

R. & J. BECK, Ltd.

ABRIDGED CATALOGUE.

This Catalogue Describes :

STAND CAMERAS. Studio Cameras.—Square Model and Taper Bellows.
Landscape Cameras.—Cheap Triple Extension and Multiflex Sets.
Hand and Stand Cameras.—“The Sanderson.”

PHOTOGRAPHIC LENSES.—Beck-Steinheil and Beck Lenses. Lenses for every purpose and all branches of work can be selected from this list. The entire field is covered.

THE CELVEREX SHUTTER. A new diaphragm shutter giving *correct speeds*, the first successful attempt to attain this object on a compact diaphragm shutter.

THE BECK-HARRIS SPECTRUM FILTER. A scientifically designed colour filter for isochromatic photography, which absorbs the light it is intended to, and nothing else. This is made with optically correct surfaces

THE ZAMBEX CAMERAS. Daylight loading flat-film cameras, both folding and box model. Ordinary stiff (not rollable) flat films. A quite unusually simple and reliable system.

THE FRENA CAMERAS. “Forty Flat Films—like a pack of cards.” These cameras have stood the test of thirteen years of unexampled popularity. They still cannot be beaten for producing really superb results.

THE DAI CORNEX CAMERAS. Daylight-loading, Box Model, Magazine Plate Cameras. This is a unique series of cameras. The only Daylight Loading Camera made for *the Penny Plate Photographer*.

THE TELEPHOTO CORNEX CAMERAS. A combined Telephoto and ordinary Magazine Plate Hand Camera of great simplicity and utility.

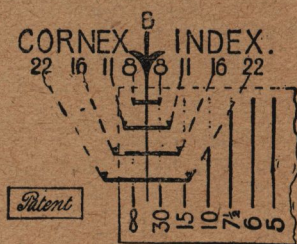
THE REFLEX HAND CAMERA. A perfect full-view focussing Hand Camera, in which every portion is made regardless of trouble to produce the very best results with the very best lenses. A perfect focal plane shutter.

THE CORNEX HAND CAMERAS. Box Model Magazine Plate Cameras of the best construction.

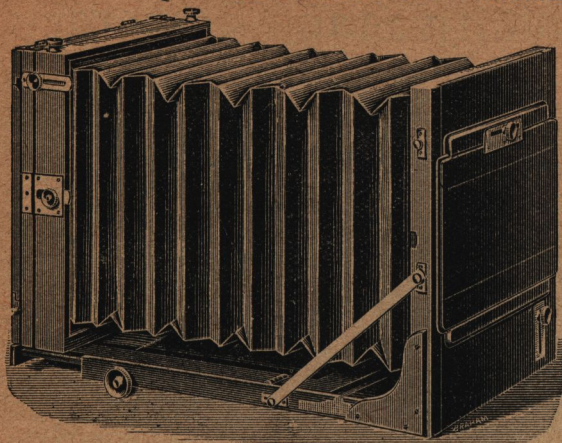
THE ROLL FILM CORNEX CAMERAS. A series of folding Roll Film Cameras of a distinctive and very perfect pattern. Their workmanship, finish and design are not only first quality throughout, but they stand out from the ordinary types with a special individuality of their own.

THE ZAMBEX EXPOSURE METER. A combined exposure and depth of focus meter of great practical use.

THE CORNEX INDEX. A focussing scale showing also depth of focus.



SQUARE MODEL CAMERAS.*



Although the "Folding" light Model Cameras have advantages in convenience for travelling, the Square Model Camera is in practice the most serviceable model that has ever been made. The Long-extension Square Model Camera gives sufficient length of focus for telephotography. Both models are provided with rising and cross fronts, double swing back, reversible back, and accurate focussing. The

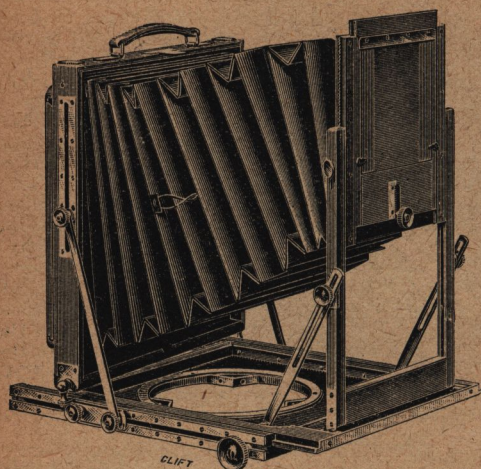
material and excellence of workmanship is unrivalled. No better camera can be made. The prices given below include three double dark slides.

PRICES.

A. Camera (short extension) ..	$4\frac{1}{2} \times 3\frac{1}{4}$	$6\frac{1}{2} \times 4\frac{3}{4}$	$8\frac{1}{2} \times 6\frac{1}{2}$	10×8	12×10	15×12
..	£6 5 0	£7 17 6	£9 10 0	£11 11 0	£15 10 0	£20 17 0
B. Do., do., with Thornton-Pickard shutter and Beck Double Aplanat, f/7.7 ..	8 10 6	10 13 6	13 7 6	—	—	—
C. Do., do., with Beck-Steinheil Unofocal f/6 ..	10 5 6	13 15 6	17 12 6	21 17 6	—	—
D. Do., do., with Beck-Steinheil Orthostigmat, f/6.3 ..	12 0 6	16 0 0	23 9 6	32 13 6	47 1 6	67 16 6
E. Camera (long Extension) ..	6 15 0	8 12 6	10 5 6	12 18 0	16 10 0	20 5 0
F. Do., do., with Thornton-Pickard shutter and Beck Double Aplanat f/7.7 ..	9 0 6	11 8 6	14 3 0	—	—	—
H. Do., do., with Beck-Steinheil Orthostigmat, f/6.3 ..	12 10 6	16 15 0	24 5 0	34 14 6	48 1 6	67 4
Extra Double Dark Slides ..	0 15 9	1 0 3	1 4 0	1 8 6	1 16 0	2 8 0
Brass binding, extra..	1 7 0	1 7 0	1 10 0	1 16 0	1 19 0	2 5 0
Aluminium fitted extra	1 14 6	1 19 0	2 5 0	2 12 6	3 4 6	3 15 0
Solid Tripod and head	0 16 6	0 19 9	0 19 9	1 15 0	1 15 0	1 15 0

R. & J. Beck, Ltd., 68 Cornhill, London, E.C.

Best Quality Stand Camera.*



The quality and general finish of this camera are as perfect as possible, and it can be confidently recommended.

It is fitted with swing and reversing back combined with side swing. All the movements for the front are provided, including rack and pinion rising front. Milled heads are fitted with check screws.

It is the lightest and most portable form of stand camera, measuring only $1\frac{1}{2}$ in. in thickness, fitted turntable with clamp, mounted flush with base-board.

The instrument will take any lens from 3 in. focus upwards, and is an excellent model for telephotography.

The prices given below include 3 double dark slides, turntable and 3-fold sliding leg tripod.

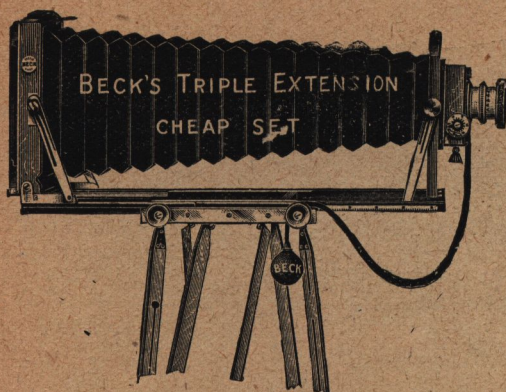
Prices (complete as above).

	$6\frac{1}{2} \times 4\frac{1}{2}$	$8\frac{1}{2} \times 6\frac{1}{2}$	10×8	12×10	15×12
A. Camera	£10 4 0	£12 0 0	£14 12 6	£18 0 0	£22 10 0
B. Do., do., with Celverex shutter and Beck Double Aplanat, $f/7.7$	14 4 0	—	—	—	—
C. Do., do., with Beck-Steinheil, Unofocal, $f/6$	16 19 0	—	—	—	—
D. Do., do., with Beck-Steinheil Series I. Orthostigmat $f/6.3$	19 4 0	—	—	—	—
E. Do., do., with Thornton-Pickard shutter with speed indicator and Beck Biplanat, $f/5.8$	14 13 6	17 12 6	21 5 0	28 6 6	—
F. Do., do., with Beck-Steinheil Orthostigmat $f/6.3$	18 6 6	25 19 6	36 4 0	49 16 6	54 6 6
Extra double dark slides ..	1 0 3	1 4 0	1 8 6	1 16 0	2 8 0
Brass binding, extra ..	1 7 0	1 13 0	1 13 0	1 19 0	2 5 0
Solid Brown hand-sewn case	1 7 0	2 0 0	2 15 0	3 15 0	5 0 0
Beck-Harris Screen	0 9 6	0 13 6	0 14 6	0 17 6	1 0 0

R. & J. Beck, Ltd., 68 Cornhill, London, E.C.

STAND CAMERAS.*

Beck's Cheap Triple Extension Sets.



