates.

## CAMERAS-KORONA FOCUSING.

Cycle or Extra Compact Style. Each in Carrying Case with Strap. Series 4000. (Old Series II-B.)

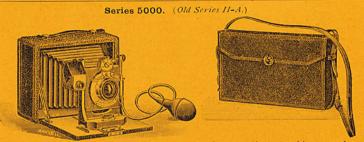


Adjustable Focus, Rising and Falling Front. Hooded View Finder for vertical or horizontal pictures. Two tripod screw socket plates. New special Shutter with Iris Diaphragm, Time, Instantaneous and Bulb exposure, finger and pneumatic release, Three speeds for Instantaneous exposures. Accurate focusing scale, Rising spring door with side curtains to use in place of focusing cloth.

Size 4x5 measures 3¼x5¼x6½ and weighs 1¾ pounds. 5x7 " 8x6½x2¾ " " 2¼ "

No. 4105, 4x5, with fine Achromatic Lens, in carrying case with strap \$10.00 "4107, 5x7," " " " " " " " " " " " 15.00

" 4205, 4x5, " " Instantaneous Symmetrical Lens, " " 14.00 " 4207, 5x7, " " " " " " " " " " " " " 19.00



Similar to Series 4000, but has the latest improved Korona Shutter and is a popular, compact, convenient instrument at reasonable cost.

Size 4x5 measures 5½ x6½ x2½ and weighs 2 pounds.

5x7 " 6½ x7½ x2½ " 2½ "

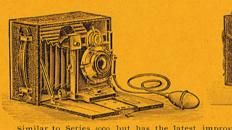
No. 5205, 4x5, with fine Instantaneous Symmetrical Lens, in case.....\$48.00

5207, 5x7, " " " 23.00

5705, 4x5, with finest Turner-Reich Lens, " " 38.00

5707, 5x7, " " " 48.00

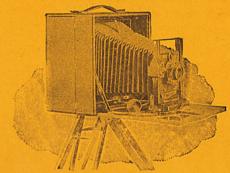
Series 6000. (Old Series II.)





Similar to Series 4000, but has the latest improved Korona Shutter, Rack and Pinion; detachable front board, and the front has both horizontal and vertical motions. Size 4x5 measures 5\(\frac{1}{2}\)x6\(\frac{1}{2}\)x6\(\frac{1}{2}\)x2\(\frac{1}{2}\) and weighs 1\(\frac{1}{2}\) pounds.

## CAMERAS-KORONA LONG FOCUS.



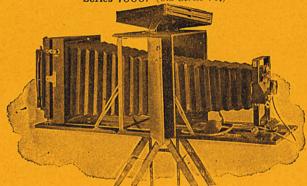
Series 7000. (Old Series VI.)

Limited space prevents a detailed description of this splendid instrument, which embodies all the good points of its predecessors along with every improvement and convenience that modern ingenuity can devise or skilled labor produce.

The leading features are: the Convertible Lens giving three different combinations. Three lenses of different focal length, Has Reversible Back. Can be used as a hand camera or on a tripod or for copying and enlarging. Has every known combination

## CAMERAS-KORONA LONG FOCUS.

Series 7000. (Old Series VI.)



#### FULLY EXTENDED.

4x5 measures 7½x63/8x73/4 and weighs 4¼ pounds.

37-	3A		Connet	Rectigraphic	Tone	Doole	and	Dinio	 10.00
NO.	7015, 485,	with	nnest	Rectigraphic	Liens,	Lack	and	1 IIIIO	 40.00
**	7617, 5x7,	66	66	6	- 66	**	.66	**	 50.00
	7715, 4×5,		- 11	Turner-Reich	64	**	"	"	 60.00
	7717, 5x7,		**	**		66	"	"	 85.00

For illustrated and complete description of all the foregoing Koronas, as well as many other styles and sizes not enumerated, see special catalogue, sent postpaid.

## Extras for Korona.

Improved Double	Plate 1	Holders	for	Korona	Cameras,	4×56	ach, \$	1,00
	6.6	66	66	***	**	5×7	66	1.25
Carrying Case and	Strap		66	***	**	4×5	44 -	2.50
	66			34		5x7		3.00
Roll Film Holders				44		4×5		5.00
66 66 66			**	44	66	5x7		00.00

## Other makes of Cameras furnished.

Ask for discounts from Korona list prices.

## CORRECT WEIGHTS AND MEASURES

Used in Photographic Formulas.

APOTHECARIES' SOLID MEASURE.

20 grains	-	1 scruple	ner.	20 grains
3 scruples	1	ı dram	-	60 "
8 drams	-	1 ounce	-	480 **
12 ounces	-	1 pound	-	5750 "

APOTHECARIES' FLUID MEASURE,

o minims	100	ı fluid dram.
8 drams	-	1 ounce.
16 ounces	-	ı pint.
8 pints		r gallon.

## Avoirdupois Weight

## Generally Used in the Sale of Photographic Chemicals.

271/3 grains	and .	1 dram.
16 drams	700	1 ounce.
16 ounces	ena"	I pound.

## CAMERAS-EASTMAN'S KODAKS.

"There is no Kodak but the Eastman Kodak."



The Kodak and Supplies for same are sold all over the civilized world; they appeal strongly to the tourist and all others seeking an instrument combining lightness, efficiency and general excellence, both of material and workmanship, at a reasonable price,

## Film Cartridge System.

The Eastman perfected system of Daylight loading Film Cartridges, is now applied to all Kodaks, from the pretty little "Pocket" up to the 5x7 "Cartridge," equipped with the choicest lens, the finest shutter, rack and pinion, and all other essentials and conveniences for the most exacting amateur.

## Features Common to all Kodaks.

Each lens is carefully tested by an expert.

All load with films by daylight.

All are covered with fine grained leather and handsomely trimmed.

All having single (achromatic) lens, except the Falcon No. 2, are provided with safety rotary shutter.

All are sold at list price net—no deviation under any circumstances—genuine Kodaks are never jobbed.

With the exception of instruments having Rapid Rectilinear Lens, all have the slides for changing stops, and for time exposures, alongside of the exposure lever, and always show by their position what stop is before the lens, and whether the shutter is set for time or instantaneous exposures, thus preventing mistakes.

## No. 2 FALCON KODAK-For Films Only.

Capacity, 12 exposures, 3½x3½, without reloading. Size, 4½x4½x5¾; weight, 19 ounces; 4½ inch focus; carefully tested achromatic lens.

Improved safety shutter, for time or instantaneous exposures. Three diaphragm stops. Brilliant view finder and universal tripod socket,



·---

NOTE.—The prospective purchaser should bear in mind that the price of the Falcon camera includes every requisite for taking pictures except the film, whereas the price of most of the so-called five dollar plate cameras on the market includes only one plate holder, and a further expenditure of \$2 or \$3 is necessary if it is desired to make more than two exposures between each trip to the dark room.

No. 2 Falcon Kodak, without film	5.00
Leather Carrying Case, with strap	1.25
Light-proof Film Cartridge, for 12 exposures, 31/2x31/2	

## POCKET KODAK-For Films or Plates.



Capacity, 12 exposures, 1½x2, without reloading. Size, 2½x2½x3½; weight, 6 ounces; 2½ inch focus. Tested lens of such quality that enlargements of any size can be made from the negatives produced therewith. Safety rotary shutter. Square view finder. Three diaphragm stops.

A Plate Holder for glass plates can be provided with each Pocket Kodak, no extra attachment being required. The change from a film to a plate camera can be made in a few seconds.

Pocket Kodak with film roll for 12 exposures\$	5.00
Leather Carrying Case for holding Kodak and 3 film rolls	
Light proof Film Cartridge, for 12 exposures, 11/2x2	.25
Plate Holder, 1 1/2 x2	.25

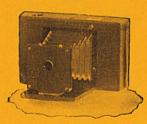
## FOLDING POCKET KODAK-For Films Only.

