HOUGHTONS



LTD.

The Largest Manufacturers of Cameras . and . Photographic Apparatus in the Kingdom.



Head Offices:

88-89, HIGH HOLBORN, LONDON, W.C.

TELEGRAMS: "BROMIDE," LONDON." TELEPHONES: 2500 HOLBORN (4 lines).

Glasgow Branch:

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TELEGRAMS: "HOUGHTONS," GLASGOW.
TELEPHONES: 1309 ARGYLE & 4666 POST OFFICE.

Optical Warehouse: 95, HATTON GARDEN, E.C.

Factories covering $2\frac{1}{2}$ acres at Walthamstow.



The
"Sander=
son"
Hand
Camera.

The REGULAR MODEL, illustrated above, can be supplied with any Lens or Shutter.

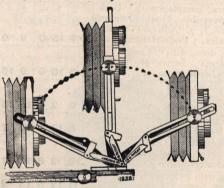
Full list can be obtained on application.

No.	DESCRIPTION.	41 >	31	in.	5 >	< 4 i	n.	61:	× 43	in.
1	Camera, complete with "Beck" Convertible Double Aplanat Lens, 1/77, 3-Foci, "Automat" Shutter, Brilliant Finder, Level, and 3 Double Plate Holders	£	s. 10	d.		s. 10		18.8	s. 10	
14	Ditto, ditto, with "Ensign" Anastigmat Lens, Series II., 3-Foci, f/7.7, ditto, ditto	7	5	0	8	5	0	11	10	0
1x	Ditto, ditto, with "Ensign" Anastigmat Lens, series I., 3-Foci, f/5.8, ditto, ditto	7	17	6	9	5	0	12	12	6
1a	Ditto, with "Busch" Detective or Rapid Aplanat Lens	7	12	6	8	17	6	11	17	6
3	Ditto, with "Dallmeyer" Stigmatic Lens, Series IL, f/6	11	17	6	14	10	0	19	10	0
4	Ditto, with "Goerz" Dagor Double Anastigmat Lens, Series III., f/6.8				12	17	6	17	7	6
4c	Ditto, with "Goerz" Syntor Double Anastigmat Lens, Series 1 D, f/6.8	8	17	6	10	-	6	-	12	6
5	Ditto, with "Cooke" Lens, Series III., f/6.5	10	7	6	11	12	6	16	2	6
8	Ditto, with "Zeiss" Double Protar Lens, Series VII.a, f/6.3	14	17	6	17	7	6	23	0	0
10	Ditto, with "Aldis" Anastigmat Lens, Series II., f/6	7	7	6	9	17	6	14	7	6
9	Ditto, with "Ross" Homocentric Lens, Series III., f/6.3	9	17	6	11	7	6	16	0	0
0	Ditto, complete with Bright Finder and 3 Double Plate Holders, but without Lens or Shutter	5	5	0	6	5	0	8	17	6
Extra	a for 3 Mahogany Book Form Slides in ce of 3 Plate Holders, as listed	0	15	0	0	15	0		_	
Solid	Leather Case to hold Camera and 3 Slides a for "Koilos" Shutter in place of "Uni-	0	10	6			6		15	6
	n" or "Automat" as listed	0	15	0	0	15	0	0	15	0

Advantages of the "Sanderson" over all other cameras.

- Universal Swing Front instantly fixed in any desired position, and controlled completely from the back of the Camera.
- Universal Swing Front with lens carrying front always held centrally, therefore possessing greater rigidity when fixed in any position.
- 3. Universal Swing Front with lens always swung on its axis; any other method of swinging the lens means refocussing for each adjustment of the swing movement.

If you are interested in the "Sanderson" Camera, send us a post-card, and ask for the green "Sanderson" Booklet; it is full of pictures, and explains the various advantages of the series at length. We send you this booklet free.



This diagram shows a portion of the universal swing movement and the locking action. It shows the camera front in three different upright positions. The slotted struts swing from a common centre, and the lens is always swung on its axis. It is, of course, obvious that the front can be stopped at any point on the arc shewn by the arrow heads, and at the same time can be raised or lowered in any position within the arc.

The "Sanderson" Tropical Model.



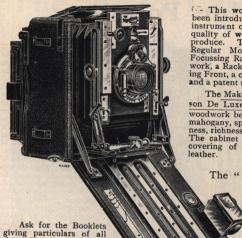
This is a model of the celebrated "Sanderson" Camera, which is constructed of selected Teak, a wood recognised for its great damp and heat-resisting qualities. The outside woodwork is polished instead of being leather-covered, for leather covering is sometimes liable to rot and peel when exposed to a damp atmosphere. The cameras are brassbound in all vital parts, and the bellows are specially attached with brass plates to the body of the camera. The "Tropical Sanderson" can be confidently recommended for

export to India and the Colonies. It is essentially the traveller's camera, for nothing is sacrificed to appearance, and every practical point has been considered.

STATE OF THE PERSON				1991					Hallagaci	
No.	DESCRIPTION.	1	14×3	ŧ	178	5×4	444	6	×4	
1	Camera, complete with "Beck" Convertible Double Aplanat Lens, f7.7, "Automat" Shutter,	1						£		
4.6	Finder, 3 Plate Holders	7	15	0	9	0	0	12	0	0
10	Ditto, ditto, with "Ensign" Anastigmat, Series II. (3 foci), f/7 7, ditto, ditto	8	10	0	9	15	0	13	0	0
1x	Ditto, ditto, with "Ensign" Anastigmat, Series I. (3 foci), f5.8, ditto, ditto	9	2	6	10	15	0	14	2	6
1a	Ditto, with "Busch" Detective or Rapid Aplanat Lens	8	17	6	10	7	6	13	7	6
4	Ditto, with "Goerz" Dagor Double Anastigmat Lens, Series III., f/6.8	12	2	6	14	7	6	18	17	6
5	Ditto, with "Cooke" Anastigmat Lens, Series III., f/6.5	11	12	6	13	2	6	17	12	6
8	Ditto, with "Zeiss" Double Protar Lens, Series VIIa., f/6·3	16	2	6	18	17	6	24	10	0
3	d leather case to hold Camera and Slidesra for "Koilos" Shutter in place	0	10	6	0	12	6	0	15	6
of	"Unicum" or "Automat"	0	15	0	0	15	0	0	15	0

Any lens or shutter can be fitted to the "Tropical Sanderson." See price list. Houghton Film Envelope Adapters are specially made in teak for this model.

The "Sanderson" De Luxe.



This wonderfully perfect model has been introduced for those who require an instrument of the most perfect finish and quality of workmanship it is possible to produce. The Body is different from the quanty of the control and a patent stop plate.