We have greatly improved our low-priced sets of $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{1}{3}$ -plate Stand Cameras. They are of sound design, workmanship and finish, fitted with Beck lenses. They possess the following salient features:— Swing back, rising and falling front, triple extension, cross front, turntable, shutter, double rack and pinion motion, turntable, tripod and slide, double book form.

Prices of above, but with Thornton-Pickard Roller Blind Shutter:—

	$\frac{1}{4}$ -plate. ($4\frac{1}{2} \times 3\frac{1}{2}$)	$\frac{1}{2}$ -plate. ($6\frac{1}{2} \times 4\frac{1}{2}$)	$\frac{1}{3}$ -plate. ($8\frac{1}{2} \times 6\frac{1}{2}$)
A Camera as above, complete with a Beck Symmetrical Lens, No. 1, No. 3 or No. 4 <i>f</i> /8 (single combination can be used alone)	£3 5 0	£3 10 0	£5 10 0
B Camera as above, but fitted with a Beck Convertible Double Aplanat, No. 1, No. 3 or No. 4, <i>f</i> /8 and <i>f</i> /14.. ..	4 5 0	5 5 0	8 0 0
C Camera as above, but fitted with a Beck Biplanat No. 2, 4, or 5, <i>f</i> /5·8	5 5 0	6 5 0*	9 0 0*
D Camera as above, but fitted with a Beck-Steinheil Unofocal Series I, No. 3, 5 or 7, <i>f</i> /6	5 15 0	7 5 0	13 10 0
E Camera as above, but fitted with a Beck-Steinheil Convertible Orthostigmat, Series II., No. 2a, 3a or 6a, <i>f</i> /6·8	8 12 6	9 15 0	14 10 0

* The shutter is fitted in front of the lens in these cases owing to the size of the lens.

Cases for above, stiff canvas	0 6 0	0 7 6	0 10 6
Beck Simple Telephoto Lens to above	1 15 0	2 0 0	2 10 0
Beck-Harris Spectrum Filters	0 7 6	0 9 6	0 15 0
Additional Double Dark Slides	0 8 6	0 8 6	0 12 6

Any lens can be fitted to the above sets at a corresponding increase or reduction in price.

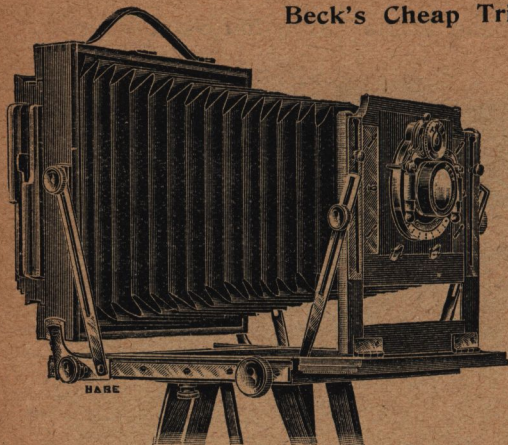
For the lens as supplied to stand camera work read:—

“Photographic Lenses: A Simple Treatise.” By Conrad Beck & Herbert Andrews. 350 pages, 45 engravings and 150 diagrams. Post free 1/3.

R. & J. BECK Ltd., 68 Cornhill, London, E.C.

STAND CAMERAS.*

Beck's Cheap Triple Extension Sets.



We are able to supply the Beck Cheap Triple Extension Sets as described, fitted with the new Celverex Shutters. These sets include all the movements mentioned on the previous page.

Prices of above, but fitted with Celverex Shutters:—

	$\frac{1}{4}$ -plate ($4\frac{1}{2} \times 3\frac{1}{4}$)	$\frac{1}{2}$ -plate ($6\frac{1}{2} \times 4\frac{1}{2}$)	$\frac{3}{4}$ -plate ($8\frac{1}{2} \times 6\frac{1}{2}$)
O Camera only as above, but with no lens ..	£2 10 0	£2 15 0	£5 0 0
AI Camera as above, complete with a Beck Symmetrical Lens, No. 1, 3 or 4, $f/8$ (single combination can be used alone)	4 7 6	4 15 0	7 7 6
BI Camera as above, but fitted with a Beck Convertible Double Aplanat No. 1, 3 or 4, $f/8$ and $f/14$	5 7 6	7 0 0	9 10 0a
CI Camera as above, but fitted with a Beck Biplanat, No. 2 or 5, $f/5\cdot8$	6 7 6		
DI Camera as above, but fitted with a Beck-Steinheil Unofocal, Series I., No. 3, 5 or 6, $f/6$	6 12 6	9 0 0	
EI Camera as above, but fitted with a Beck-Steinheil Convertible Orthostigmat, Series II., No. 3a, 4a or 6a, $f/6\cdot8$	9 17 6	11 10 0	
aFitted with the large 9×7 Unicum shutter. (The Celverex is not made of large enough size.)			
Cases for above, stiff canvas	0 6 0	0 7 6	0 10 6
Beck Simple Telephoto Lens to above	1 15 0	2 0 0	2 10 0
Wide-Angle Rectilinear Lens to screw into same Shutters	1 7 6	1 17 6	2 0 0
Beck-Harris Spectrum Filters	0 7 6	0 9 6	0 15 0
Additional Double Dark Slides	0 8 6	0 8 6	0 12 6

Any Beck lens can be fitted to the above sets at a corresponding increase or reduction in price.

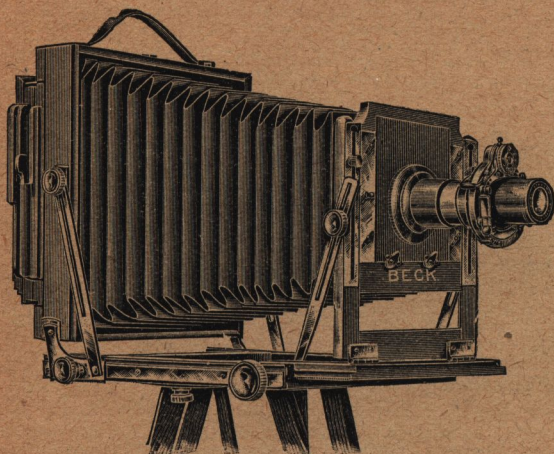
For lenses as applied to stand camera work read:—

“Photographic Lenses: a Simple Treatise.” By Conrad Beck & Herbert Andrews. 350 pages, 45 engravings, and 150 diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

The "MULTIFLEX" SET.*

(A Complete Outfit for Telephotography.)



The popularity of stand camera work has undoubtedly been due to a certain extent to the wonderful value obtainable at a low price; we have endeavoured to extend this popularity still further by introducing a popular Telephoto Set suitable for all kinds of work hitherto untouched by the majority of photographers.

There is a fuller description of the lens given on a later page of this list, but it will not be out of place to mention here that

it is constructed of a specially designed positive of large aperture, $f/7.7$, mounted in a combined focussing mount with a Cilverex or Bausch & Lomb shutter, so arranged that the positive can readily be used alone to give the shortest focus, either 6 in. or $7\frac{1}{2}$ in. Its back combination is so designed as to allow of its use alone, giving a lens of 11 in. and 15 in. focus respectively. Finally, the special additional lens allows of foci up to 40 in. being obtained without a corresponding great increase of camera extension. The whole of the plate is illuminated with any of the above combination of lenses.

The Outfit consists of Camera, turntable tripod, slide with all the necessary movements, and a "Multiflex" combination lens, giving foci from 6 in. to 36 in. in the $\frac{1}{4}$ -plate, and $7\frac{1}{2}$ in. to 45 in. in the $\frac{1}{2}$ -plate set, together with shutter and Iris diaphragm, and the lens in case complete.

PRICES.

	1-pl. ($4\frac{1}{4} \times 3\frac{1}{4}$).	$\frac{1}{2}$ -pl. ($6\frac{1}{2} \times 4\frac{1}{2}$)
Camera, complete as above (triple extension), with "Multiflex" Lens, Cilverex Shutter	£6 7 6	£7 12 6
Ditto ditto, Unicum Shutter	5 10 0	6 15 0
Beck-Harris Spectrum Filter (most useful for Telephoto work)	0 7 6	0 7 6
Soft canvas case for above	0 5 6	0 6 0
Extra dark slides	0 8 6	0 8 6

For Telephotography and artistic landscape work, read:—

"Photographic Lenses: A Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 Engravings and 150 Diagrams. Post free 1/3.