Capacity, 12 exposures, 2½x3½, without reloading. Size, 15½x3½x6½ when closed; weight, 14½ ounces; 4 inch focus. Tested achromatic lens of fine definition and full covering capacity. Safety rotary shutter for time or instantaneous exposures. A single pressure of the lever makes a snap shot, and the shutter sets itself for the next. Three diaphragm stops, Two brilliant view finders. Made of aluminum in order to combine ex-



treme lightness and necessary strength; covered with finest black Morocco leather, making a beautiful, compact instrument of smallest compass that will produce negatives capable of enlargement to any size.

Folding Pocket Kodak, without film\$	00.01
Leather Carrying Case, with strap	1.25
Light-proof Film Cartridge, for 12 exposures, 2\frac{1}{4}x\frac{1}{3}\frac{1}{4}	



## No. 2 FOLDING BULLS-EYE KODAK-For Films Only.

Capacity, 12 exposures, 3½x3½, without reloading. Size, 1½x4½x7½, when closed; weight, 15 ounces: 4½ inch focus. Carefully tested achromatic lens; safety rotary shutter for time or instantaneous exposures. Three diaphragm stops. Brilliant view finder. Universal tripod socket.

Can be readily carried on the bicycle by use of special clamps and the regular hand case.

No. 2 Folding Bulls-Eye Kodak, without films\$	10 00
Leather Carrying Case, with strap	1.25
Light-proof Film Cartridge, for 12 exposures, 31/2 x 31/2	.60
Pair of clamps for carrying above case on head of bicycle	1.00

## No. 2 BULLS-EYE KODAK- For Films Only.

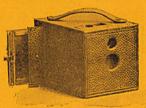


Capacity, 12 exposures, 3½x3½, without reloading. Size, 4½x4½x5¾: weight, 24 ounces; 4½ inch focus. Carefully tested achromatic lens, Safety rotary shutter for time or instantaneous exposures. Three diaphragm stops. Brilliant view finder, universal tripod socket.

No. 2 Bulls-Eye Kodak, without film	\$8.00
Leather Carrying Case, with strap	1.25
Light-proof Film Cartridge, for 12 exposures, 31/2 x 31/2	.60

## No. 2 BULLET KODAK-For Films or Plates.

Capacity, 12 exposures, 3½x3½, without reloading. Size, 4½x4¼x6¼; weight, 26 onnces; 4½ inch focus. Tested achromatic lens. Safety rotary shutter for time or instantaneous exposures. Three diaphragm stops, Brilliant view finder and universal tripod socket.



No. 2 Bullet Kodak, without film\$	10.00
Leather Carrying Case, with strap	1.25
Light-proof Film Cartridge, for 12 exposures, 31/2 x 31/2	.60
Single Plate Holder, 31/4 x 31/2	.60

## No. 4 BULLS-EYE KODAK-For Films Only.



Capacity, 12 exposures, 4x5, without reloading. Size, \$x5%x9¼; weight, 2 pounds 10 ounces; 6¼ inch focus. Carefully tested achromatic lens of superior quality. Safety rotary shutter for time or instantaneous exposures. Three diaphragm stops. Two brilliant view finders, two universal tripod sockets and carefully adjusted focusing scale.

No. 4 Bulls-Eye Kodak, without film\$	12.00
Leather Carrying Case, with strap	2.00
Light-proof Film Cartridge, for 12 exposures, 4 x 5	.90

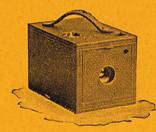
## No. 4 BULLET KODAK-For Films and Plates.

Capacity, 12 exposures,  $4\times5$ , without reloading. Size,  $5\%\times6\times9\%$ ; weight, 3 lbs.; 6% inch focus. Carefully tested achromatic lens of superior quality. Safety rotary shutter, for time or instantaneous exposures. Three diaphragm stops. Two brilliant view finders and two universal tripod sockets.



No. 4 Bullet Kodak, without film\$	15.00
Leather Carrying Case, with strap	2.00
Light-proof Film Cartridge, for 12 exposures, 4x5	.90
Single Plate Holders, 4x5	.75

## No. 2 BULLS-EYE SPECIAL KODAK-For Films Only.



Capacity, 12 exposures, 3½ x 3½, without reloading. Size, 4½ x 4¾ x 6¾; weight, 28 ounces; 5 inch focus. Carefully tested *Rapid Rectilinear Lens*. Three speeds for instantaneous work, also short time and time exposures. The shutter is the same as Eastman's pneumatic, but arranged to work with finger release instead of bulb, and is fitted with Iris diaphragm stops, graduated Nos. 4, 8, 16, 32, 64, and 128. Brilliant square view finder and universal tripod socket; an excellent bicycle companion.

No. 2 Bulls-Eye Special, without film	15.00
Leather Carrying Case, with strap	
Trade Craft as a rest	.60

## No. 2 BULLET SPECIAL KODAK-For Films and Plates.

Capacity, 12 exposures, 3½ x 3½, without reloading. Size, 4½ x 4¾ x 7½; weight, 2 pounds; 5 inch focus. Carefully tested achromatic lens of finest quality. The shutter is the same as Rastman's pneumatic, but arranged to work with finger release instead of bulb, and is fitted with Iris diaphragm stops, graduated Nos. 4, 8, 16, 32, 64, 128 Frilliant view finder and universal tripod socket. An excellent bicycle companion.



No. 2 Bullet Special Kodak, without film	18.00
Leather Carrying Case, with strap	1,25
Light-proof Film Cartridge, for 12 exposures, 31/2 x 31/2	.60
Double Plate Holder, 31/ x 31/4	1.00

## No. 4 BULLS-EYE SPECIAL KODAK-For Films Only.



Capacity, 12 exposures,  $4 \times 5$ , without reloading. Size,  $5 \times 5 \% \times 8 \%$ ; weight, 2 lbs. 12 ounces; 6 % inch focus. Carefully tested Rapid Rectilinear Lens. Three speeds for instantaneous work; also, short time and time exposures. The shutter is the same as Eastman's pneumatic, but arranged to work with finger release instead of bulb, and is fitted with Iris diaphragm stops, graduated Nos. 4, 8, 16, 32, 64 and 128. Two brilliant view finders and two universal tripod sockets. Carefully adjusted focusing scale.

No. 4 Bulls-Eye Special Kodak, without film\$	20,00
Leather Carrying Case, with strap	2.00
Light-proof Film Cartridge, for 12 exposures, 4x5	

## No. 4 BULLET SPECIAL KODAK-For Films and Plates.

Capacity, 12 exposures, 4x5, without reloading. Size, 5½x6½x10½; weight, 3½ pounds; 6½ inch focus. Carefully tested Rapid Rectitinear Lens. Three speeds for instantaneous work, also short time and time exposures. The shutter is the same as Eastman's pneumatic, but arranged to work with finger release instead of bulband is fitted with Iris diaphragm stops, Nos. 4, 8, 16, 32, 64 and 128. Two brilliant view finders and two universal tripod sockets. The Roll Holder is detachable and being



equipped with a dark slide is interchangeable with Plate Holders in the field, also permits of focusing on the ground glass when using films.

No. 4 Bullet Special Kodak with Cartridge Roll Holder and	
one Double Plate Holder, without film\$2	25.00
Also with Double Plate Holder but no Roll Holder	20.00
Cartridge Roll Holder, without cartridge	5.00
Leather Carrying Case, with strap	2.25
Light-proof Film Cartridges, 4 inch, for 12 exposures, 4 x 5.	.90
Double Plate Holders, 4 x 5.	1.00

## No. 4 CARTRIDGE KODAK-For Films or Plates.



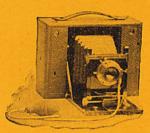
Capacity, 12 exposures, 4x5, without reloading. Size, 3½x6%x8% when closed; weight, 3 pounds; Size, 3½fx6%x8% when closed; weight, 3 pounds; Size, 15½ inch focus. Carefully tested Rapid Rectilinear Lens. Three speeds for instantaneous work, also short time and time exposures. Eastman's pneumatic release shutter, fitted with Iris diaphragm. The shutter can be operated by finger release instead of bulb if desired. Rack and pinion movement, and carefully adjusted focusing scale. Rising, falling and sliding front. Also permits of focusing on the ground glass when plates are used. Two brilliant view finders and two universal tri-

pod sockets. Has Eastman's non-collapsing bellows, and is equally well adapted to hand and tripod work.