The Make and Finish of the "Sanderson De Luxe" are of the very best, the woodwork being of well-matured Spanish mahogany, specially selected for its sound-ness, richness of colour, and fine figuring. The cabinet work is faultless and the covering of the finest black Morocco

> The "SANDERSON DE LUXE" costs £10 0 0 in the quarter - plate size.

giving particulars of all the various sizes. The De Luxe Models can be supplied with any Lenses to order.

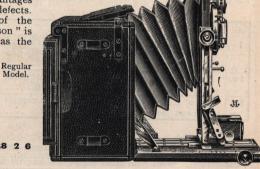
The Post=Card "Sanderson."

The Post-Card "Sanderson," taking plates $5\frac{1}{2} \times 3\frac{1}{2}$, yields admirable upright pictures, and when used the long way gives a picture having all the panoramic advantages with none of its defects. The specification of the Post-Card "Sanderson" is exactly the same as the Regular.

No. 1d. "Post-Card" Sanderson Hand Camera, complete wilh Beck Conver tible Aplanat Lens, f/7.7 (7½ inch focus), and Automat Shut-ter, Brilliant View Finder, Level and three Double Plate

Holders . No. 1v. Ditto, ditto, with "Ensign" Anastigmat Lens Series

6 17



The "Sanderson" Regular Popular.



The Regular Popular "Sanderson" is a field camera embodying all the celebrated "Sanderson" movements. A special feature of this camera is the great range of extension obtainable, the 3-plate size extending to 21 in., and yet the lens when raised may be set back to within 23 in. of the focal plane without cutting off any portion of the image. Each camera is built with a cross front and rising lens board, and is constructed with the usual reversing frame attached to the new and improved body. camera has the usual extended baseboard actuated by rack and pinion, and an additional rack and pinion for the back for wide - angle Although produced at a popular price, these cameras are exceedingly well made and finished. They are made in Teak and Mahogany.

The price of the Teak model being rather above those quoted below.

No. 1	DESCRIPTION.	½-plate.	1-plate.
1	Complete with Lens, Thornton-Pickard Shutter, I Double Dark Slide, and 3-fold Ash Tripod Stand		. £ s. d.
1v	Ditto, ditto, with "Ensign" Anastigmat Lens, Series II., 3-Foci, f/7.7, ditto		10 12 6
1x	Ditto, ditto, with "Ensign" Anastigmat Lens, Series I., 3-Foci, f/5.8, ditto	8 12 6	

Write for full particulars and quotations for the Regular Popular "Sanderson," fitted with other high-class Anastigmat lenses.

A Special List of Field Pattern "Sandersons" is published.

The "Victo" Camera Set.



CAMERA. — Polished Mahogany, Triple Extension, actuated by two Racks and Pinions, highly finished Lacquered Brass Fittings. Automatic Self-erecting Swing Front and Back with extreme Rising, Falling and Cross Front (rigid in any position) Wide-Angle Movement, Double Swing Back, Reversing Frame, Real Leather Truncated Bellows. Plumb Indicator, and beautifully finished flush Turntable with Clamp.

DOUBLE DARK SLIDE.—Feather pattern of superior make, book-form, with special lighttight Joints, Spring Catches, and Hinged Metal Partitions.

Shutter. — Thornton-Pickard Time and Instantaneous. Behind Lens Pattern, with Speed Indicator and Pneumatic Release.

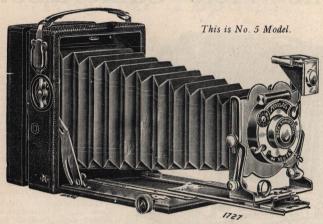
TRIPOD STAND. — Three-fold, with sliding leg, straps and handle.

No.	DESCRIPTION.	½-plate.	1-plate.
1	"Triple-Victo" Set complete with "Ensign" Symmetrical Lens, f/8, and	Fight Market	£ s. d.
	"Thornton-Pickard" Shutter, etc	3 10 0	5 10 0
1a	Ditto, complete with "Ensign" Aplanat Lens, f/7-7	3 15 0	5 17 6
2	Ditto, "Busch" Rapid Symmetrical Lens,	3 17 6	6 0 0
3	Ditto, "Beck" Rapid Symmetrical Lens, f/8	3 15 0	5 17 6
1v	Ditto, ditto, with "Ensign" Anastigmat, Series II. (3 foci), f/77	5 10 0	8 2 6
1x	Ditto, ditto, with "Ensign" Anastigmat, Series I. (3 foci), f/5 8.	6 12 6	SW. WE.
2012	Extra Double Slides	86	14 6

Teak Victo made in all sizes for Tropical use.

Post-card and 5×4 models in mahogany or teak.

"Tudor" Cameras.



A British-made series of Folding Hand Cameras of an entirely new type. The similarity of the "Tudor" to other cameras of the folding type ends with the appearance. The patent combined rising and swing front ensures that no matter how much the lens is raised in order to photograph high objects, the plate or film is always fully illuminated. With the "Tudor" automatic rising and swing front, the lens is swung on its optical centre, and therefore there is no danger that the circle of illumination is not sufficiently large to cover the plate. The finder which is attached to the front swings to exactly the same level as the lens, and thus always shows the amount of rise obtained on the plate.

	-			
No. 1. Camera of Mahogany, with nickel fittings. Fitted with patent Rising Front. Symplanat Lens, Simplex Auto Shutter, View Finder, Infinity Catch and Double Dark Slide, complete	£	-plat	d.	
No. 2. A Similar Model with "Rectimat" f/8 Lens		10	200	
No. 3. A Double Extension Model with "Rectimat" f/8 Lens		17	6	
No. 4. Double Extension Model with Automat Shutter and "Rectimat" f/8 Lens		10		
No. 4vv. A Similar Model with "Ensign" Anastigmat, Series II., No. 0, f/7'7, and Automat Shutter		15		
Shutter Anastigmat, Series I., No. 0, f/5'8, and Automat		10		
No. 5. Very handsome Model with "Beck" or "Busch" Rapid Symmetrical Lens, f/8, and "Automat" Shutter; Swing Back, Camera covered in real leather				
No. 5v. A Similar Model with "Ensign" Anastigmat, Series II., No. o, f/7'7, and Automat Shutter		4		
No. 5x. With "Ensign" Anastigmat, Series I., No. 0, f/5'8, with Automat Shutter		2		
Models Nos. 4 and 5 can be fitted with any of the Modern Anastig			ŭ	
Lenses. For prices, see Detailed Catalogue.	mu			
Post-Card "Tudor" complete with "Busch" or "Beck" Lens, aud "Automat" or "Unicum" Shutter	•			
Extra for "Koilos" Shutter to any Model in place of "Unicum" or "Automat" as listed		17		
	9	15	0	

"Folding Klito."