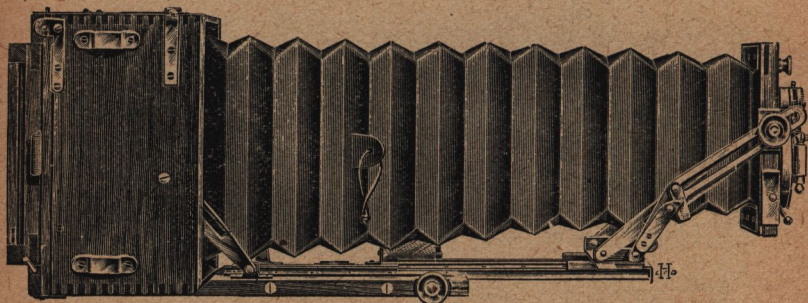
R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

HAND OR STAND CAMERAS.

A Popular Type of Camera for Universal Application.

The Sanderson Universal Hand or Stand Camera has become peculiarly popular of late years. It is a thoroughly, substantially made camera, adapted to hard wear. Its particular claim to attention is due to its possessing practically every movement that has been found useful in the most difficult classes of work. It possesses swing, rising and twisting front movements, and a long extension, making it suitable for telephotography.

The camera body is covered in heavy, hard-grain leather, is fitted with lacquered brass and polished mahogany baseboard and any of the lenses by Beck listed below.



We list it in four Models—

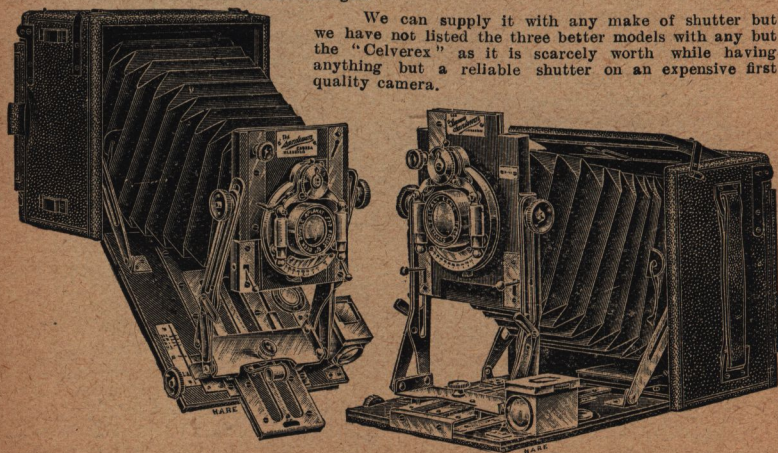
The "Regular" is the Standard model leather covered.

The "De Luxe" has rack and pinion rising front, improved bellows, rack and pinion wide angle movements and focussing chamber and is finished in the most perfect style, leather covered.

The "Tropical" is made in Teak brass bound and brass dowed, bellows attached by metal plates, all woodwork polished, no leather covering.

The "Junior." A cheaper form of the "Regular" with practically all its movements and advantages.

We can supply it with any make of shutter but we have not listed the three better models with any but the "Celverex" as it is scarcely worth while having anything but a reliable shutter on an expensive first quality camera.



R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

HAND or STAND CAMERAS*

(THE SANDERSON).

PRICES OF THE SANDERSON "REGULAR," "TROPICAL," AND
"DE LUXE" MODEL CAMERAS.

	Model.	4½ in. × 3½ in.		5 in. × 4 in.		6½ in. × 4¾ in.°		7 in. × 5 in.	
		£	s. d.	£	s. d.	£	s. d.	£	s. d.
1. Camera complete with Celverex shutter, brilliant finder, level, 3 double dark holders, and Beck Convertible Double Aplanat Lens f/7.7. 6in., 7½ in., 9in. and 9in. respectively.	"Regular"	7	13 6	8	13 6	11	15 0	12	15 0
	"Tropical"	8	18 6	10	3 6	13	5 0	—	—
	"De Luxe"	11	3 6	12	13 6	19	5 0	20	5 0
2. Ditto ditto, with Beck Steinheil Orthostigmat Lens, Series I, f/6.3. No. 3, No. 4, No. 5 and No. 5 respectively.	"Regular"	11	18 6	14	1 0	19	0 0	20	0 0
	"Tropical"	13	3 6	15	11 0	20	10 0	—	—
	"De Luxe"	15	6 0	17	18 6	26	5 0	27	5 0
3. Ditto ditto, with Beck Steinheil Convertible Orthostigmat Lens, Series II., f/6.3, 3 foci. No. 3a and No. 4a respectively.	"Regular"	12	18 6	15	1 0	—	—	—	—
	"Tropical"	14	3 6	16	11 0	—	—	—	—
	"De Luxe"	16	6 0	18	18 6	—	—	—	—
4. Ditto ditto, with Beck Steinheil Unofocal Lens, Series I, f/6. No. 3, No. 4, No. 5 and No. 5 respectively.	"Regular"	10	3 6	11	16 0	16	10 0	17	10 0
	"Tropical"	11	8 6	13	6 0	18	0 0	—	—
	"De Luxe"	13	13 6	15	13 6	23	15 0	24	15 0
5. Ditto ditto, with Beck Steinheil Unofocal Lens, Series II., f/4.5, No. 3 and No. 4 respectively.	"Regular"	12	18 6	14	3 6	—	—	—	—
	"Tropical"	14	3 6	15	13 6	—	—	—	—
	"De Luxe"	16	8 6	18	1 0	—	—	—	—

PRICES OF

THE JUNIOR SANDERSON HAND CAMERAS.*

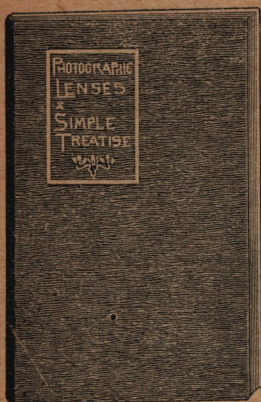
	½-plate.		5×4		½-plate.	
	£	s. d.	£	s. d.	£	s. d.
No. 1c Camera with Celverex Shutter, Finder, Level, 3 Slides, and Solid Leather Case, Beck Rapid Symmetrical Lens, 6in., 7½ in., and 9in. respectively	6	13 6	7	8 6	8	18 6
Telephoto Attachment, Beck Simple	1	15 0	1	15 0	2	0 0
Telephoto Attachment, Beck-Steinheil	4	0 0	4	0 0	4	15 0
Cheap Light Tripod	0	6 3	0	6 3	—	—
Best quality Ash Tripod with best head	0	16 6	0	16 6	0	19 9
Frena Film Holder, fitted complete to above	3	0 0	3	5 0	3	10 0
Beck-Harris Spectrum Filter, complete	0	7 6	0	7 6	0	9 6
Best quality Leather Case, complete	0	9 6	0	11 6	0	14 6
Bipod for Telephoto Work	0	6 0	0	6 0	0	6 0

To choose a Lens, read the new book :—

"Photographic Lenses: A Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 Engravings and 150 Diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

“PHOTOGRAPHIC LENSES.”†



(A simple Treatise by Conrad Beck and Herbert Andrews).

New Edition (6th).

PRICE 1/-

(Post Free, 1/3.)

The fact that 15000 Copies of this book have been sold is sufficient to show that the subject has been treated in a manner that appeals to all. No Photographer who is anxious to learn how to use his apparatus should be without a copy.

350 Pages, 45 Engravings and 150 Diagrams.

The British Journal of Photography says :

“ Week by week we have borne witness to the almost pathetic ignorance shown on lens matters which characterises most photographers, and sometimes we have felt that, ‘If we were King,’ we would make it a penal offence for any one to take up photography without having perused such a compilation as that under notice.

“ The book throughout is written with singular lucidity of style, and contains little or nothing of a mathematical nature calculated to deter its perusal by non-mathematical readers. The half-tone illustrations are extremely good, and the clearness and simplicity of the diagrams will very materially assist the reader to understand the text. The book is a sound piece of work, and in strongly recommending it we trust it will be widely circulated.”

A Leading Daily says :

“ In printing and illustration, the book is simply luxurious.”

POST FREE GRATIS

on application.

**“ PRACTICAL NOTES ON TELEPHOTO-
GRAPHY.”**

This is a 64-page pamphlet, profusely illustrated, explaining the principles which underlie Telephotography, and giving full working instructions. Its perusal will be found of the greatest value to all those who desire to use a telephoto lens.

POST FREE GRATIS

on application.

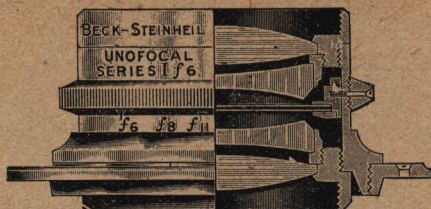
**“ HINTS ON LENSES TO PROFESSIONAL
PHOTOGRAPHERS.”**

In this small pamphlet all the points concerning lenses in connection with portraiture are condensed into a brief two or three pages. Tables as to the length of camera extension and length of focus required in a studio of a given size are included, together with diagrams of sizes.

Every photographer, whether amateur or professional, who takes portraits should write for a copy, as it gives in a few direct sentences the vital qualities required by a lens to be used for portraiture.

BECK LENSES.

The Beck-Steinheil Unofocal.* Series I., f/6.



A new form of specially intense Anastigmat.