No. 4 Cartridge Kodak, without film	\$25.00
Leather Carrying Case, with strap	2.00
Light-proof Film Cartridge, 5 inch, for 12 exposures, 5x4	90
Double Plate Holders, 4x5	. 1,00
Glass Plate Adapter, with ground glass	

## No. 5 CARTRIDGE KODAK— For Films or Plates.

Capacity, 12 exposures,  $5\times 7$ , without reloading. Size,  $33/\times 83/\times 103/8$  when closed: weight, 43/4 pounds; 83/2 inch focus. Otherwise the description of No. 4 Cartridge Kodak will apply in every particular.



35.00
2.50
1.60
1.25
3.00

Send for complete Kodak Catalogue, free and postpaid.

## CARRYING CASES, WITH STRAP.



Fo	r Pocket Ko	odaks		\$ .75
**	Folding P	ocket Koda	aks	. 1.25
**	21/2 X21/2	Cameras,	\$1.00 to	1.75
**	3½x3½	"	1.25 "	2.00
**	31/4×41/4	**	1.50***	2.25
66	4×5	- 66	1.75 "	3.00
"	5×7	**	2.00 "	3.50

Styles and prices vary; write or call for particulars.

#### CANDLES-For Lanterns.

Best Paraffine candles for use in dark room lantern.

Each, 3c; dozen, 3oc

Postage, each, 1c

## COTTON-Absorbent Filtering.

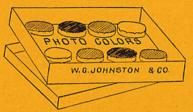
For filtering chemicals which, before or after using, may contain dirt or other detrimental foreign substances.

Per ounce, 5c Postage, 2c

## COLORS-Photographic.

For Tinting Photographs, Lantern Slides, Magazine Pictures, Steel Engravings, Pen Drawings, Maps, &c.

## COLORS-Photographic .-- Cakes.



We offer a set of eight carefully prepared colors, for giving any desired tint or shade to photographs, and securing beautiful effects at trifling cost by following the simple directions.

Postage, 5c

## COLORS-Photo-Lustra Liquids.

These are transparent liquids, including Green, Scarlet, Rose, Flesh, Blue and Vellow, from which other shades can be made by combining two or more before applying, or by putting one color over another after the first has dried.

The lights and shadows show through and produce beautiful effects without any special skill if the directions are followed.

They are five times the strength of similar preparations, absolutely uniform and widely used by professional artists and amateurs as a source of considerable profit.

The contents of a box will finish 1,000 cabinets.

Complete, with full directions.....\$1.00

## COLOR SENSITIZING MEDIUM.

## COLOR BRUSHES.

Best Camel's Hair, small, medium or large, each, 5c Postage, 1c each.

Cartridges. See Film Cartridges, page 30.

" Flash Lights, "



## DEVELOPING, PRINT-ING, MOUNTING, &c.

As these are the fascinating and instructive features of amateur photography, we strongly advise the amateur to perform these operations for himself,

If for any reason expert services are required in these lines, we are prepared for the work and will obtain the highest possible results from plates or films entrusted to us.

We will also make criticisms and offer suggestions for improvement "next time," Come in and use our dark room at any time without charge. We built it for you,

Drying Racks. See Negative Racks, page 37. Developers. See Chemicals, pages 9 to 14.

#### DROPPERS.

Very convenient for measuring Bromide or other solutions used by the drop. Glass tubes, best rubber bulbs.

Postage, 1c each.



Each, 5c

## DRY PLATES.



## New York Record "Specials"

are the best *all around* plates in the market for amateur or professional purposes, regardless of price.

They are rapid, about the same as Seed's No. 27, sensitive, reliable and uniform, develop quickly and have the finest of printing qualities.

EVERY PLATE WARRANTED.

## Special Prepaid Express Rate on Plates.

Dry plates are not mailable, but if cash accompanies order we can prepay to any point in the United States reached by Adams, American or United States Express at one cent per ounce, provided no package will be carried for less than 15 cents.

We give weights per dozen plates as follows:

## NEW YORK RECORD "Specials."

No.	12	1½ x 2P	er doz.	\$ .20
	22	2½ x 2½	**	.20
		3½ × 3½	**	.30
	33	3½ x 3½	44	.30
	34	3¼ × 4¼	44	-35
	44	4¼×4¼	- 64	.40
	45	4 ×5	44	.40
	57	5 x 7	44	.70
	68	6½ x 8½	44	1.00

Other sizes furnished.

THE PRICES OF ALL DRY PLATES ARE UNSETTLED AND SUBJECT TO CHANGE WITHOUT NOTICE.

## Other Standard Dry Plates.

	Stanley.	Hammer.	Seed,	Non-Halation
21/2 x 21/2per do	z25	.25	.25	
3½ x 3½ "	.30	-35	.35	
3¼ × 4¼ "	.35	.40	.40	.50
414 × 414 "	.40	.50	-55	.70
4 x 5 "	.40	.50	-55	.70
5 x7 "	.70	.90	.95	1.20

Other sizes and makes furnished.



## ENVELOPES.

Safety Photo Mailing, made of XXXXX Manilla reinforced by two pieces of pasteboard, one for each side of the picture.

Provided with a metal clasp that allows of easy examination as required by the postal regulations, thus reducing postage to 1c for 2 oz.

No.	18,	51/2	X	71/2	 each,	2c, per	dozen,	20C
"	24,	6	x	8	 **	3c,	44	30C
66	52,	71/2	x	101/2	 66	5C.	**	50C

Postage, per doz., No. 18, 15c; No. 24, 18c; No. 52, 30c Special prices quoted on large lots.

Envelopes for Negatives. See Negative Envelopes, page 40.



## EXPOSURE METERS.

Wynne's Infallible Exposure Meter is an unerring guide to the correct exposure required for every make and speed of plate, on every kind of subject and for any condition of light

Each, with full directions\$2.7	5
Box of Sensitive Paper for above	5
Postage on Meter sc: Paper 10	

Easels. See Printing Frame Easels, page 44.

## FABRIC-Ruby or Orange.

A transparent material which excludes the actinic rays and for dark room purposes is often preferable to glass, as it is unbreakable and mailable,

Thirty-eight inches wide, best quality, per square yard..........60c Less than square yard, """ "" "........70c

Postage, per square yard...... 100

Fixing Boxes. See Negative Fixing Boxes, page 39.

## FERROTYPE PLATES.





#### FILM CARTRIDGES.

## Eastman's Daylight Loading.

On spools so arranged that they can be inserted or removed in open daylight.

In the sizes given, the first number indicates the length of the spool. No. 12 size 11/x2 twelve exposures......per roll, \$ .25

	23,			x31/4		- 66	 66	.40
**				x3½		- 66	 "	.60
**	45.		4		**	- 11	 . 66	.90
**	54.			X4	- 11	- 66	 "	.90
-	75,	**	0	x5	**	- 66	 **	1.60

Postage on No. 12, 2c; No. 23, 3c; No. 33, 4c; No. 45 or 54, 5c; No. 75, 8c

Nos. 33 and 45 are also adapted for use with the Buckeye, Hawkeye, Bedford, &c.

## FILM CARTRIDGES-For Roll Holders.

For use in Cartridge Roll Holders, furnished as attachments with various makes of

In ordering these cartridges be sure to state that they are for Cartridge Roll Holder, giving length of spool and size of roll holder. Kodak Cartridges cannot be used in these Roll Holders, and vice versa.

In the sizes given, the first number indicates the length of the spool.

No.	. 303.	size	. 31	2X3/2	twelve e	exposur	espe	er ron	, 5.00
	405,				- 66	"		**	.90
	504,			F 100 1				4.6	.90
	705.		-		***	- 66		**	1.60

Postage on No. 303, 4c; No. 405 or 504, 5c; No. 705, Sc

## FILMS-CUT.

Best quality, prepared especially for the Vive Camera No. 44, 41/4 x41/4......per dozen, .75 Postage, securely packed, 5c

## FILM HOLDERS.

These hold the films perfectly flat throughout the developing process, making them as easily handled as plates. Each film can be developed according to its individual exposure. No curling, no uneven development, no soaking, no tacking up to dry. Made of aluminum, which is not corroded by the developing fluids.