Quarter-Plate.

No. 0 "Folding Klito," with Symplanat Rapid Achromatic Lens, "Simplex Auto" Shutter and two single metal slides Note.—The No. 0 "Folding Klito" has a Polished Ebonised Baseboard and is not fitted with a Cross Front. No. 1 "Folding Klito," with "Symplanat" Rapid Achromatic Lens, "Simplex Auto" Shutter and two single metal slides..... No. 3 "Folding Klito," with Beck Symmetrical Lens, f/8, and "Simplex Auto" Shutter and two single metal slides No. 4 Folding Klito," with Beck Symmetrical Lens, f/8, "Automat" Shutter and two single metal slides No. 5 "Folding Klito," "Ensign" Symmetrical Lens, f/8, complete with two single metal slides. Ditto, with Houghton Envelope Adapter, for plates and films in place of focussing screen and slides No. 7" Folding Klito," with "Ensign" Symmetrical Lens, f/8, and two single metal slides. Ditto, with Houghton Envelope Adapter, for plates and films in place of focussing screen and slides No. 7v "Folding Klito," with "Ensign" Anastigmat Lens, Series II., No. 0, f/7, and "Automat" Shutter..... No. 7x Ditto, with "Ensign" Anastigmat Lens, Series I., No. 0, f/5'8, and "Automat" Shutter..... Extra for "Koilos" Shutter for any model in place of "Unicum" or "Automat Extra Single Metal Slides... Houghton Envelope Adapter with self-contained Focussing Screen for plates and films..... 0 15 0

"Ariel" Cameras.



The "Ariel" is the smallest Camera on the market taking Quarter-Plates. It is only just a little larger, certainly no thicker, than an ordinary packet of Quarter-Plates. Yet strength and rigidity have not been sacrificed to reduce the bulk.

It is a Plate Camera that can be carried in the pocket without betraying its presence.

Made of Aluminium, with Nickel Fittings, covered in finest Morocco Leather; Leather Bellows, Rising Front; Focussing Scale; Focussing Screen; Focussing by Rack and Pinion; Swing Back; Real Brilliant View Finder; Infinity Catch; Bushes for upright and oblong pictures. Size when closed, 58×34×176.

MARE			
No. 1. "Ariel" Camera with Extra Rapid Aplanat Lens, f/8, and Special Adjustable Shutter, fitted with "Antinous" Release, and 2 Single Metal Slides		17	
	22	17	0
Do., with Houghton Envelope Adapter for plates and films in place of focussing screen and slides		7	6
No. 1b. "Ariel" Camera with "Cooke" Lens 5 in., Series III., and "Koilos" Shutter with "Antinous" Release and 2 Slides		7	0
	-		

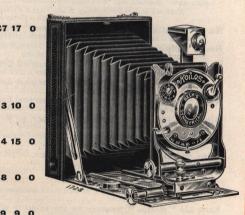
No. 0. "Pocket Ariel De Luxe." Size when closed, $4\frac{1}{4} \times 3 \times 1\frac{1}{16}$ ins. For Plates $3\frac{1}{4} \times 2\frac{1}{2}$, with extra rapid Aplanat Lens, j/8, "Simplex Auto" Shutter with speeds and 3 Slides in Envelope Case

No. Oa do., with extra Rapid Aplanat Lens and "Koilos" Shutter (speed up to 350th of a second)

No. Ob do., "Cooke" Anastigmat Lens, Series III.,
41 in. and "Koilos"
Shutter

No. Oc do., with "Goerz"

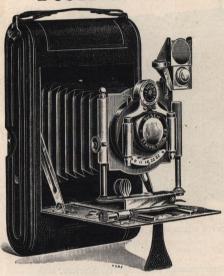
Dagor Anastigmat Lens,
Series III., and "Koilos"
Shutter



Post=Card Model "Ariel" Camera (modified specification) and two single metal slides

£2 17 6

"Ensign" Roll Film Cameras.



Model V.

For Plates or Daylight Loading Roll Films, 44 × 34. Camera built of seasoned mahogany, leather bellows, aluminium baseboard, covered seal grain leather: nickel fittings: Rising and Falling Front, both upright and oblong; Rack and Pinion adjustment for fine focussing; improved spool carrier. Bausch & Lomb "Unicum" or "Automat" Shutter. giving time, bulb, and instantaneous exposures; reversible brilliant finder; level: focussing scale; patent infinity catch adjustable for use with roll films; dark slides or Houghton Envelope Adapter; Tripod Sockets for upright and oblong pictures.

		1-pla	ate	
No. 1. With "Beck" Rapid Symmetrical Lens, f/8	£3	12	6	
No. 1v. With "Ensign" Anastigmat Lens, Series II. (3 foci), No. o f	77. 4	15	0	
4½ inch focus No 1x. With "Ensign" Anastigmat Lens, Series I. (3-foci) No f/5'8. 4½ inch focus No. 3a. With "Aldis" Anastigmat Lens, Series II., No. 2, f/6	5	10		
No. 3a. With "Aldis" Anastigmat Lens, Series II., No. 2, f/6	4	15	0	
No. 4a. With "Goerz" Syntor Double Anastigmat Lens, Series I //68, No. 0 No. 6. With "Goerz" Double Anastigmat Lens, Series III., //68, N	6	10		
No. 6. With "Goerz" Double Anastigmat Lens, Series III., f/6.8, N	0.0	10	0	

The Post-Card "Model V Ensign," for Daylight Loading Roll Films or Plates, $5\frac{1}{2} \times 3\frac{1}{4}$, is exactly similar in general design to the $\frac{1}{4}$ -plate Model V Ensign, and is fitted with Rack and Pinion Adjustment with travelling base for fine focussing, improved form of Spool Carrier, Level to View Finder, etc.

	30 -1	16	U
No. 5v. With "Ensign" Anastigmat Lens, Series II. (3-foci), No. 1.	6	0	0
f/7.7. 6 inch focus No: 5x. With "Ensign" Anastigmat Lens, Series I. (3-foci), No. 1,	U	U	v
No. 5x. With "Ensign" Anastigmat Lens, Series 1. (3-1001), No. 1,	7	0	0
f/5.8, 6-inch focus No. 5a. With "Aldis" Anastigmat Lens, Series II., No. 2a, f/6.3	6	5	ñ
No. ba. With "Aidis Aliastignat Lens, Series 11., 110. 24, 1/03	U	-	

Fig. 7, No. 1 10 10 Extra for "Koilos" Shutter on any model in place of "Unicum" or "Automat". 0 15

The "Klito" Camera.