No.	Focus.		Aper- ture.	Circle of Illumi- nation. ^o	Plate suitable for at full Aperture, f/6. ^o	Plate covered at f/22.	PRICE with Brass Mount and Flange.	PRICE with Magnalium Mount and Flange.	PRICE Fitted in Celverex Shutter. ^o
	Inches.	Cm.								Inches.	Inches.
1	3.5	9	.59	—	$3\frac{1}{2} \times 2\frac{1}{2}$	5 × 4	£3 0 0	£4 0 0	£4 15 0
2	4.1	10.5	.69	$6\frac{3}{4}$	$4\frac{1}{2} \times 3\frac{1}{2}$	6 × 4	3 2 6	4 2 6	5 0 0
3	4.75	12	.79	$8\frac{1}{2}$	$3\frac{1}{2} \times 3\frac{1}{2}$	$6\frac{3}{4} \times 4\frac{3}{4}$	3 5 0	4 5 0	4 15 0
4	6.00	15	1.00	$10\frac{1}{2}$	5 × 4	7 × 5	3 15 0	4 15 0	5 7 6
5	7.2	18	1.29	$12\frac{1}{2}$	$6\frac{1}{2} \times 4\frac{3}{4}$	9 × 7	4 15 0	5 15 0	6 15 6
6	8.25	21	1.38	$17\frac{1}{2}$	$6\frac{1}{2} \times 4\frac{3}{4}$	10 × 8	6 10 0	7 10 0	—
7	9.5	25	1.48	22	$8\frac{1}{2} \times 6\frac{3}{4}$	12 × 10	9 0 0	10 10 0	—
8	11.5	30	2.08	25	9 × 7	15 × 12	12 0 0	13 0 0	—
9	15.75	40	2.8	28	12 × 10	15 × 12	18 0 0	20 0 0	—

^o For particulars of the new Celverex Shutter see page 153.

For the new coupon system for obtaining one of these finest of modern Anastigmats, see p. 143.

A fuller description of this remarkable development in lens construction will be found in our book on Lenses, 6th edition. At the same time we would draw our customers' attention to the wonderfully low price of the lens, when compared with the earlier types of Anastigmats in the market.

The workmanship is the finest throughout, similar to that bestowed upon the Orthostigmats.

The latest and most moderately priced modern Anastigmat for all work.

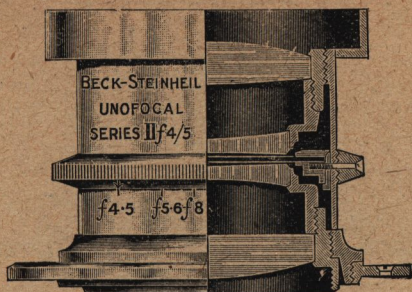
For a full description of this lens see special appendix in—

“Photographic Lenses: a Simple Treatise.” 5th Edition. By Conrad Beck and Herbert Andrews. 350 pages, 45 illustrations, and 150 diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck-Steinheil Unofocal.* Series II., $f/4.5$.



A new form of specially intense anastigmat.

No.	Focus, in.	Plate suitable for at full aperture, $f/4.5$.	PRICE with Brass Mount and Flange.	PRICE with Magnalium Mount and Flange.	PRICE fitted in Celerex Shutter.*
2	4.25	$3\frac{1}{2} \times 2\frac{1}{2}$	£5 0 0	£6 0 0	£6 12 6
3	5.00	$4\frac{1}{4} \times 3\frac{1}{4}$	5 10 0	6 10 0	7 10 0
4	6.00	5×4	6 0 0	7 0 0	7 15 0
4A	6.50	5×4	7 0 0	8 0 0	—
5	7.65	$6\frac{1}{2} \times 4\frac{3}{4}$	8 0 0	9 0 0	—
6	8.25	$6\frac{1}{2} \times 4\frac{3}{4}$	10 5 0	11 10 0	—
7	9.50	7×5	12 10 0	13 10 0	—
8	11.75	$8\frac{1}{2} \times 6\frac{1}{2}$	17 10 0	19 10 0	—
9	15.75	$10\frac{1}{2} \times 8\frac{1}{2}$	25 0 0	27 0 0	—
10	19.75	12×10	36 0 0	38 0 0	—

When fitted in Special Sunk Mounts for Reflex Cameras an extra charge is made.

* For particulars of the New Celerex Shutter see page 153.

When a customer asks whether it is worth while to purchase a lens with so large an aperture as $f/4.5$ we usually have said no, but we now recommend the Unofocal, Series II., because it has none of the disadvantages of very rapid lenses. Its central definition is superb, and stopped down it will cover as well as Series I. There is no sign of flare with the smallest stops, as is usually the case with Anastigmats with air spaces. The price is not more than the old Orthostigmats, and we most strongly recommend this lens everywhere for Telephotography.

For Portraiture and Reflex Cameras it is unrivalled, and we can most strongly recommend it.

For a special appendix on this lens, see:—

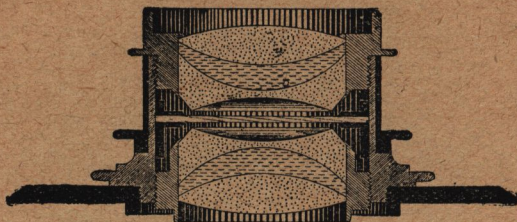
“Photographic Lenses: a Simple Treatise.” 5th Edition. By Conrad Beck and Herbert Andrews. 350 pages, 45 illustrations, and 150 diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck-Steinheil Orthostigmat.* Series I.

Aperture $f/6.3$.



Beck-Steinheil Orthostigmat.
No. 0A. Full Size.

Aperture: Nos. 0-0a, $f/5.3$; Nos. 1-5, $f/6.3$; Nos. 6-8, $f/7.7$; Nos. 9-11, $f/8$.

No.	Focal length. In.	Recom- mended for plate.	Plate covered sharply.		PRICES.					
			$f/6.3$.	$f/20$.	In Brass.	In Aluminium.	Fitted in Cilverex Shutter. <i>a</i>			
0	1	—	$\frac{6}{8} \times \frac{6}{8}$	$\frac{3}{4} \times \frac{3}{4}$	£1	7	6	—	—	
0a	2	—	$1\frac{1}{8} \times 1\frac{1}{8}$	2×2	4	7	6	—	—	
1	$3\frac{1}{2}$	$3\frac{1}{2} \times 3\frac{1}{2}$	$3\frac{1}{4} \times 3\frac{1}{4}$	$4\frac{1}{4} \times 3\frac{1}{4}$	4	10	0	£5	10	0
2	$4\frac{1}{2}$	$4\frac{1}{2} \times 3\frac{1}{2}$	$4\frac{1}{4} \times 4\frac{1}{4}$	$4\frac{1}{2} \times 3\frac{1}{2}$	4	15	0	5	15	0
3	$4\frac{3}{8}$	$4\frac{1}{2} \times 3\frac{1}{2}$	$4\frac{1}{4} \times 3\frac{1}{4}$	5×4	5	0	0	6	0	0
4	$4\frac{3}{8}$	5×4	6×4	$7\frac{1}{2} \times 5$	6	0	0	7	0	0
5	$5\frac{1}{8}$	$6\frac{1}{2} \times 4\frac{3}{4}$	$6\frac{1}{2} \times 4\frac{3}{4}$	8×6	7	5	0	8	5	0
6	$8\frac{1}{2}$	$7\frac{1}{2} \times 5$	$7\frac{1}{2} \times 5$	$8\frac{1}{2} \times 6\frac{1}{2}$	8	10	0	9	10	0
7	$9\frac{1}{2}$	$8\frac{1}{2} \times 6\frac{1}{2}$	8×6	$9\frac{1}{8} \times 7$	10	10	0	11	10	0
8	11	$8\frac{1}{2} \times 6\frac{1}{2}$	$8\frac{1}{2} \times 6\frac{1}{2}$	$11 \times 8\frac{1}{2}$	13	0	0	14	0	0
9	$14\frac{1}{2}$	10×8	10×8	$12 \times 9\frac{1}{2}$	20	0	0	22	0	0
10	19	12×10	$12 \times 9\frac{1}{2}$	16×12	30	0	0	32	0	0
11	$23\frac{1}{2}$	15×12	16×12	20×16	45	0	0	47	0	0

a For particulars of the new Cilverex Shutter see page 153

All prices are strictly Net Cash.

The Finest of Modern Anastigmats "for all work."

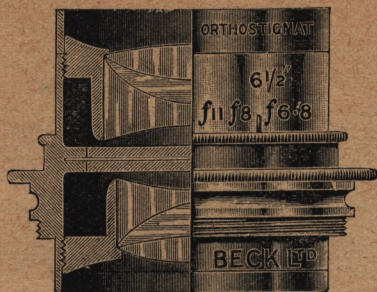
For a full discussion of its properties and uses read:—

"Photographic Lenses: a Simple Treatise": By Conrad Beck and Herbert Andrews. 350 pages, 45 illustrations and 150 diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck-Steinheil "Convertible"
Orthostigmat.* Series II. $f/6.8$ and $f/7.7$.