## DIRECTIONS.

Cut up the entire film while

fingers are dry, and slip each piece, face up, into a holder. Treat each holder exactly like a plate, keeping the films in the holders through the entire process,

					I I	ach.	Postage.	Doz.	Postage.	
No	12,	for	films	11/2 X2	\$	.IO	\$ .01	\$1.00	\$ .05	
- 66	23.		166	21/4 x31/4		.10	.02	1.00	.06	
- 66	33,	**	44	31/2×31/2		OI.	.02	1.00	.07	
							.03	1.00	.10	
**	57.	- 66	**	5 ×7		.15	.03	1.35	.15	

In ordering, specify length of spool on which film is rolled; also name of Camera.

## FINGER TIPS OR COTS.





Made of smooth, tough Para rubber, sufficiently thin not to obstruct the sense of touch. Very useful in protecting the fingers from chemical stains.

Set of three tips......150

Postage, per set, ic

## FLASH LIGHT POWDER-Electric.

Our Electric Flash Powder is unsurpassed by others costing nearly double. It gives an intense richly actinic white light, Burns instantaneously with but little smoke. Put up in ounce bottles, also in cartridges with long fuse which extends beyond the box and being plainly visible, the exact moment of the flash is easily calculated.

## Electric Flash Light Powder.

Per ounce bottle, (not mailable).....40c

## FLASH LIGHT CARTRIDGES-Electric.

W. G. J. & CO.'S ELECTRIC FLASH LIGHT CARTRIDGES.

No. 20, Small, 20 grain, box of 7, .25 " 40, Medium, 40 " " 7. .40 " 60, Large, 60 " " 7, .60 "120, Ex. Large, 120 " " 7, .75

Not mailable.

## FLASH LIGHT SHEETS-Eastman's.

These sheets are treated with a special flash compound that burns more slowly than ordinary powders, thus giving a softer light, and more natural expression to the eye.

Per package of six sheets.....

## FOCUSING CLOTHS.





& Co.'8

Electric

Flash

Light

Powder.

Best quality thin, strong gossamer rubber, one yard square. Each.

Postage, 12c

40C

## FUNNELS.

Very convenient for filtering, pouring solutions back into bottles, etc. Unbreakable, acid proof.

Each......20c

Not mailable.

## GRADUATES.—Tumbler Form.

These answer every purpose of a regular graduate; the 2 and 4 ounce sizes being graduated in drams and ounces and the 8 ounce size in ounces only. They are even more durable than graduates and immensely popular on account of price and the ease with which they can be cleansed.



No.	2T,	Tumbler	Graduates,	2	ounce,	drams	and	ounces.	 each,	100
- 11	4T.	- 11	**	4	**	- 66	**	44	 **	120
- 11	ST	**	***	8	.66	onne	s on	v		150



## GRADUATES .- Goblet Form.

These are made especially for photographers' use and are quite accurate.

The figures and lines are shown on both sides in order to facilitate measuring. They are graduated in drams and ounces, except the No. oG, which is graduated in drams and minims or drops. The shape permits of easy cleaning.

No. oG,	Goblet	Graduat	tes, I dram,	graduat	ted, minin	is an	d drams	each,	20C
" IG.			I oz.		drams				
" 2G,	***	- 66	2 "	**	**	**	"	**	20C
" 4G,		**	4 "	- 66	"	"	"	**	25C
" SC	- 11	- 11	8 11	***	ounce	s		66	30C

## GLASS.-RUBY OR ORANGE.

Especially tinted for dark room use. Size for Dark Room Lanterns Nos. 1, 3, 5 or 1	oeach,
5 x 8	
8 x 10	
10 x 16	

## GROUND GLASS.

The best stock, finely ground for camera focusing purposes.

No.	45,	for	4 x 5	Can	1erae	ach,	IOC
"	57,	-	5 x 7	"		**	15c
041				1 1			

Other sizes furnished promptly.

## HYDROMETERS.



Very useful for testing the strength of solutions,

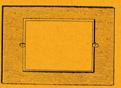
Best quality, each, in box.....5oc

Postage, roc (We do not guarantee safe carriage by mail.)

## KITS.

## Standard Pattern, Wood.

These enable the operator to use small plates in a large camera, and are made with special reference to lightness and strength.



No. 45, for using 3½x4½ plates in 4x5 holder, each......20c
" 57, " 4x5 " 5x7 " " .....25c

Postage on No. 45.....2c No. 57, ....3c

## KITS.—Dean's Universal.—(Improved)



Constructed of almost indestructible thin sheet metal, with movable grips which grasp and hold a plate of any size smaller than that originally intended for the holder.

This saves the expense of a large plate when a small one will answer the purpose as well, or when the regular size cannot be obtained. Economical, durable, compact and light,

If the grips should move too freely tap them lightly on the binding end, while lying on a hard surface,

## LANTERNS .- For Dark Room.



## Our "Leader" Compact Lantern No. 1.

This is a brand new article possessing very desirable features which make it the best low priced lantern on the market. Has a large ruby glass, giving a good volume of light. The ventilation is perfect and the case is light-tight.

For a similar lantern using oil, see our "Model" No. 5.

Leader No. 1.

## Our "Tourist" Folding No. 3.



Tourist No 3.



## Our "Model" Compact Lantern No. 5.

Similar to the "Leader" but is a little more elaborately constructed and uses oil instead of candles. The only satisfactory oil lantern at less than \$1.00.

Each.....50c

## Our "Perfection" Lantern No.10.

The finest lantern ever produced at the price. Has improved central draft, giving a volume of light hereto-foreunobtainable except at greatly increased cost. Hinged top, perfect ventilation, regulates from the outside, fitted with shade reflectors and has both orange and ruby glass, thus insuring a non-actinic light easy on the eye; burns oil



Extra ruby or orange glass for either of the foregoing lanterns.....each, 10c



## LAMPS.—For Flash Lights. The Ideal Flash Lamp.



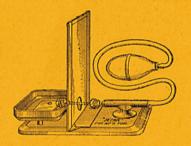
Simple,safe and sure; made of steel and finely nickel plated. The handle is made of polished rosewood. The powder is ignited by contact with a lighted taper or common match.

The operating lever is thrown clear back by means of a spring, thus making it perfectly safe while the taper is being lighted.

## THE ÆTNA FLASH LAMP.

This is, without exception, the finest flash lamp made, Absolutely safe from explosion, premature ignition, or failure to ignite,

The flame is always separated from the powder by the reflector until the bulb is pressed, when the piston glides through the small opening and brings the flame into actual contact with the powder, producing an instantaneous complete flash without possibility of moistening the powder accidentally,



Uses any good compound flash powder.

Price, complete.....each, \$1.25

Postage, 10c

## LEVELS.



Our Double Level can be used with cameras of any size and will be appreciated by landscape and tourist photographers. It is quite compact and may be attached to the body of hand cameras, or if a tripod camera is used it should be attached to the swing-back.

Price.....each, 45c

Postage, 2c

## LITMUS PAPER.

## LENSES-Photographic.

"It's all in the Lens, "—a better photograph can be made with a good lens in a cigar box than with a poor one in a polished mahogany case. As the various names and terms are but little understood by the public in general and the amateur in particular, we give a few brief explanations.

The Single Achromatic, (see cut,) is the most popular photographic lens in use.

The word "single" does not properly describe the lens, as it is composed of two separate lenses, but it is a single system as distinguished from lenses or objectives composed of two systems, as all higher priced onesare. "Achromatic" means without color and describes the optical corrections of the lens. An Achromatic lens must be composed of two or more lenses cemented together. If the lens were not achromatic it would resolve the light into its primary or prismatic colors, and it would be impossible to make a good photograph therewith. The proper correction of even cheap lenses is one which entails a considerable amount of scientific knowledge.