The "Klito" Camera is the most popular Box-Form Magazine Hand Camera in the world. Tens of thousands have been sold, and the demand is as big as ever. Each camera will twelve 1-plates, and possesses a "Klito" Shutter with speeds from two seconds to the hundredth part of a second. There are two finders, and all are rack-focussing models except Nos. "I," "o" and " 00." No hand

camera at anything like the price offers such extraordinary value for the money.

"Klito" No. 1, with Rapid Achromatic Lens, Safety Shutter, and three magnifiers for focussing	21/0
"Klito" No. o, with Rapid Rectilinear Lens, Iris Diaphragm, Focussing Magnifiers	
"Klito" No. 00, with "Ensign" Symmetrical Lens, f/8, and Safety Shutter, Focussing Magnifiers	
"Klito" No. 1A, with Rapid Achromatic Lens, Rack Focussing	25/0
"Klito" No. 2A, with "Ensign" Symmetrical Lens fig Colotte	
Shutter, Rack Focussing	31/6
door	30/0
"Klito" No. 3, with "Ensign" Symmetrical f/8 Lens, polished Mahogany Front, Rack Focussing	
MILO NO. 4. With Beck Rapid Symmetrical flo Tons	
polished Mahogany Front, Rack Focussing	50/0
"Klito" No. 6, with Bausch and Lomb Automat Shutter and Beck Rapid Symmetrical f/8 Lens, horizontal pattern	63/0
"Klito" No. 7, with Bausch & Lomb Automat Shutton and Bank	
Rapid Symmetrical Lens, f/8	70/0

"Ticka" Camera.



This Camera is no bigger than a watch; it is made entirely of metal, and is highly plated. It Loads and Unloads in Davlight, taking 25 perfect little pictures on a single Spool of Film, costing 10d. only. The photographs can be automatically enlarged in printing to

3½×2½ inches. You can take snap-shot pittures or portraits with a "Ticka." Every negative is sharp, clear and distinct. Her Majesty the Queen uses a "Ticka" Camera, and has written to say she is very pleased with the pictures she has taken with it. Write for a free Booklet fully illustrated with pictures taken with "Ticka" Cameras.

tully indistrated with pictures taken with Ticka Came	eras.
"Ticka" Watch Pocket Camera (complete)" "Ticka" Ensign Film Spool (25 exposures)	8/6 10d.
"Ticka" View Finder (to fit on the stem of "Ticka," just over lens)— Model A. To view from behind.	
Model C. To view from above	1/6 2/0
"Ticka" Time Shutter	1/0
Developing and Printing Outfit. Complete with Book of Instructions. (For Developing Spools and making Contact Prints actual size)	3/6
"Ticka" Printing Box. Complete with Book of Instructions. (For making	
Enlarged Prints, $3\frac{1}{4} \times 2\frac{1}{4}$)	4/6
Post-Cards	1/6
Printing Box Outfit. Complete with Book of Instructions. (For Developing	2/6
and Printing Enlarged Prints)	
Developing Outfit, and Printing Box Outfit and Spool of 25 exposures "Ticka" Magnifying Glass	21/0
"Ticka" Printing-out Paper for Contact Prints	6d.
"Ticka" Self-Toning Paper for Contact Prints "Ticka" Bromide Paper for use with the Printing Box	6d. 6d.
"Ticka" Picture Frame (9½×7) with five openings for prints made in the	ou.
"Ticka" Printing Box	9d.
"Ticka" Printing Frame for seven Contact Pictures "Ticka" Mounts for Contact Pictures (per packet of 15 assorted)	6d. 4d.
"Ticka" Mounts for Enlarged Pictures, per dozen	6d.
"Ticka" Albums for Contact Pictures "Ticka" Film Negative Box for storing twelve Spools	4d. 4d.
The state of the s	0.14

DEVELOPING and PRINTING.

Holborn "Reflex."

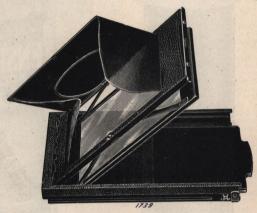


The most perfect Reflex Magazine Camera on the market, also one of the simplest and least complicated cameras to use. It is as handy as a box-form camera with the advantages of the Reflex. Every operation locks unless taken in the right order, it is impossible to do anything out of the proper sequence. The camera is built of mahogany with brass fittings, the focussing is by rack and pinion, and there is an engraved scale from 5 ft. to infinity. An "Ilex" f/7-7 Lens is fitted and the shutter gives a range from $\frac{1}{100}$ th part of a second to three seconds, patent Block Changer.

The "Houghton" Envelope System.

(Daylight Loading, for Films and Plates.)

This most important introduction will be welcomed by the vast army of photographers who have been looking for a really reliable Daylight Loading System for Films or Plates. Up to now no absolutely practical method of using ordinary cut films or dry plates for Daylight loading and unloading has been put on the market, so that the popularity of a system which enables the amateur to use



Cut Films or Plates in Light-Tight Envelopes which can be put into and taken out of the Camera in Broad Daylight, is bound to command success.

The "Houghton" Envelope Adapter, Models "B" and "C," have a focussing screen built into them in such a way as to dispense with the ordinary focussing screen attached to the back of a camera altogether. The Adapter thus not only supersedes Dark Slides, but renders a separate focussing screen unnecessary also. The Adapter is never removed from the camera either for focussing or for re-loading.

Prices complete with Self-contained Focussing Screen.

MODEL "B"—Ebonised wood, leather-covered, for all cameras using wooden Dark Slides, including "Sandersons" and "Tudors."

MODEL "C"—Metal, leather-covered, for all "Folding Klitos," "Ariels" (\(\frac{1}{4}\text{-pl.}\)), and Roll Film "Ensigns" (\(\frac{1}{4}\text{-pl.}\)).

Size.	Model "B." Each.	Model "C."	Plate Envelopes (Unloaded). Per Dozen.	Film Envelopes Loaded with "Ensign"Flat Cut Film (Thick), Packets of 10.	"Ensign" Flat Cut Films (Thick), for Reloading. Packets of ro.
½-plate 5 × 4 ½-plate	15/0 18/6 25/0	15/O 	2/0 3/0 4/0	3/0 4/6 6/0	1/8 2/6 3/9

"Ensign" Roll Film.

(Made by Austin Edwards.)