Complete Convertible Lens.

Before purchasing a lens consider how many lenses you are purchasing—the Convertible B.S.O. is 3.

No.	Focus. Single Lens. $f/12.6$.		Com- bined Focus.	Aper- ture.	Size of Plate in inches. Most suitable for Plate.	PRICE with Brass Mount.	In Aluminium.	Fitted in Cilverex Shutter. <i>a</i>
	Back.	Front.						
1a	6	7	$3\frac{7}{8}$	$f/6.8$	$3\frac{1}{2} \times 3\frac{3}{8}$	£4 15 0	£5 15 0	£6 10 0
1b	6	$8\frac{1}{2}$	$4\frac{1}{2}$	$f/7.7$	$4\frac{1}{2} \times 3\frac{3}{8}$	5 0 0	6 0 0	6 17 6
2a	7	$8\frac{1}{2}$	$4\frac{1}{2}$	$f/6.8$	$4\frac{1}{2} \times 3\frac{1}{2}$	5 2 6	6 2 6	6 15 0
2b	7	10	$5\frac{1}{2}$	$f/7.7$	5×4	5 15 0	6 15 0	7 7 6
3a	$8\frac{1}{2}$	10	$5\frac{1}{2}$	$f/6.8$	5×4	5 17 6	6 17 6	7 10 0
3b	$8\frac{1}{2}$	$12\frac{1}{2}$	$5\frac{1}{2}$	$f/7.7$	6×4	6 10 0	7 10 0	8 2 6
4a	10	$12\frac{1}{2}$	$6\frac{1}{2}$	$f/6.8$	$6\frac{1}{2} \times 4\frac{3}{8}$	7 0 0	8 0 0	8 12 6
4b	10	$14\frac{1}{2}$	7	$f/7.7$	$6\frac{1}{2} \times 4\frac{3}{8}$	8 0 0	9 0 0	—
5a	$12\frac{1}{2}$	$14\frac{1}{2}$	$7\frac{1}{2}$	$f/6.8$	7×5	8 10 0	9 10 0	—
6a	$14\frac{1}{2}$	$17\frac{1}{2}$	8	$f/6.8$	$8\frac{1}{2} \times 6\frac{1}{2}$	10 0 0	11 0 0	—

a For particulars of the new Cilverex Shutter see page 153

All prices are strictly Net Cash.

The Finest of Modern Anastigmats "for all work."

This series gives three distinct foci. Each lens is engraved for the different apertures on the one mount, a perfect universal lens.

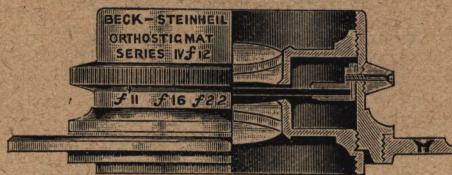
For a full discussion of its properties and uses read:—

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 illustrations and 150 diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck-Steinheil Orthostigmat,* Series IV., $f/11.3$, Wide Angle.



ANGLE 100° TO 110° .

No.	Focus.		For Plate.*	Circle of Critical Definition.	Brass. PRICE with Iris.	PRICE in Magnalium.
	In.	Cm.				
1	$2\frac{7}{8}$	7.5	5×4	8"	£3 10 0	£4 10 0
1a	$3\frac{1}{2}$	8.8	$6\frac{1}{2} \times 4\frac{3}{4}$	$9\frac{1}{8}$ "	3 16 0	4 16 0
2	$4\frac{1}{8}$	10.5	$6\frac{1}{2} \times 4\frac{3}{4}$	$10\frac{1}{4}$ "	4 0 0	5 0 0
2a	$5\frac{1}{16}$	13	$8\frac{1}{2} \times 6\frac{1}{2}$	12"	4 10 0	5 10 0
3	6	15	$8\frac{1}{2} \times 6\frac{1}{2}$	13"	5 0 0	6 0 0
3a	$7\frac{1}{16}$	17.5	10×8	16"	5 10 0	6 10 0
5	$8\frac{1}{8}$	20	10×8	19"	5 15 0	6 15 0
4a	$9\frac{1}{16}$	23	12×10	22"	6 10 0	7 10 0
6	10	26	12×10	24"	7 0 0	8 0 0

* Each size will cover a much larger plate with a small aperture, but as the use of a large amount of rising front is often required the longest focus that will give the desired angle should be selected.

This series has been introduced to meet the demand for a reliable and yet rapid wide-angle lens. The full aperture of these lenses is $f/11.3$, and at this aperture they will cover the whole of the plate listed with the beautiful definition associated with the Orthostigmats. Freedom from Astigmatism, Spherical aberration, flare and distortion, is a feature of these lenses. They are unquestionably the best wide-angle lenses to choose, and as the full aperture can be used they are very rapid.

The importance of a wide-angle Anastigmat with such a large aperture can scarcely be over-rated for Architectural Photography. It is also specially suitable when an extended use of the rising front is required.

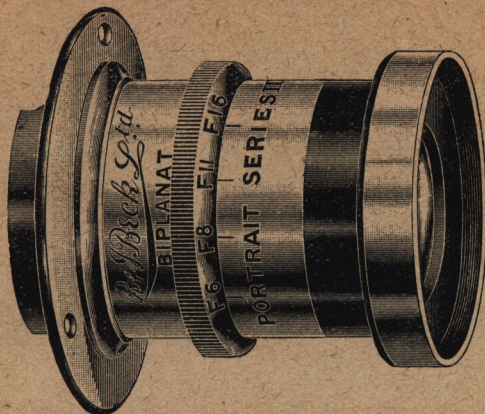
For wide-angle work, read:—

“Photographic Lenses: a Simple Treatise.” By Conrad Beck and Herbert Andrews. 350 pages, 45 illustrations, and 150 diagrams. Post-free 1/3.

R. & J. Beck, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Portrait Biplanat, f/6.† Series II.



Aperture f/6.6.

No.	Focus.	Focus of Back Lens.	Diameter of Lenses.	Plate suitable for at f/6.	Plate covered f/22.	PRICE in Brass and Aluminium.	PRICE Fitted in Celverex Shutter.*
2	5½	9	¾	4½ × 3½	4¾ × 3¾	£1 15 0	£3 5 0
4	7½	13½	1⅛	5 × 4	6¼ × 4¼	2 10 0	4 10 0
5	9½	16	1⅜	6 × 4½	8¾ × 6¾	2 15 0	—
6	11	20	1⅝	7½ × 5	9 × 7	3 3 0	—
7	14	24	2¼	9 × 7	12 × 10	4 5 0	—
8	17	30	2¾	10 × 8	15 × 12	8 0 0	—

* For particulars of Celverex Shutter see page 153

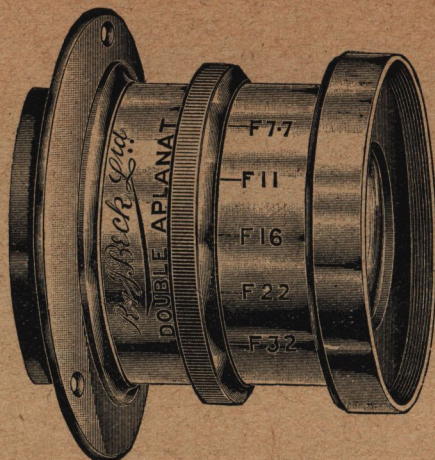
We have introduced this series of Biplanats to provide a low priced series of **Portrait** Lenses giving good definition in the centre of the field, and yet having certain of the Series I. properties, *i.e.*, flatness of field and the power of using the single combinations alone.

When used at full aperture they do not give the microscopic definition of an anastigmat, and are therefore specially suitable for heads and busts, while if they are slightly stopped down they are excellent lenses for groups, being entirely free from distortion and flare. They thus form an ideal series of lenses for professional workers. The half lenses can be used separately, as long focus single lenses of about double the focus and require an aperture half that of the complete lens.

For portrait work read:—

“Photographic Lenses: a Simple Treatise.” By Conrad Beck and Herbert Andrews. 350 pages, 45 engravings, 150 diagrams. Post free 1/3.

BECK LENSES.

The Beck Double Aplanat.† Series I, $f/7.7$.Aperture $f/7.7$.