A more accurate name would be "Meniscus Achromatic," the word "Meniscus" describing the shape of the lens as produced by the curves on which it is ground, while the word "Achromatic" describes its optical condition.

The Rapid Rectilinear Lens is similar to the Instantaneous Symmetrical, described in following paragraph,

The Instantaneous Symmetrical. The word "Instantaneous" is merely intended to convey an idea of its rapidity. The word "Symmetrical" really describes in a general way, the construction of the lens and means a photographic objective consisting of two systems, (the front and the back separated by the diaphragm) which are of symmetrical construction; that is, they are identical as to shape and optical properties. This is the most popular form of the better grade photographic lens.

Wide Angle Lenses. These lenses are usually made on the Symmetrical plan and are so constructed that the "Wide Angle Symmetrical" has an angle of about 85 degrees, and the "Wide Angle" one of fully 100 degrees, thereby including a greater area than other lenses, but making a corresponding reduction in the size of objects, and is not much used by amateurs.

The Perigraphic Lens is made on the same general lines as the Rectigraphic but is a wide angle lens, and as such, should not be used if one of longer focus will do the work.

The Rapid Rectigraphic. "Rectigraphic" is a made up word intended to describe the photographic result obtained by the use of the lens, i.e., the picture is a correct or graphic reproduction of the subject. This lens is not constructed on the Symmetrical plan, but consists of two combinations each one of which is a triplet (three lenses comented together) and each having a different focus. Each combination is a well corrected objective in itself, so that good results can be obtained by using either combination singly, and being of different focal lengths, it really makes three lenses in one and is of great value when used with cameras of the long focus variety.

Turner-Reich Anastigmat Lens. This is without question one of the finest lenses made and is the peer of any of the celebrated products of European manufacture. The word "Anastigmat" means absence of astigmatism, the presence of which is the one great fault of any other style. In this lens not only is astigmatism entirely corrected but a flatter field, greater sharpness and rapidity are obtained. The effect of astigmatism, as seen on the ground glass, is that a lens having the defect will not make a sharp image of lines at right angles up to the edge of the plate; that is, if an image of a cross, consisting of a vertical and horizontal line were focused sharp at the center of the plate, and then without changing the focus, the camera were swung around so as to bring the image to the edge of the plate, it would be found that if the vertical line were in focus the horizontal line would not be, and vice versa.

"Definition" is simply clearness of outline and detail,

"Covering Capacity" is the ability to entirely cover a circle whose diameter is at least equal to the long way of the plate.

"Depth of Foons" is the power to clearly define both near and distant objects at the same time

"Flatness of Field" is that quality which enables a lens to define objects equally well over the entire surface of the plate,

## NEGATIVE DRYING RACKS



Nos. 20-25.

#### Leader Drying Rack No. 20.

Made of seasoned wood, well oiled to prevent swelling. Holds 24 negatives  $5\times7$  or smaller, and folds into small space when not in use.

Each 20c

#### Perfection Drving Rack No. 25.

Same style and capacity as No. 20 but larger and heavier, for plates from 4x5 to 8x10.

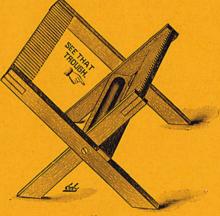


## Improved Drying Rack No. 35.

A little larger than No. 25, and provided with zinc fluting and drip trough.

The joints are particularly well constructed. Holds 30 negatives 8x 10 or smaller, and folds together compactly when not in use,

Each.....35c



No. 35.

## NEGATIVE WASHING AND DRYING RACK.



#### The Ideal.

Has no equal as a portable rack for the traveler. Twelve plates can be washed at a time and laid away to dry. The tray being water tight, catches the drip while the plates are drying. There are no loose parts to get lost. The sides collapse into the tray and fold into compact space.

No. 1, 3½ in. wide, for plates 3½ x 3½, and 3¼ x 3½ ......each, .50

" 2, 4¼ " " " 3¼ x 4¼, 4¼ x 4¼, and 4¼ x 6½.... " .50

" 3, 5 " " " 4x 5, 5 x 7, and 5 x 8..... " .50

## NEGATIVE WASHING BOX.



#### The Favorite.

This Box meets the demand for a neat and satisfactory washer for the smaller plates now generally used. The water enters from a rubber tubing attached to the nozzle at the bottom and runs out the perforations at the top of the opposite side. The plates are raised from the bottom by a platform so that the water circulates thoroughly under and between them, giving an easy and perfect washing. Made of zinc. Holds seventeen 4x5 or nine 5x7 negatives...... each, \$1.00

## NEGATIVE WASHING BOX.

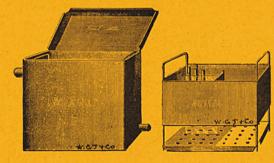
## The Simplex

Similar to the "Pavorite" but is provided with a convenient *lifting rod* for raising the plates out of the solution without handling.

Simplex for 4x5 or 5x7 plates .... each, \$1.25



## NEGATIVE WASHER AND DRIER—The Perfection. Combined and Adjustable.



The only perfect washer in existence.
The entire inner portion lifts out and becomes just as perfect a drier, saving the plates at their most critical stage, also the expense and bother of two separate articles for washing and drying.

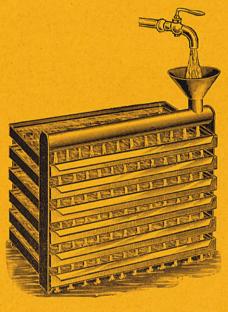
Can be used in connection with city water or any elevated vessel with spigot.

The water enters through the hose and discharging tube and is gently circulated over the entire area of the box, thus insuring perfectly uniform washing. The outer portion is perfectly plain, with no recesses to accumulate foreign matter.

Plates of any size smaller than the largest mentioned can be washed. Well constructed throughout of sheet and cast zinc.

			each	
" 57, "	5	×7 ''	 "	2, 10
Other sizes	furnished.			

## NEGATIVE and PRINT WASHER. The Globe.



Will thoroughly eliminate all traces of hypo from negatives or prints in fifteen minutes; no edges or corners left unwashed, as rapidly running water is constantly flowing over the entire surface of each.

The improved "Globe" washers stand perfectly rigid, being built of zinc and much stronger than the original design. By a recent improvement in construction all the trays are inserted or removed from one side of the frame.

In use, each negative or print is submerged under a thin covering of water in rapid motion. No rubber tubing required,

No.45, for negatives or prints 4x5 or smaller....\$1.25

No.58, for negatives or prints 5x8 or smaller.... \$1.60

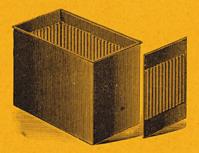
No. 58 will wash two 4x5 or smaller plates or prints in each tray.

#### NEGATIVE FIXING BOX.—The Model.

A first class chemical-proof box for fixing negatives of any size from 3½ x 3½ to 5 x 7.

Made of metal, finished in black enamel and coated on the inside with a special preparation rendering it proof against the action of chemicals. Provided with adjusting partition which adapts it to negatives of various sizes.

An excellent article for ......\$1.00



## NEGATIVE FIXING BOX.—The Complete.

Similar to the "Model," but is provided with a convenient lifting rod for raising the plates out of the solution without handling.

Suitable for 4x5 and 5x7 plates only.....each, \$1.25



## NEGATIVE FILING BOXES.

Indispensable to every photographer, whether amateur or professional, if he desires to file negatives systematically.

Each file holds 50 plates, or a much larger number of films, between pasteboard mats, with centers cut out for ventilation, which prevents plates from moulding or frilling.

Neg. No. Plate No.

Bright, Hazy, Cloudy,

Actinometer Time Min. See Sens. F

Exposure \_\_\_ Min.

Good.

Fair.

..... Time....

Dark.

Bad

No.	33	Size,	for	50 1	plates	31/2	x	31	ź e	ach,	45c
- 66	34	66.	66	50	***	31/4	x	41	£	**	50c
- 66	45	- 66	66	50	- 66					**	55C
44	57	66	66	50	- 66	5	x	7		**	6oc

Date.....

Developer .....