A Red, White and Blue band with the Flag trade mark is round every spool.



Note the Red, White and Blue carton, and refuse to accept substitutes.

Not only are the "Ensign" Roll Films British made but they are the Best Roll Films obtainable, because you can be certain of getting a perfect result from every exposure. With the "Ensign" Roll Films you always get detail in the highest lights as well as in the darkest shadows. The scale of gradation never alters, and the highest light is always the same number of steps or gradations denser than the deepest shadow. Consequently the prints will always be bright, clear, and crisp, and full of the most exquisite clear-cut detail.

"Ensign" Anastigmat.



The "Ensign" Anastigmat is entirely British made. It is guaranteed to be of the highest merit, and for definition and good quality has no equal. No longer will a highclass Anastigmat be beyond the purchasing power of the average amateur photographer. Here is a lens simple in construction, capable of doing everything that the highest type of Anastigmat will do at a price that, until quite recently, was quoted for an ordinary Rapid Rectilinear. It has five separate lenses, forming two combinations. There are no cemented elements, and as these all have shallow-ground surfaces the cost of production has been lessened, and we are thus enabled to put the "Ensign" Anastigmat on the market at a lower price than that usually charged for other genuine Anastigmats. Oblique spherical aberration is corrected to a remarkable degree. Astigmatism is corrected over the whole field of

70 degrees, marginal illumination is as perfect as the marginal definition, and the equivalent focus corresponds exactly with the true focus. The "Ensign" Anastigmat is a 3-foci lens. The front and back cells are interchangeable, and can be used in either position equally well.

The front and back cells are interchangeable, and can be used in either position equally well.

There are two series, one working at //5/8 and one at //7/7, and both are capable of producing the finest possible results both as regards illumination and definition.

The "Koilos" Sector Shutter is recommended for use with this lens.

Series I F/5'8.

1.			Seri	es I r/3	0.		
No.	Plate Covered at full Aperture.	Focus of the Complete Lens.	Focus of the Front Combina- tion.	Focus of the Back Combina- tion.	Price, in Aluminium Mount and Iris Diapbragm.	Price in "Automat" Shutter Complete.	Price, in "Koilos" Shutter Complete.
0 I 2	$4\frac{1}{4} \times 3\frac{1}{4}$ 5 × 4 $6\frac{1}{2} \times 4\frac{3}{4}$	4 ³ -in. 6 ,, 7 ¹ / ₄ ,,	7½-in. 9 ,, 11 ,,	83-in. 111/4 ,, 131/2 ,,	£ s. d. 2 12 6 3 2 6 3 12 6	£ s. d. 3 17 6 4 7 6 5 10 0	f. s. d. 4 12 6 5 2 6 6 0 6

Series II F/7.7.

No.	Plate Covered at full Aperture.	Focus of the Complete Lens.	Focus of the Front Combina- tion.	Focus of the Back Combina- tion.	Price, in Aluminium Mount and Iris Diaphragm.	Price in "Automat" Shutter Complete.	Price, in "Koilos" Shutter Complete.
0 I	4½×3½ 5×4	4 ³ / ₄ -in.	7½-in.	8 ³ / ₄ -in.	f s. d. 1 17 6 2 2 6	3 2 6 3 7 6	s. d. 3 17 6 4 2 6
2 4	$6\frac{1}{2} \times 4\frac{3}{4}$ $8\frac{1}{2} \times 6\frac{1}{2}$	7½ 9½	11 ,,	131	2 10 0 3 15 0	3 15 0	4 10 0 6 3 0

The two extra diaphragms scales referring to the single combinations when used separated can be engraved on the mount at an extra cost of 2s. Od.

The "Negasys" System

of Filing Negatives.

Nothing could be more simple than the "Negasys" Filing System for storing either film or glass negatives. Although these files have only been introduced recently they have completely superseded the old bulky plate boxes and the inconvenient film album. Any negative can be found instantly, and can be removed to a special file and taken out for printing without interfering with the others. The "Negasys" Files will simplify the most complicated stock of



Prices of the Plate Negasys.
1-plate File for 50 negatives . 1/6
5 × 4 do. do. do. . 2/Post-card plate (5½ × 3½) File,
for 50 negatives . 2/8

for 50 negatives . . 2/6 ½-plate File for 50 negatives 2/6 Whole-plate do. do. 3/9



Prices of the Film Negasys.

negatives, or can be used with equal success for a few dozen. The film "Negasys" will appeal particularly to those who have had trouble with storing films. It prevents handling the gelatine surfaces. and the wallet cards with their stiff backing, obviate any of the twisting found in some of the older makes of film. Get one for a special series, and if you like the idea, extend it to your whole stock of negatives. The cost is quite

A Sensible Draining Rack.

The "Vento" Draining Rack is quite different from other draining racks that are sold for negative drying. It is extremely rigid, and when

racks that are sold for hega it is extended to the right width, the two legs come to a dead stop. There are four cherry wood bars with grooves cut to hold twelve negatives of any size up to whole-plate. These grooves are so shaped that the water which drains from the surface of the negative does not accumulate at the bottom edges



of the plate. No metal comes into contact with the plates, and there is no danger of rust or other marks on the emulsion. You buy it in a box.

Don't take any other kind. Price, 10d.

"Kligee" Squeegees.

"Kligees" are strong sensible squeegees with polished handles and red rubber rollers. They are made in a variety of sizes, and all up to six inches in width are sold in a box.

3 i	nch	Roller	"Kligee	·	.7d.	6 i	nch	Roller	"Kligee	· · · · · · ·	1/0
		,,	,,		.8d.	8	"	"	,,		. 1/6
5			The state of the		10d.	IO		,,	,,		1/10

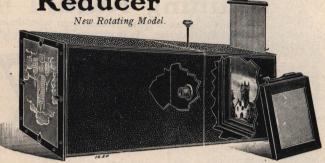
The "Klito" Print Glazer.

Consists of a piece of specially prepared Polished Celluloid, Cloth-Bound, to which is hinged a sheet of special absorbent. A highly glazed surface can be given to prints with this Glazer with the minimum of trouble.

No. 1—10× 8			 	 .1	0
No. 2-12×10			 	 .1	6



"Klito" Daylight Reducer



A new and simplified form of camera for making Lantern Slides or Transparencies by reduction from either ‡-plate, 5×4 or ‡-plate negatives. The making of lantern slides by contact is at best a makeshift, and all good workers invariably produce their best slides by reduction, and so preserve the actual proportions of the original negative. The apparatus is of wood, covered in leather cloth.