No.	Focus.	Focus of Single Combination.	Plate suitable for at $f/7.7$.	Plate covered $f/22$	PRICE.
1	$5\frac{1}{2}$	10	$4\frac{1}{4} \times 3\frac{1}{4}$	5×4	£1 10 0
2	$6\frac{1}{2}$	12	5×4	$6\frac{1}{2} \times 4\frac{1}{2}$	1 15 0
3	$7\frac{1}{2}$	14	5×4	$6\frac{1}{2} \times 4\frac{3}{4}$	1 17 6
4	$8\frac{3}{4}$	16	$6\frac{1}{2} \times 4\frac{3}{4}$	8×5	2 0 0
5	11	20	$8\frac{1}{2} \times 6\frac{1}{2}$	9×7	3 0 0
6	$14\frac{1}{2}$	26	10×8	11×9	5 0 0

The Beck Double Aplanat in Celverex Shutters.*

No.	Focus.	Focus of Single Combination.	Plate suitable for at $f/7.7$.	Plate covered, $f/22$.	PRICE.
1	$5\frac{1}{2}$	10	$4\frac{1}{4} \times 3\frac{1}{4}$	5×4	£3 0 0
2	$6\frac{1}{2}$	12	5×4	$6\frac{1}{2} \times 4\frac{1}{2}$	3 7 6
3	$7\frac{1}{2}$	14	5×4	$6\frac{1}{2} \times 4\frac{3}{4}$	3 10 0
4	$8\frac{3}{4}$	16	$6\frac{1}{2} \times 4\frac{3}{4}$	8×5	4 0 0

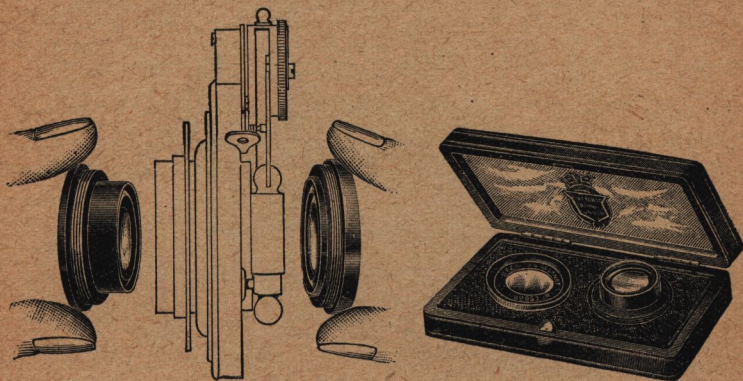
* For particulars of the New Celverex Shutter see page 153.

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 engravings and 150 diagrams. Post-free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck W.A. Aplanats and Symmetrical, f/16.*



The Beck W.A. Aplanats for screwing into Celverex or B. & L. Shutters, for all **Folding Pocket Cameras**, making them useful for interior and architectural work.

No.	Focus.	In cells for B. & L. or Celverex.	For Plate.	Aplanat in Cells.	Aplanat in Mount.	Symmetrical in Cells.	Symmetrical in Mounts.
1	3in.	5×4 size	$4\frac{1}{2} \times 3\frac{1}{2}$	1 7 6 ^a	1 15 0	0 17 6	1 5 0
2	4in.	5×4 „	$6\frac{1}{2} \times 4\frac{3}{4}$	1 17 6	2 5 0	1 2 6	1 10 0
3	4in.	8×5 „	$6\frac{1}{2} \times 4\frac{3}{4}$	2 0 0	2 5 0	—	—
3	5in.	5×4 „	$6\frac{1}{2} \times 4\frac{3}{4}$	—	—	1 5 0	1 12 6

^a This lens will cover a 5×4 or $\frac{1}{2}$ -plate.

This series of lenses is of the Rectilinear type, and the fact that the 3-in. lens will cover a $\frac{1}{2}$ -plate with the smallest stop is a good guarantee of their covering powers. They are specially mounted for screwing into the Celverex or Bausch and Lomb shutters as are supplied on many of the folding cameras.

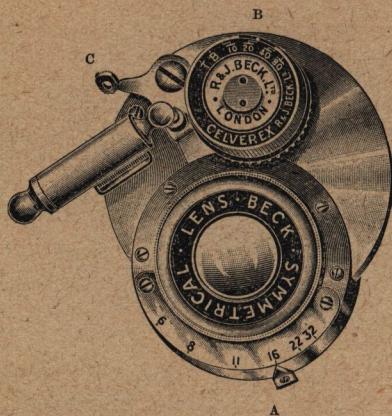
“Photographic Lenses: A Simple Treatise.” By Conrad Beck and Herbert Andrews. 350 pages, 45 engravings, 150 diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck Symmetrical Lenses, $f/8$.†

The most
popular
Rectilinear
Lens.



Giving
Critical
Central
Definition.

Aperture $f/8$.a

No.	Focus.	Focus of Back Combination.	For Plate.	Prices in Iris Mount.	PRICE in Celverex Shutter.*
1	5 " to 6 "	—	$4\frac{1}{4} \times 3\frac{1}{4}$	£1 5 0	£2 15 0
2	$6\frac{1}{4}$ " to $7\frac{1}{4}$ "	—	5×4	1 7 6	3 0 0
3	8 " to 9 "	16"	$6\frac{1}{2} \times 4\frac{3}{4}$	1 13 0	3 5 6
4	11	20"	$8\frac{1}{2} \times 6\frac{1}{2}$	2 0 0	4 0 0
5	$12\frac{1}{2}$	22"	9×7	3 0 0	—
6	$14\frac{1}{2}$	26"	10×8	3 15 0	—
7	18	32"	12×10	6 0 0	—

*For Particulars of the New Celverex Shutter see page 153.

Every Beck Symmetrical Lens carries a special exchange coupon, see page 143.

These lenses are now so well known, that a full description is unnecessary, they are excellent, cheap, rectilinear lenses. They have been specially calculated to give critical central definition, and can be used for telephoto work.

aThis is the only series of lenses of our make, the full apertures of which we cannot guarantee; owing to the variations in focus, the value of the full aperture varies slightly; for fuller particulars read:—

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 engravings and 150 diagrams. Post free, 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

The Beck Symmetrical Lens Coupon System.

A New Method of procuring one of the finest of Modern Anastigmats.

The reception that has been accorded to the popular work on lenses, entitled "Photographic Lenses: a Simple Treatise," by Conrad Beck and Herbert Andrews (over 15,000 copies have already been sold), has been most satisfactory. This book has explained to many photographers exactly what are the advantages of employing an anastigmat lens for photography. To make it possible for anyone who possesses a Beck Symmetrical, Beck Double Aplanat, Primus Beck or Thornton-Pickard Beck Symmetrical Lens, to obtain one of the finest modern anastigmats at a moderate cost, we have introduced the new "Lens Exchange Coupon Scheme."

If a coupon has not been provided when the lens was purchased, one can be obtained on application to ourselves or any other photographic dealer.

The obverse and reverse of the coupon are given below:—

Lens Exchange Coupon. ○

On the presentation of this Coupon, together with the lens to which it is attached, to any photographic dealer,

The sum of.....will be allowed in part payment of the purchase price of a Beck-Steinheil Unofocal Complete in..... Retail price Exchange price

The lens is the finest of ○ modern anastigmats to be obtained, will cover a.....plate perfectly to the corners at full aperture. For the advantage of such a lens read "PHOTOGRAPHIC LENSES: A SIMPLE TREATISE."

Information for your Photographic Dealer.

The coupon must be returned, together with the lens being exchanged, to Messrs. Beck or their wholesale house, when the new lens will be supplied in the usual way at the reduced prices.

* For the well-known half-plate ($6\frac{1}{2} \times 4\frac{3}{4}$) Beck Symmetrical Lens, Beck Primus Lens, or Thornton-Pickard Beck Symmetrical Lens, in brass mount, with Iris diaphragm, £1 0 0 will be allowed in exchange for a No. 5, Series I., f/6, Beck-Steinheil Unofocal, 7.2" focus, in brass mount, with Iris diaphragm, complete £4 15 0, exchange price £3 15 0.

For the well-known $\frac{1}{4}$ -plate do., do., £0 15 0 will be allowed in exchange for a No. 3, Series I., f/6, Beck-Steinheil Unofocal, 4.75" focus, in brass mount, with Iris diaphragm, complete £3 5 0, exchange price £2 10 0.

For the well-known $\frac{1}{4}$ -plate do., do., £1 10 0 will be allowed in exchange for a No. 7, Series I., f/6, Beck-Steinheil Unofocal, 9.5 focus, in brass mount, with Iris diaphragm, complete £9 0 0, exchange price £7 10 0.

For the well-known $\frac{1}{2}$ -plate Beck-Symmetrical or Primus-Beck Lens, in a small Bausch & Lomb Unicum Shutter, including shutter, £1 10 0 will be allowed in exchange for a No. 5, Series I., f/6, Beck-Steinheil Unofocal, 7.2" focus, complete in large Bausch & Lomb Unicum Shutter, £6 12 6, exchange price £5 2 6.

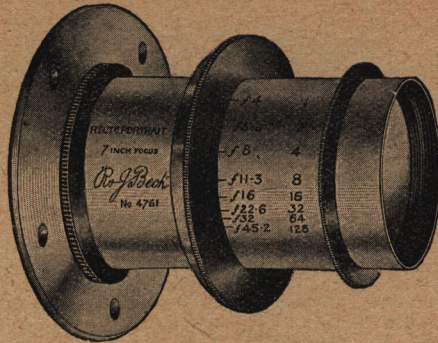
For the well-known $\frac{1}{4}$ -plate Beck-Symmetrical or Primus-Beck Lens, lens in cells only, £0 15 0 will be allowed in exchange for a No. 3, Series I., f/6, Beck-Steinheil Unofocal, 4.75" focus, in special cells, to fit same shutter, £3 5 0, exchange price £2 10 0.