Result:

Subject:

Remarks:

WM. G. JOHNSTON & CO.,

## NEGATIVE ENVELOPES-

#### Improved Form,

Made of heavy manilla paper with blank spaces for recording every detail connected with the picture. (See diagram.) Invaluable for reference, as they form a perfect history of the operator's progress in photography.

## Per 100

No.	33	for	plates	31/2	x 31/2	3ос
**	34	**		31/4	x 41/4	зос
**	45	"	***	4	x 5	35c
66	57	66	**	5	x 7	4oc

## Postage, per hundred:

No. 33, No. 34, No. 45, No. 57, 12c 13c 16c 22c,

Mailing Envelopes. See Envelopes, page 24.



## OUTFITS

Wm. G. Johnston & Co.'s RECORD NEGATIVE HOLDER.

Pittsburgh, - - - Pa.

#### For Developing and Finishing.

Our outfits are the best and most complete on the market, and include every essential for practical photography, except camera and plates. Nothing omitted, and nothing skimped in size or quality.

CONTENTS: Good Ruby dark room Lantern. 3 developing Trays; bottle of Developer; bottle of Toner and Fixer; 1 lb. Hypo; Glass Graduate; Printing Frame; 1 pkg, Printing Paper; 1 pkg, Card Mounts; Paste and Book of Instruction.

Outfit for 4x5 or smaller	each,	\$1.50
If Developer, Toner and Fixer, furnished in powder	form,	100

#### PRINTING PAPERS.

PRICES UNSETTLED AND SUBJECT TO CHANGE WITHOUT NOTICE.

The rates for half gross and gross quantities are for paper packed in boxes containing the quantities named, and do not apply to six or twelve envelopes of one dozen sheets each.

## Special Prepaid Express Rates.

If cash accompanies order we will prepay to any point in the United States reached by Adams, American or United States Express, at 10 cents for the first 24 ounces and 1 cent for each additional 2 ounces.

We state the *postage* per dozen sheets, carefully protected, also the *weight* of larger packages in ounces, the postage being I cent per ounce, which in many instances exceeds the Express charges, and offers no security against loss.

		21/2 X21/2	31/2×31/2	31/4×41/4	414×414	4×5	5×7	6½x8½
Postage, per	dozen,	2C	2C	2C	3c	3c	4c	6c
Weight, "	½ gross	5 oz.	6 oz.	7 oz.	8 oz.	9 oz.	12 Oz.	18 oz.
	gross,	9 oz.	HOZ.	13 oz.	15 oz.	17 oz.	23 oz.	35 oz.
		Postag	ge extra,	ic per c	ounce.			



## SOLIO-EASTMAN'S.

A fine gelatine printing out paper, deservedly popular on account of its uniformity and the ease with which soft, rich yet brilliant effects can be produced.

Recommended for both professional and amateur work.

No.	22S	2½x2½	2 per	2	dozen,	20C	per	gross,	\$1.15
	23S	21/4×33	35	2	44	20C			1.00
	33S	3½x3½	4 "	2	**	20C		44	1.15
- 66	34S	31/4×41/2	4. "	2	66	200		66	1.15
	44S	41/4×41/2	4 "	2	**	25C		44	1.25
66	45S	4 x5	- 41	2	**	25C		44	1.25
",	57S	5 ×7			**	30C	\$1.60 gross.	**	2.65
**	68S	6½x8½	2 "	I	**	45¢	2.40	**	4.25

PRICES UNSETTLED AND SUBJECT TO CHANGE WITHOUT NOTICE.

#### SELF-TONING PAPER.

A Self-Toning Printing Out Paper which is simple to work, uniform in results and permanent. This new process paper is coated with collodion and in addition to the silver for printing, CONTAINS THE GOLD required for toning, which, when acted upon by the light, prints and tones simultaneously. Simply expose, then place in Hypo, that's all. Very economical, as no expensive gold toning bath is required.



No. 33ST	3½ x 3	½ per dozen,	15c	per ½ gross	, \$ .75	per gross,	\$1.50
" 45ST	4 x 5	"	25C	"	1.00	**	2.00
" 57ST	5 x 7	**	35c	**	1.75	**	3.50

Self-Toning Matt Solution, (concentrated) per bottle.....35c PRICES UNSETTLED AND SUBJECT TO CHANGE WITHOUT NOTICE.

5x7 88 3.50

WM. G. IOHNSTON & CO.,

## DEKKO-EASTMAN'S.

The new "Short Day" developing-out paper that prints perfeetly by day or artificial light, and is preferred by many on account of its easy manipulation. It has a range of tone from blue black to olive green, and is at all times perfectly under the operator's control.

The prints are absolutely permanent, will lie flat without mounting and are remarkable for their beautiful combined platinum and carbon effects.

The paper keeps indefinitely

The Carties of	33D	3½x3½	per dozen,	15c	per gross,	\$1.25
	44D	41/4×41/4	**	20C	"	2.00
	45D	4 ×5	**	20C	**	2.00
	57D	5 x7	66	35c	"	3.50
	31-	0				

PRICES UNSETTLED AND SUBJECT TO CHANGE WITHOUT NOTICE. Marvol and M. Q. Developers for Dekko Prints. See Chemicals, page 11. Postage extra. See head of page 41.



42

Requires no complicated manipulation. Prints by Artificial or Day light whenever and wherever desired. Requires but a few seconds for printing and as much more for developing the image, followed by the usual fixing and washing,

Extremely rapid working and hundreds of prints can be turned out in an incredibly short time.

No. 33V	3½ x 3½	per dozen, 15c	per gross, \$1.25
" 45V	4 × 5	" 25c	" 2.00
11 TOV		" 40c	" 3.50

PRICES UNSETTLED AND SUBJECT TO CHANGE WITHOUT NOTICE.

Marvol and M. Q. Developers for Velox Prints. See Chemicals, page 11. Postage extra. See head of page 41.

## PHOTOGRAPHIC BLUE PRINT PAPER.

Especially prepared for simplified photography and surpasses anything of the kind heretofore offered. No chemicals required; simply expose and wash thoroughly in clean water to obtain beautiful permanent prints, in pure white and bright blue, at small expense.

Very convenient for making proofs of negatives.



No.	33B	31/2	X 3 1/2	per pack	age of	25 sheet	s, 16c	gross	package,	\$ .80
66	34B	3 1/4	x 414	**	"	**	16c	**	"	.80
	44B			66	6.6		16c	- 11	- 66	.80
	45B			**	- 66	**	20C	44	**	1.00
	57B			**	**	66	35C	- 64	**	1.75
	011				Dontos		Con	load a	C marra ir	

Other sizes furnished. Postage extra. See head of page 41. TO OBTAIN OTHER COLORS FROM BLUE PRINTS.

GREEN.-Print rather lightly wash well and immerse in 15 minims of sulphuric

acid diluted with to ounces of water.

VIOLET.—Immerse the blue print in a 25 per cent, solution of acetate of lead.

BLACK.—Bathe the print in a 4 per cent. solution of carbonate potassium until the blue disappears and the print is a yellowish brown, then bathe in a 4 per cent. solution of tannin.

N. B. Wash thoroughly after treating with any of the above.

## PAPER FOR DARK ROOM.

This is an orange-red paper, perfectly non-actinic, for use on windows, &c. In sheets 20 x 25.....each, 3c; 2 for 5c; dozen, 20c



## PRINT HOOK CLIPS.

For holding prints while drying, hook on upper end for hanging on a cord or wire; bull dog clip on lower end; nickel plated.

Each, 3c: 2 for 5c: dozen, 20c

Litmus Paper. See Litmus, page 35. Print Rollers. See Rollers, pages 45-46.