No. 1.	To reduce from	$\frac{1}{4}$ -plate to $3\frac{1}{4} \times 3\frac{1}{4} \dots$	12/6
No. 2.		5×4 to $3\frac{1}{4} \times 3\frac{1}{4} \dots$	13/6
No. 3.	"	$\frac{1}{2}$ -plate to $3\frac{1}{4} \times 3\frac{1}{4} \dots$	15/0

The "Standa" Tank.

Each Tank
holds 6 plates.





The "Standa" Tank is an invention which does away with the need of a dark-room. It develops glass plates in five or six minutes without attention in daylight or any light. The "Standa" Tank wonderfully simplifies the process of development. No more need to pore over developing dishes or to dabble with the fingers in chemicals. No need, in fact, to know anything about development. All that is necessary is to followed.

low the simple instructions.
Development takes place
in complete darkness, and
the negatives are clean, bright
and free from all stains and

blemishes. The cost of the "Standa" Tank is no more than that of the orthodox outfit of dishes, bottles, measures and scales,

New and	Greatly I	mproved	Model.	Original Model.	Developer.
Size of Plates or Films.	"A" Quality.	"B" Quality.	"C" Quality.	Price.	Standa Develop- ing Powders.
$3\frac{1}{2}$ × $2\frac{1}{2}$ ins.	4/6	7/6	12/6	3/3	2d. per packet
$4\frac{1}{4} \times 3\frac{1}{4}$,,	5/-	10/6	21/-	3/6	21d. ,,
5 × 4 ,,	6/6	12/-	25/-	5/6	3d. "
Post - Card	7/6	12/6	26/-	5/6	3d. "
$6\frac{1}{2} \times 4\frac{3}{4}$ ins. $8\frac{1}{8} \times 6\frac{1}{8}$	10/-	15/-	30/-	7/6	31d. ,,
81 × 61	15/-	20/-	35/-	12/6	4.d

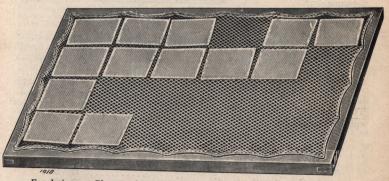
"Ensign" Porcelain Dishes.



and thicker than usual. The "Ensign" dishes are made in the celebrated Staffordshire Potteries, and are of the Finest Porcelain which has ever been used for the purpose of the manufacture of Photographic Dishes. The finish is all that can possibly be desired, and in every respect the "Ensign" Porcelain Dishes can be thoroughly recommended as the best Porcelain Dishes on the market. They are perfectly flat, and will withstand any

Photographic Cl	nemicals.			.,	tinstand an
Inside. Measurement.	Shallow. Each. s. d.	Deep. Each. s. d.	Inside Measurement.	Shallow. Each.	Deep. Each.
$4\frac{1}{2} \times 3\frac{1}{2}$ 5×4 $5\frac{1}{2} \times 3\frac{1}{2}$ 7×5 9×7	0 6 0 7 0 7 0 10 1 2	0 7 0 8 0 8 0 11 1 5	10 × 8 12 × 10 15 × 12 18 × 14	s. d. 1 5 2 3 5 0 9 0	s. d. 1 8 2 9 6 0 12 0

"Ensign" Drying Net.



For drying any Photographic Prints, Post-cards or Films quickly. Every print drys perfectly flat. No cockling at the edges. Every print ready for trimming or insertion in Slip-in-Albums. The net is always ready for use and will last indefinitely. The "Ensign" Drying Net does not injure the most delicate photographic surface, however glossy or gelatinous it is.

	$17\frac{1}{2} \times 10\frac{1}{2}$, for 12 quarter-plate prints in box $27\frac{1}{2} \times 15\frac{1}{2}$, for 12 half-plate prints or 20 quarter-plates $33\frac{1}{2} \times 20\frac{1}{2}$, for 20 half-plate prints	
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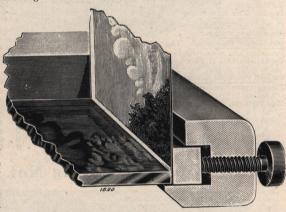
"Ensign" Printing Frame

(PATENT).

An entirely new type of frame which not only holds both negative and paper absolutely firmly, but enables the user to see every bit of his print at once.

The principal feature of the "Ensign" Printing Frame is a spring pressure bar actuated by a milled head screw. This pressure is exerted on the edge of the negative, and the paper coming between the edge of the negative and the pressure bar is gripped so tightly that neither the paper nor the negative can be moved. The "Ensign" Printing Frame is filled by unscrewing the milled head nut at the top a few turns, then

the laying negative rebates the with the film side uppermost with its edge under the spring paper lifter. The sensitive printing paper is then placed on its end between the edge of the negative and the spring pressure bar. The milled nut is screwed tight until the



paper is firmly gripped, the paper turned down and the back-board replaced. It will then be found that both paper and negative are firmly clamped, and full view examination can be made without either paper or

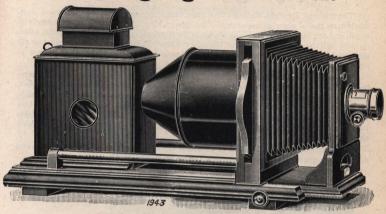
negative shifting in the slightest.

The back of the "Ensign" Printing Frame is built of a non-warpable wood all in one piece, and only one pressure spring has to be manipulated. The negative cannot fall out or get damaged while the spring paper lifter enables the print to be raised easily without scratching the negative.

Each Frame Boxed separately.

A STATE OF THE PARTY OF THE PAR				s. d.
31 × 21 " Ensign"	Printing F	Frame		0 6
1-plate "		,,		0 6
5×4 "	,,			0 9
$5\frac{1}{2} \times 3\frac{1}{2}$,	**			0 9
1-plate	"	Mary Street Street Section 1	• • • • • • • • • • • • • • • • • • • •	1 10
1/1 plate ,, 9×12 Centimetres	"Fraign		Frame	0 9
	Ensign		L'Iame	1 0
13×18 ,	and the south	"	,,	2 0
10 X 24))				

The "Tudor" Enlarging Lantern.



The "Tudor" Enlarging Lantern is scientifically constructed and capable of turning out work of the highest technical excellence. The baseboard is of solid mahogany, and extends by rack and pinion. The pinion head in its normal position is thrown out of gear, and this allows the baseboard to be easily moved backwards and forwards to obtain the correct adjustment. The pinion head can then be pulled out, and the final focussing done with the rack and pinion movement.