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 Engravings, and 150 Diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

Portrait Lenses. Extra Rapid Rectilinear.*



E.R.R.		APERTURE: f/4.		
No.	Equiv. Focus.	Size of Portrait.	Size of Views.	PRICES.
2	$7\frac{1}{2}$	C.-de-V. and Busts	5 × 4	£8 10 0
3	$9\frac{3}{4}$	C.-de-V. and Cabinets	$6\frac{1}{2} \times 4\frac{3}{4}$	10 10 0
4	$11\frac{1}{2}$	Cabinets	$8\frac{1}{2} \times 6\frac{1}{2}$	15 15 0
5	14	Panels	10 × 8	21 0 0

Half Orthostigmats for Portraiture.

Aperture: Nos. 6 and 7, $f/6.8$, and Nos. 8-11, $f/7$ to $f/8$.					
No.	For Portraits.	Focus.	Half combination, focus.	Plate covered.	PRICE of single combination mounted with iris for portraiture, $f/12.5$.
6	C.-de-V. and Busts	$8\frac{1}{4}$	$16\frac{1}{2}$	$7\frac{1}{2} \times 5$	£4 15 0
7	C.-de-V. and Cab.	$9\frac{1}{2}$	$17\frac{1}{2}$	8 × 6	5 15 0
8	Cabinets and Panels	11	20	$8\frac{1}{2} \times 6\frac{1}{2}$	7 0 0
9	Panels	$14\frac{1}{4}$	26	$9\frac{1}{2} \times 7$	11 0 0
10	Large Groups	19	36	12 × $9\frac{1}{2}$	16 10 0
11	Large Groups	$23\frac{1}{2}$	40	16 × 12	25 0 0

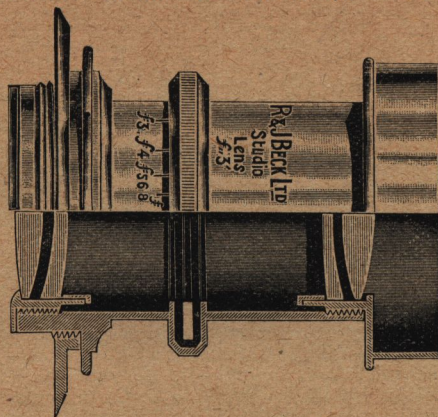
For full discussion of their properties and uses read:—

“Photographic Lenses: a Simple Treatise.” By Conrad Beck and Herbert Andrews. 350 pages, 45 engravings, 150 diagrams. Post free, 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The Beck Studio Lens. Series I., f/3. Series II., f/6.*



Series I., f/3, f/4.

No.	Diameter of Lens.	Focus.	Size of Plate.	Aperture.	PRICE, with Iris Diaphragm.
2	2"	6"	C. de V.	f/3	£4 15 0
3	2 $\frac{3}{4}$ "	8 $\frac{1}{2}$ "	C. de V & Cab.	f/3	7 10 0
4	3 $\frac{1}{2}$ "	12"	Cabinet	f/3.5	11 0 0
5	4"	16"	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "	f/4	15 0 0

Series II., f/6.

No.	Diameter of Lens.	Focus.	Size of Plate.	Aperture.	PRICE, with Iris Diaphragm.
5	2 $\frac{3}{4}$ "	16"	8 $\frac{1}{2}$ " x 6 $\frac{1}{2}$ "	f/6	£8 0 0
6	3 $\frac{1}{2}$ "	19"	10 x 8	f/6	12 0 0
7	4"	24"	12 x 10	f/6	15 0 0

These Lenses are of the well-known Petzval formula. The Series I. are the most rapid Portrait lenses we make. The central definition is critical, the field is however curved, and the edges of the plate are not sharply covered without stopping down. They do not compare for curving power with Anastigmat Lenses, and are only suitable for portraits and groups.

The Series II. are long focus lenses of the same type but of smaller aperture.

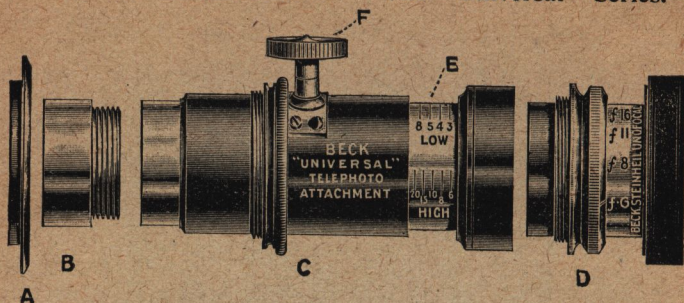
For full particulars, see:—

"Hints on Lenses for Professional Photographers." Post free. (See page 133).

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

Telephoto Attachments. The "Universal" Series.*



Description of Illustration.—A. Flange of Positive Lens into which either the positive D. or Telephoto Attachment C. screws.—C. Telephoto Attachment with scale of magnification E. and Focussing milled head F.—D. Beck Steinheil "Unofocal" Lens with Iris diaphragm.—B. A second Telephoto Positive Lens as supplied in Telephoto Pairs to screw into mount C. in place of the first lens.

These can be fitted to any positive lens without any alteration to the latter, so that it can be used as before with or without the Telephoto Attachment in the same flange, but the lens should be sent to us so that we can adjust the Telephoto Attachment to it. Any good lens will give good results with these Telephoto Attachments provided it has an aperture not less than F/8 or F/11. They work well for instantaneous photography with lenses of F/6 and F/4, with moderate magnifications especially when fitted to Reflex hand cameras.

Every attachment is provided with a Rack and Pinion adjustment by means of which the magnification may be varied and the final focussing accurately accomplished.

The "Universal" Telephoto Attachments are made in 3 Series

According to the magnification required. The tables attached show at a glance the camera extensions required and the size of plate that will be illuminated with the different lenses.

The Low Power covers a given size plate with a low power magnification, that is to say it has a large circle of illumination, but it requires rather more camera extension and is therefore most suitable for magnifications of from 3 to 5 (see tables).

The Standard Power has not so large a circle of illumination except with rather higher magnification, but requires less camera extension, and it is therefore generally more suitable for magnification of from 4 to 8 (see tables).

The High Power has still smaller circle of illumination, but is specially suitable for powers from 7 to 20 as it requires only very short camera extension (see tables).

The "Universal" Telephoto Pairs. To provide for those who desire to be completely equipped for Telephotography we are making selected pairs of two Telephoto Attachments which screw interchangeably into one Rack and Pinion mount, one high power and one low power, this combination enables any magnification to be used under the best circumstances. The mount and the two lenses are packed in a case and form a very perfect outfit. A Beck Harris light filter may, if desired, be packed in the same case. They are catalogued both by themselves and also combined with a suitable "Unofocal" positive lens.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

TABLES GIVING CAMERA EXTENSION.

Necessary with the "Universal" Series of Telephoto Lenses.

STANDARD POWER.		No. 1	No. 2	No. 3	No. 4	No. 5
		Inches.	Inches.	Inches.	Inches.	Inches.
Magnification ..	3	3 $\frac{3}{4}$	5	7 $\frac{3}{4}$	9 $\frac{1}{4}$	10 $\frac{1}{2}$
Do. ..	4	5 $\frac{1}{2}$	7 $\frac{1}{2}$	11 $\frac{1}{2}$	13 $\frac{3}{4}$	16
Do. ..	5	7 $\frac{1}{2}$	10	15 $\frac{1}{2}$	18 $\frac{1}{2}$	21 $\frac{1}{4}$
Do. ..	8	13 $\frac{1}{4}$	17 $\frac{1}{2}$	27	23 $\frac{1}{4}$	37
Do. ..	10	17	22 $\frac{1}{2}$	34 $\frac{1}{2}$	41 $\frac{1}{2}$	45 $\frac{1}{2}$
Do. ..	15	26 $\frac{1}{2}$	35	54	—	—
HIGH POWER.		No. 0	No. 1	No. 2	No. 3	
		Inches.	Inches.	Inches.	Inches.	
Magnification ..	5	4 $\frac{1}{2}$	7 $\frac{1}{2}$	10	15 $\frac{1}{2}$	
Do. ..	8	8	13 $\frac{1}{4}$	17 $\frac{1}{2}$	27	
Do. ..	10	10 $\frac{1}{4}$	17	22 $\frac{1}{2}$	34 $\frac{1}{2}$	
Do. ..	15	16	26 $\frac{1}{2}$	35	54	
LOW POWER.		No. 1	No. 2	No. 3	No. 4	No. 5
		Inches.	Inches.	Inches.	Inches.	Inches.
Magnification ..	3	3 $\frac{3}{4}$	5	7 $\frac{3}{4}$	9 $\frac{1}{4}$	10 $\frac{1}{2}$
Do. ..	4	5 $\frac{1}{2}$	7 $\frac{1}{2}$	11 $\frac{1}{2}$	13 $\frac{3}{4}$	16
Do. ..	5	7 $\frac{1}{2}$	10	15 $\frac{1}{2}$	18 $\frac{1}{2}$	21 $\frac{1}{4}$

TABLES GIVING DIAMETER OF CIRCLE OF ILLUMINATION

at various magnifying powers with the "Universal" Series of Telephoto Attachments combined with suitable Beck-Steinheil Unofocal Lenses f/6 aperture.