## PLATE HOLDERS. Improved Double, with best hard rubber slides for Leader or Korona Cameras.

No.	22,	for	plates	21/2 x21/2,	each	\$ .75
	33,					
"	34,	**		31/4×41/4,		
66	45,	**	**	4×5,		 Service Control
66	57.	66	44	5×7,	**	 1.25



## PLATE HOLDER SLIDES

Best	Hard	Rubber,	for	31/	2×31/2	or	smaller	holders	eacl	115c
**	**	**	**	4	x5			"		20C
**	**	**	**	5	x7			"		25c

## PRINTING FRAMES.

Ų		Lea	der.	
į	Hardwood wi	th dovetaile	d frames, 1	ight, and strong.
ľ	No. 22, for plat	tes 21/2 x21/2	, each	15
i		3 1/2 X3 1/2	, "	
q	" 34, " "	3 1/4 × 4 1/4	, "	
I	" 44, " '	4/4 - 4/4	, "	
į	" 45, " '	44.31	"	
	" 57, " '		"	
	Nos. 22, 3 Postage, 4c, 5	33, 34, 4	4, 45, 57	
9	Postage, 4c, 5	se, se, 60	c, 6c, 70	

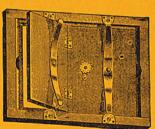
## PRINTING FRAMES.

#### Perfection.

Best hardwood, substantially made, dovetailed frame with light-proof flange.

Well shellaced and finished, with springs bushed to prevent wear.

Furnished, when desired, with tally ratchet for counting both the number of prints made and to be finished.



No. 405, for plates 4x5 without tally, 3oc, with tally, 35c. " 5×7 " " " 507, " 35c. " Postage on No. 405, 15c No. 507, 20c

## PRINTING FRAME TALLIES.

For attaching to any printing frame.....each, 5c



## PRINTING FRAME EASEL.

This simple contrivance will be found a great convenience for raising the printing frame to the angle of the sun's rays, and should be used by every photographer and amateur.

Each.....20c Postage, 6c

## PHOTOGRAPHIC PASTE.

Our Mucilaginous Paste is a beautiful translucent white, of the exact viscosity for adhering quickly and tenaciously.

UNEXCELLED FOR PHOTOGRAPHIC PURPOSES. Cannot mould, sour nor separate. Will not strike through nor discolor.

When thickened by evaporation simply thin with water.



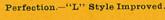
					h	
6 ounce	glass	jar	with	cap	and brush, each	.20
Pint		"	66	11		
Ouart	66	**	- 66	**		.50



## PLATE LIFTERS.

Leader.-"Thimble" Style.

Made of metal, with projecting point which lifts the plates or films without scratching them. Each......oc Postage, 1c





This is attached to the end of the tray by a spring. A gentle pressure raises the plate without danger of scratching and keeps the operator s hands out of the solutions, some of which will stain.

The part under the plate is quite thin, so that no extra amount of solution is required. Made of aluminum and cannot corrode.

Each......20c

Postage, 1c

Print Washers. See Negative and Print Washers, page 39. Plates. See Dry Plates, page 28.

## RETOUCHING GLASSES.

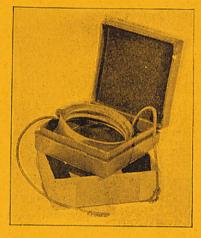


Inches. Each. \$ .75 1.15 1.30

Also useful in examining photographs for details otherwise invisible to the naked eve.

Best German silver rim, polished ebony handle, superior lenses, substantially mounted and guaranteed best quality.

31/2	4	41/2
1.70	2.25	2 80



## RAY FILTER-or Monochromatic Screen.

#### The Karma.

This perfect little contrivance consists of an exceedingly thin sheet of the most perfect mica, stained to a uniform transparent yellow. This disc of mica is mounted in a brass cylinder, finely finished, and large cylinder, finely finished, and large enough to cover the aperture of any lens. By means of elastic cords it can be instantly fastened to any camera. By employing extra sheets of mica a yellow light of any desired intensity may be obtained. The refraction caused by the extremely thin sheet of mica is totally imperceptible in photographics clouds. ceptible in photographing clouds, foliage, flowers, water scenes and

Price, complete in neat case, Each ......50c Extra sheets mica ..... each, 25c

## ROLLERS-Mounting and Squeegee. Single Roller.



No. 1.

No. 1, LEADER, has its handle and frame cast in one piece with angular ribs, that make it strong and light, The handle is arched for easy handling, and is pivoted on steel pins.

Postage, 10c



No. 3-

No. 3, BEAUTY, has an iron frame, with large threaded steel shank screwed firmly into the handsome polished imitation rosewood handle, pivoted on strong steel pins.

4 in. velvet rubber rolls, each, 15c 6 in. velvet rubber rolls, each, 25c Postage, 10c

## Double Roller, No. 5.

WM. G. JOHNSTON & CO.,



No. 5, TWIN BEAUTY, Similar to the Beauty, but with two rolls and a one piece handle of new design, allowing the pressure to be applied directly above the rollers, which are pivoted on steel pins.

The construction is such that it will not slide the print sideways.

6 inch velvet rubber rolls.....each, 40c

Postage, 15c

## SCALES.

## "Arc" Photographic Scales.

These are accurately graduated in drams, and will weigh correctly from 1 dram to 1½ ounces. They can be folded into small space.

Each in a neat box..... 75c

Postage, 5c



## STIRRING RODS .- Glass.

Very convenient for mixing various solutions, some of which would be affected by metals. &c.

12 inch....each, 12c

Spirit Levels. See Levels, page 35.

Sleeves. See Aprons, page 5.

Squegee Plates. See Ferrotype Plates, page 29.

Shutters. Ask for Special Catalogue, stating requirements.

#### TUBES-For Mailing Purposes.



Constructed on the spiral principle, very strong and light, for mailing photos, drawings, etc. Size, 36 and 42 inches, from which shorter pieces may be cut as desired.

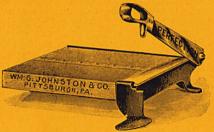
1¼ x36, each, 8c dozen, \$ .75 2 x42, "100 "1.00

## TRIMMERS.

## Perfection, for Card and Paper.

This combines economy, simplicity, durability, efficiency, compactness, beauty and general excellence in the highest degree,

The surface is a hardwood block, shellaced finish; cast metal parts are enameled vermilion; the blades are of the very best polished steel, temperedas hard as practical for shears. The handle and blade are both finely nickel plated; the lower blade can be readily removed by



loosening two screws, when it is necessary to sharpen, and easily squared or adjusted. It stands on three legs, insuring a rigid base wherever placed.

No. 51/2,	with 51/	inch	blad	e for 4x 5	prii	its or	sma	ller	\$1.25
" 71/2,	" 71	2 "	**	5x 7	- 66	**	6.6		1.65
" II,	" 11	**							

## TRIMMERS.

## Lloyd's Improved Rotary for Papers.



Constructed on an entirely new principle, which makes it impossible to buckle the print or paper which is being trimmed, thereby insuring a perfectly clean and true edge.

All that is necessary is to place one side of the print or paper to be trimmed, square with the rule, and allow the

part that is to be cut off to extend under the pressure plate, which holds the paper firmly in position while the wheel is revolved from one side to the other. The cutter is self-sharpening,

Unmounted prints or printing paper can be trimmed quickly and absolutely true, so that it is economy for any photographer, either amateur or professional, to use one,

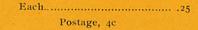
No.	7	7	inch	cuteach	\$2.50
44	81/2	81/2	**		3.00
**	10	10		"	3.50

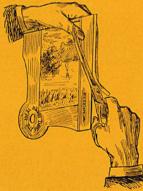
## TRIMMERS.

#### The "Ideal" Print Trimmer.

This is a simple, practical trimmer for prints up to 5 inches square. Made of metal, finely plated and equipped with a graduated measure.

The print is placed in the trimmer with the edge to be trimmed under the guide and the other edge in contact with the measure at the top; press with the thumb on the guide, and with a pair of shears cut along the edge of the guide.





## TELEMETERS.

#### The Ideal Telemeter and Level.

This little instrument is designed to enable hand-camera users to measure the distance to any object with accuracy, and without attracting attention.

#### DIRECTIONS.

Look through the sight-tube towards the base of the subject to be photographed; the index hand will point to the number of feet (on the scale) between the observer and the subject to be photographed.

graphed.

The Telemeter can also be used as a plumb of indicator to accurately level the camera when on the tripod. Made of brass, nickel plated.