The body, chimney and condenser hood are of Russian iron. The condenser in a solid brass mount is of excellent quality. Lens front and condenser carrier are of solid polished mahogany. The negative carrier is shaped so that the picture can be regulated to the best advantage, the curved base making it possible to correct lines that are out of the perpendicular. A rising front lens panel is fitted, and the portrait lens is of specially selected quality, with "Waterhouse" diaphragms and rack focussing adjustment.

Model A. Small Body Lantern with Tall Chimney, with Incandescent Gas Fittings or Oil Lamp.

Model B. Square Form Lantern with Cowl (as illustrated) for Incandescent Gas or Electric Arc Lamp—tray only supplied.

supplied.			
No. 1. Quarter-plate, complete with 5½ in. Condenser and best quality Portrait Lens.		,	
110. 2. 3 A OI FOSI-CATO SIZE, complete with 61 in Condensor and best and best		15	0
Portrait Lens	5	0	
Extra for Aldis Lens Series II. No. 3 instead of Portrait Lens No. 3 Half-plate, complete with 8½ in. Condenser and best quality Portrait Lens		10	0
		0	0
Extra for Aldis Lens Series II. No. 4 instead of Portrait Lens	2	2	6
		8	0
Extra for Incandescent Burner and Reflector	0	6	9
Special Note - Please always state 1:1 14 11	100 GES		

ays state which Model, A or B, Lantern is required, and whether for Gas, Oil or Electric Light.

"Combination" Enlarging Lantern for ½-plate cameras "Queen" Enlarging Lantern, with 5½ inch condenser "Victo" Enlarging Lantern with 5½ inch condenser "Sanderson" Enlarging Lantern for ½-plate "Sandersons" "Imperial" Enlarging Lantern for ½-plate negatives	2	17 7 10	660	
Emarging Lantern for 4-plate negatives	4	15	0	

The "Klito" Daylight Enlarger.

The "Klito" Daylight Enlarger has been entirely re-modelled, and is now a very much more useful piece of apparatus. The new "Klito" Enlarger is made entirely of wood, and can be taken to pieces as shown in the illustration, and packed so that it takes up only half the space. The lens of the new "Klito" Enlarger embraces a wider angle than the lens in the older pattern, so that the total height is less when the Enlarger is fitted up ready for use.

The covering is a hard leather grain material, and there is a leather handle for carrying. When set up the smaller end locks on to the base by mesns of two metal catches. There is a dark slide for the bromide paper, and it should be stated that this dark slide can be entirely withdrawn, so that there is no necessity to take the whole Enlarger into the dark-room when the picture is to be developed. The panel of the dark slide folds back out of the way when the exposure is being made. There is a plunger shutter which shows when the lens is open or closed.

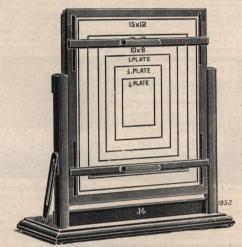
The Lens supplied is a Doublet of excellent definition, with exception of Nos. 5a and 6, which are fitted with single achromatic Lenses of special quality.



Prices of the "Klito" Enlargers complete with Wooden Dark Slides.

	Woodon Burn Bridge	
No. 2	"Klito" Enlarger (New Model) \(\frac{1}{4}\)-plate to whole-plate, and \(3\frac{1}{2}\times 2\frac{1}{2}\) to \(\frac{1}{2}\)-plate	15/-
No. 3	"Klito" Enlarger (New Model) 5×4 to 10×8, and \frac{1}{2}-plate to whole-plate	21/-
No. 4	"Klito" Enlarger (New Model) 1-plate to 12 × 10, and 3\frac{1}{2} × 2\frac{1}{2} to 10 × 8	25/-
No. 5	"Klito" Enlarger (New Model) 5×4 to 12×10, and 4-plate to 10×8	30/-
No. 5	a "Klito" Enlarger (New Model) Post-card size to 12×8	32/6
No. 6	"Klito" Enlarger (New Modei) ½-plate to 15×12, and 5×4 to 12×10, and ½-plate to 10×8	37/6
No. 2	Mascot Daylight Enlarger (2-plate to whole-plate, and 32 × 22 to 2-plate)	6/6
No. 4	Mascot Daylight Enlarger (1-plate to 12 × 10, and 3\frac{1}{2} × 2\frac{1}{2} to whole-plate)	10/6
No. 2	Briton Daylight Enlarger (1-plate to whole-plate, and 31 × 21 to 1-plate)	8/6
No. 4	Briton Daylight Enlarger (4-plate to 12 × 10, and 3\frac{1}{2} × 2\frac{1}{2} to whole-plate)	15/-

The "Holborn" Enlarging Easel.



Everybody who enlarges by artificial light will find a use for the Enlarging Easel here illustrated. It is made of polished white American hardwood. There is a solid base to which the easel is hinged. It is kept in position by a brass strut which automatically locks when it is at right angles to the base. The easel-board can be adjusted to any height, and can be instantly fixed in the required position by means of the milled nut at the side. The bromide paper does not require to be pinned down to the surface of the board, an objectionable procedure which is entirely overcome by means of the spring pressure bars. These bars can be adjusted to any position, and will hold firmly either 1-plate pieces of paper or any paper up to 15 × 12 in. on the marked paper surface. The baseboard is supported on four soft rubber feet, which prevent it sliding about and getting out of focus when the sensitised paper is being fixed on the easel. When fixing the bromide paper the side strut can be released and the easel-board swung back and laid flat and the bromide paper easily inserted under the spring pressure bars. When raised, the Easel-board automatically locks in the same position it occupied during focussing. This is a great advantage when a number of enlargements are required of the same subject. The total height of the easel when set up is 17 in. Price complete, 8/6.

"Holborn" Enlarging Easel, No. 2.

Constructed of white wood, well finished and thoroughly practical. Takes bromide paper up to 15×12. The board can be raised or lowered to centre the picture and swung on its axis for either upright or horizontal enlargements.

Price, 3/9 only.

"Circoids."

Not only do "Circoids" produce a greater quantity of solution than the similar preparations, but the ingredients used are of such undoubted purity, and the process of manufacture is attended with such care that they are, value for value, worth considerably more to the amateur photographer than anything else of a like nature.

"Circoids" are put up in glass tubes, which absolutely prevent any deterioration through climatic influences. The corks are large and sound, and will not break or come to pieces when being withdrawn. They are well waxed, and the tubes are quite air-tight. These tubes are put up in a neat cardboard box, and full instructions are enclosed.



Hydrokinone, to make 40 ozs. Developer. Metol-Quinol 40 ozs.

Pyro-Soda 40 ozs. Amidol 20 OZS. Pyro-Metol to make 20 ozs. Developer. 20 ozs. Solution.

Gold Toning & Fixing,, Gold Toning . ,, Sepia Bromide Toner,, 40 ozs. 48 ozs.

Platinum Toner, to make 16 ozs. Solution. Chromium Intensifier, to make 18 ozs. Solution.

1/- per box.

Reducer, to make 15 ozs. Solution. Restrainer, to make 5 ozs.

Solution. Hypo Eliminator, to make 15 ozs. Solution.

6d. per box.

"Ensign" Developing Cartridges.

The Chemicals in these Cartridges are separated by using two hermetically sealed Glass Tubes, one enclosed inside the other, thus ensuring their keeping for practically an indefinite period.

METOL-QUINOL Developer Cartridges. "Ensign Brand." Metol: Metol Metol Metol DEVE

		Per	r Box	, Per Box,
	Each Cartri	dge 1	doz.	Each Cartridge & doz.
	makes		ridges	makes Cartridges.
Metol Quinol	10 oz. Sc	lution	1/9	Gold Toning & Fixing 4 oz. Solution 1/11
Pyro-Soda	8 oz.	,,	1/6	Copper Toning 8 oz. ,, 1/6
Hydroquinone	8 oz.	,,	1/6	Platinum Toning 4 oz. ,, 1/11
Eikonogen-Quin	ol 4 oz.	,,	1/6	Hypo Eliminator 20 oz. ,, 1/11
Gold Toning	8 oz.	"	1/9	

Autochrome Plates and Materials for Colour Photography

(Lumière Process).

Full stocks of all materials and accessories for the new Colour Photography with Messrs. Lumière's Autochrome Plates. The only simple and commercially practical process. Only one plate and a single exposure are necessary. Any amateur who can develop a negative can make a perfect colour picture on an Autochrome Plate at the very first attempt.

Autochrome Plates.

$3\frac{1}{4} \times 3\frac{1}{4}$ $4\frac{1}{4} \times 3\frac{1}{4}$	 3/9 8	a box o	f 4 plates.
44 × 34	 4/6	,,	**
5 × 4	 7/0	,,	
$6\frac{1}{6} \times 4\frac{3}{4}$	 10/0	,,	,,

Taking Screens. (Absolutely necessary).

		(A	OSO	in	teu	y n	eces	sary	
21	×	21							5/0
31	×	31							7/6
32344	×	43							12/0

Screen Holders.

									1	-
24	X	24								0
31	×	31							7	0
43									9	0

"Ensign" Chemical Outfit for Developing Autochrome Plates.

Made of the purest chemicals, under the direction of a fully qualified scientific Chemist, and containing every requisite for the process

5/6
with time table and instructions

Ask for particulars of the new Anti-Frilling Dish, and the Autochrome Viewing Stand.

We have just published a little book on the new Colour Photography, written by Mr. George E. Brown, the Editor of the British Journal of Photography, in collaboration with Mr. C. Welborne Piper.

The whole process is described and simplified, and full

working instructions are given.

The book measures $4\frac{3}{4} \times 7\frac{1}{4}$, is printed on heavy antique paper, and has a bright orange cover. It is called "Colour Photography with Lumière Autochrome Plates," and is sold by all Photographic Dealers, and at Railway Bookstalls.

PRICE TWOPENCE.

(It ordered direct, enclose one penny for postage.)

"Folda" Border Negatives.



A Simplified and Accurate Method of Printing Border Designs on Post-Cards and Ensuring Perfect Register.

With ordinary mask or design negatives, it is a matter of considerable difficulty to print a number of pictures, one after the other, from one negative and yet obtain exactly the same pictorial results from each. With the new "Folda" Border Negatives and Masks this difficulty is entirely overcome. The process is so simple, and the register between the border design and the masked picture is so accurate, that a large series of cards can be made with faultless precision, while if only one or two prints are required from a single negative there is no time wasted in making preliminary adjustments.

Every packet contains six negative border designs, and six masks to correspond. They are all packed in pairs. The borders and openings

are so arranged that practically any size negative can be used—a feature that greatly increases the utility of the ''Folda'' Registering Borders.

> Set of Six pairs of Masks and Borders:—

No. 1	 	 1	-
		1	
No a			

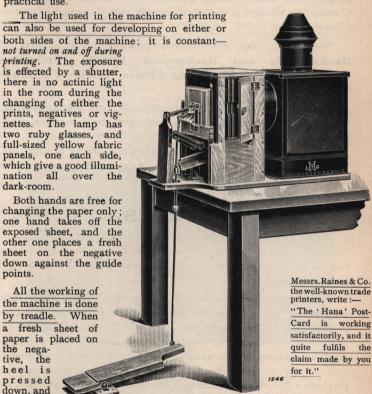
Each of the above sets contains six different designs, so that with a choice of eighteen different designs, the purchaser of all the three "Folda" sets could suit practically any negative in his collection.

Try a set for making gaslight pictures from your holiday negatives.



The "Hana" Bromide Printing Machine.

This machine is designed specially for printing on cut sheets and postcards with the utmost possible speed, accuracy and ease. It is substantially constructed, well-finished, and meant for continual and practical use.



movement first closes the pressure back and then opens the shutter. The "Hana" Machine is being used extensively by the leading Trade Printers and many Professional Photographers. A fully Illustrated Booklet free.

that one

Price Complete, as illustrated, with "Kern" Incandescent Burner, 24 15s.

Export.

The foregoing pages can only be taken as the merest indication of the immense variety of photographic apparatus and appliances that we manufacture and handle. As the largest house in the trade we are in a position to offer dealers the advantages of a huge and varied stock.

We have travellers and representatives all over the Empire, and pay special attention to our Export business. Dealers and others should put themselves into communication with our head office, and every dealer who values his trade should make a point of being on our Mailing List.

Catalogues and printed matter dealing with all our productions are sent free to any part of the globe. All enquiries dealt with promptly and in detail.

Our Colonial Representatives will always be glad to hear from prospective customers.

Australasia.—H. V. Lawes, P.O. Box 748, 127, King Street, Sydney.

India.—James Whitby, 12, Dalhousie Square, Calcutta. South Africa.—T. Eyre Clatworthy, P.O. Box 308,

Cape Town.

China.—Messrs. Kaye Jervis & Co., Hankow Road, Shanghai.

Japan.-Mr. O. T. Gillon, 53, Main Street, Yokohama.

HOUGHTONS, LTD.,

The Largest Manufacturers of Cameras and Photographic Apparatus in Great Britain, =

88/89, High Holborn, LONDON, W.C.