Each.....50c



## The Aluminum Telemeter.

This is a simpler form of the above.....each, 25c



WM.G.JOHNSTON & CO.

Neatly finished with two coats of Japan over a plating of tin, and provided with a raised knob to prevent the plates from sticking to the bot-

No.	45T.	11/2	x	5	1/2	Tapanned	each,	IOC
	58I							15c

## Electroid-Acid Proof.

These are sometimes sold as hard rubber, which they resemble, and while not so durable, they are serviceable and satisfactory. Four slightly raised ridges on the bottom prevent the plates from adhering.



These trays have a convenient pouring lip, which dispenses with the funnel.

No.	34E, 3	1/2	X 4/2	Electron	a	eacn,	20C
- 66	45E, 4	1/2	x 51/2	"		44	25C
44	58E. 5	1/2	x 81/2	44		66	40C



## Rubber-Polished.

Improved trays with depression to allow of engaging the plate without scratching its surface.

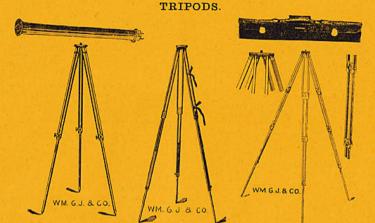
Prices unsettled at present, but we will always meet competition.

No.	45R,	41/2	x 51/2,	Polished	Rubbereach,	28
			x 81/2.		"	56

Tray Coating. See Chemical Coating, page 14.

## PLATES HELD FOR DEVELOPMENT.

When plates are exposed and set away for future development, be sure to set them face to face, as they were in the original boxes. If the face or film is placed against the back, you will probably have finger marks on the film, caused by the fingers coming in contact with the backs of the plates while placing them in the holder.



Leader No. 2. An excellent article, well made from selected spruce, in two parts. Extends to 56 inches, closes to 29 inches; steel pointed; rigid and light.....each, \$1.25

Perfection No. 3.

Leader No. 2.

Perfection No. 3. Selected straight grained spruce or ash, in three parts; extends to 56 inches, closes to 23 inches; steel pointed; improved pin locking device for holding the legs firmly together; rigid, light, well finished, and exceptionally strong.....each, \$2.25

EASTMAN'S FEATHER NO. 4. Remarkably light, compact and strong. Especially adapted to the tourist or cycler; carefully made from finest cherry or spruce, in *four parts*. Extends to 52½ inches, closes to 14½ inches; brass fittings, except the top plate, which is of aluminum, and weighs, in spruce, but 17½ ounces; steel pointed, very rigid, for Camera 4 x 5 and smaller.

No. 4S, Spruce, weight, 171/2 ounces	each,	\$4.00
No. 4C, Cherry, " 20½ "	**	4.00
No. 4M, Mahogany finish, weight, 201/2 ounces	**	4.50
Black sole leather Carrying Case	***	1.50

## THERMOMETERS-Photographic.



These are attached to the end of the tray by means of tongue springs, so that the bulb is immersed in the solution, enabling the operator to obtain the exact temperature for proper work-

Feather Nos. 4S, 4C, 4M.

## INDEX.

## VIGNETTERS.

## The Improved Dixie Adjustable.



This is attached to the ordinary printing framo and can be quickly, easily and accurately adjusted to any negative—the Pear, Oval, Round, Square or any desired opening can be produced, of any size required, and right where it is wanted. It is all complete, always ready for use, and not only allows

any desired opening to be formed, but also enables the user to see at a glance just what size and shape is required and to make it immediately.

No.	34.	for	3	4×44	printing	frame,	eacl	1	.30
**	45,	44	4	x5	**	**	**		.30
**	57,	**	5	×7	46	-66	"		.30

Postage on No. 34, 5c; No. 45, 6c; No. 57, 8c

## VIGNETTERS-Karma Matt.



MADE WITHOUT ONE.

MADE WITH ONE,

Most amateurs have difficulty both in trimming and mounting prints smoothly and squarely on their cards,

Karma Matt Vignetters cost but a trifle and enable any one to overcome these difficulties, as well as to obtain beautiful results from negatives that are not sharply cut to the edges or are otherwise imperfect. (See the comparison made with above illustrations.)

Use a good variety of these matts, print only the *heart* of the picture, no matter how small a part this may be, and most surprising and satisfactory improvement will be obtained.

There are six matts of each size made—three styles of central openings with wide margins and three with narrow ones.

The openings are circular or oval, square or oblong, and diamond.

No.	22,	for	21/2 X21/2	paper.		No.	44,	for	4¼×4	¼ paper.
**	33,	- 66	31/2×31/2	**		**	45,	"	4x5	"
44	34,	**	31/4×41/4	- 66		- 66	57,	**	5×7	"
00	i		one cire	price	including p	netam	e			

Other sizes furnished promptly. Send for circulars.

Washing Boxes. See Negative Washers, etc., page 38.

PAGE,
Acid Fixing Powder or Salts 12
Albums3 to 5
All About Lenses 36
Aprons 5
Rievele Clamp
Backgrounds         7           Bicycle Clamp         7           Blotting Board or Paper         7           Blue Print Powders         12           "Papers         42
Blotting Board or Paper 7
Blue Print Powders 12
Books on Photography 6
Brushes6-7
Burnishers 7
Cameras 15 to 26
Carrying Cases
Carrying Cases 26
Cartridge Films 30
" Flash Lights 31
Card Mounts8-9
Chemicals
Coating for Trays, &c 14
Colors
Cotton
Cuffs and Sleeves 7
Dark Room Paper 43
Dekko42
Developers-Solutions 10
-Powders11-12
-Tablets 13
Developing Trays 48
Droppers 27
Dry Plates 28
Easels 44
Eastman's Solio41
Encyclopedia-Photographic 6
Envelopes-Mailing 29
Envelopes—Mailing
Exposure Meters29
" Tables 6
Pabric for Dark Room 26
Ferrotype Plates 29
Filter—Karma Ray
Films and Film Holders 30
Fixing Boxes 39
" and Hardening Powder 12
" Trays 48
Finger Tips or Cots 31
Flash Cartridges and Powder 31
" Light Sheets 21
Focusing Cloth 31
Funnels 32
Glass-Ground 33
" -Ruby and Orange 32
" —Ruby and Orange 32 Glycerine 11
Gold Solution 10
Graduates 32
How to Make Photos 2
Hypo, see Chemicals 14
Hydrometers 33
Intensifying Solution II
" Tablets 13

PAGE.
Karma Tablets 13
Tr's
Kits 33
Kodaks21 to 26
Lanterns for Dark Room 34
T C- Til-ol Ti-let
Lamps for Flash Lights 35
Lenses 36
Levels 35
Tit To
Litmus Paper 35
MARVOL developer9-10-12
Magnifying Glasses 45
magnifying Classes
Metol Quinol Tubes, 11
Mounting Rollers45-46
Negative Drying Racks 37
" Developes 10
" Envelopes 40 " Filing Boxes 40
" Filing Boxes 40
" Fixing Boxes 39
Washing Doxes30-39
Outfits 40
Papers—Printing 41-42
Paste 44
Photographic Colors 27
Encyclopedia 6
Encyclopedia
Platinum Solution 10
Plates-see Dry Plates 28
Plate Holders and Slides 43
" Lifters 44
Printing Frames 43
Print Hooks 43
" Trimmers 47
washers
Ray Filter 45
Reducing Solution 11
" Tablete 13
" Tablets 13
Restraining Tablets
Retouching Glasses 45
Dallana 15
Rollers 45-46
Scales-Photograph 46
Self-Toning Paper
Consistence Management of
Sensitizing Medium 27
Single Toner II
Colio Paper
Squeegee Plates—see Ferro. 29
Squeegee Rollers45-46
Stirring Rods 46
Tallies
Telemeters 48
Thermometers 49
Toning and Fixing Solutions 10
Tours of the same
" " Powders 12
" Tablets
Trays 48
11ays 40
Tray Coating 14
Trimmers 47
Tripods 49
Tubes for Mailing 46
Velox
Tildada da
Vignetters
Washing Boxes38-39
Weights and Measures 20