Lenses of larger aperture will give somewhat larger, and those of smaller aperture somewhat smaller, Circles of Illumination.

STANDARD POWER.		No. 1.	No. 2	No. 2	No. 3
		With No. 3 Beck-Steinheil Unofocal f/6 Lens (4 $\frac{3}{4}$ in.) Inches.	With No. 4 Beck-Steinheil Unofocal f/6 Lens (6 in.) Inches.	With No. 5 Beck-Steinheil Unofocal f/6 Lens (7 $\frac{1}{4}$ in.) Inches.	With No. 7 Beck-Steinheil Unofocal f/6 Lens (9 $\frac{1}{2}$ in.) Inches.
Magnification ..	3	4 $\frac{1}{4}$	5 $\frac{1}{2}$	5	7
Do. ..	5*	8 $\frac{1}{4}$	11	10	14
HIGH POWER.		No. 0	No. 0	No. 1	No. 2
		With No. 3 Beck-Steinheil Unofocal f/6 Lens (4 $\frac{3}{4}$ in.)	With No. 4 Beck-Steinheil Unofocal f/6 Lens (6 in.)	With No. 5 Beck-Steinheil Unofocal f/6 Lens (7 $\frac{1}{4}$ in.)	With No. 7 Beck-Steinheil Unofocal f/6 Lens (9 $\frac{1}{2}$ in.)
Magnification ..	3	2 $\frac{1}{4}$	2	3 $\frac{1}{4}$	4 $\frac{1}{2}$
Do. ..	5	4 $\frac{1}{4}$	3 $\frac{3}{4}$	6 $\frac{3}{4}$	9 $\frac{1}{4}$
Do. ..	8*	7 $\frac{1}{4}$	6 $\frac{3}{4}$	11 $\frac{1}{2}$	16
LOW POWER.		No. 2	No. 3	No. 3	No. 5
		With No. 3 Beck-Steinheil Unofocal f/6 Lens (4 $\frac{3}{4}$ in.)	With No. 4 Beck-Steinheil Unofocal f/6 Lens (6 in.)	With No. 5 Beck-Steinheil Unofocal f/6 Lens (7 $\frac{1}{4}$ in.)	With No. 7 Beck-Steinheil Unofocal f/6 Lens (9 $\frac{1}{2}$ in.)
Magnification ..	3	7	12 $\frac{1}{4}$	9 $\frac{1}{2}$	13 $\frac{1}{4}$
Do. ..	4*	10 $\frac{1}{2}$	18 $\frac{3}{4}$	15	20

* At higher magnifications the Circles of Illumination are so large that it is unnecessary to give them.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

Telephoto Attachments. "Universal" Series.

STANDARD POWER.

No.	Diameter of Lens. Inches.	Focus of Lens. Inches.	Suitable for Lenses of Foci, inches.	PRICE in Brass with Rack and Pinion Focussing.	PRICE in Magnalium.
1	.90	1.90	4 to 5½ in.	£2 17 6	£3 12 6
2	1.20	2.50	5½ " 7½ "	3 7 6	4 2 6
3	1.40	3.85	7 " 9½ "	3 12 6	4 10 0
4	1.60	4.60	10 " 12 "	4 0 0	5 0 0
5	2.00	5.30	14 " 16 "	4 15 0	5 15 0
HIGH POWER.					
0	.60	1.15	4 to 5 in.	£3 5 0	£4 2 6
1	.90	1.90	6 " 8½ "	3 5 0	4 2 6
2	1.20	2.50	10 " 12 "	4 0 0	5 0 0
3	1.40	3.85	14 " 16 "	4 15 0	5 15 0
LOW POWER.					
1	.90	1.90	3 to 4¼ in.	£2 17 6	£3 12 6
2	1.20	2.50	4¼ " 5½ "	3 7 6	4 2 6
3	1.60	3.85	5½ " 7½ "	3 17 0	4 10 0
4	1.90	4.60	7½ " 9 "	4 10 0	5 10 0
5	2.00	5.30	9 " 12 "	5 0 0	6 0 0

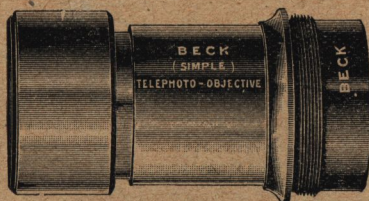
Beck "Universal" Telephoto Pairs.

No. 1 PAIR.— $\frac{1}{4}$ -plate size, Consisting of Rack and Pinion mount and two interchangeable telephoto attachments, No. 0 High power and No. 2 Low power, in case	£4 12 6
Ditto, ditto with the addition of a "Unofocal" Positive lens, No. 3, Series I., $f/6$ aperture	7 17 6
No. 2 PAIR.— 5×4 size, Consisting of Rack and Pinion mount and two interchangeable telephoto attachments, No. 0 High power and No. 3 Low power, in case	5 2 6
Ditto, ditto with addition of a "Unofocal" Positive lens, No. 4, Series I., $f/6$ aperture	8 17 6
No. 3 PAIR.— $\frac{1}{2}$ -plate size, Consisting of Rack and Pinion mount and two interchangeable telephoto attachments, No. 1 High power and No. 3 Low power, in case	5 5 0
Ditto ditto with addition of a "Unofocal" Positive lens No. 5 Series I., $f/6$ aperture	10 0 0
No. 4 PAIR.—Whole-plate size, Consisting of Rack and Pinion mount and two interchangeable telephoto attachments, No. 2 High power and No. 5 Low power, in case	6 10 0
Ditto ditto with addition of a "Unofocal" Positive lens, No. 7, Series I., $f/6$ aperture	15 10 0

BECK LENSES.

The Beck "Simple" Telephoto Attachments.† Series IV. (Simple.)

We hold ourselves responsible for any lenses bearing our name, and shall always take full responsibility as to their quality.



The Beck "Simple" Telephoto Attachment.

No.	Element.	For Lens of Focus.	Diameter of Screw of Positive.	PRICE.
1	I	4" to 6" in 5 × 4 B. & L.	or flanges up to 1½"	£1 15 0
2	I.	5" to 7" in 5 × 4 B. & L.	or flanges up to 1½"	1 15 0
3	II.	6" to 9" in 5 × 4 B. & L.	or flanges up to 1½"	2 0 0
4a	IIA.	For Beck Symmetrical Lenses in Mount		2 0 0
4	II.	6" to 9" in 7 × 5 B. & L.	or flanges up to 2"	2 0 0
5	II.	6" to 9" in 9 × 7 B. & L.	or flanges up to 3"	2 10 0
6	II.	4" to 7" in 7 × 5 B. & L.	or flanges up to 2"	2 5 0

Telephoto work is not confined to the users of the most expensive attachments; much can be done with a simpler, if less perfect, instrument.

This attachment has been brought out for use on cameras having only short extensions. The ordinary lens is unscrewed from the camera, and this little attachment screwed on behind it; focussing can then be accurately carried on by pulling or pushing the shutter and lens backwards or forwards. It gives magnification up to 4½ times or 6, and can be used with any lens; it is light and handy.

It is equally suitable for all good lenses in any form of mount, and should find its way into every outfit.

"Practical Notes on Telephotography," 64 pages, gives details of this lens and its uses, post free, gratis.

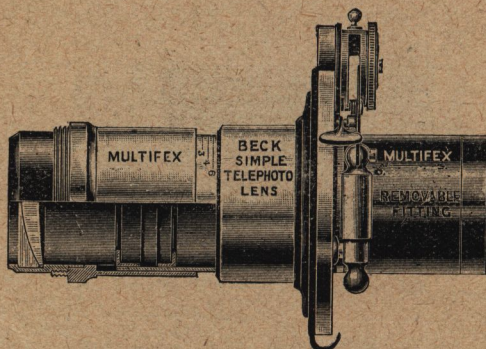
For a complete discussion of Telephotography in all its bearings read:—

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 engravings and 150 illustrations. Post free 1/3.

R, & J, BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

The "Multiflex" Telephoto Lens.†



The Beck "Multiflex" Lens.

A Description of the "Multiflex" Lens.

The popularity of Telephotography, confined though it has been to workers with special lenses and special cameras, is so real that we have been induced to design a lens promising the advantages of a Telephoto Lens and at the same time without its restrictions.

The "Multiflex" Lens consists of (1) a specially constructed positive mounted in a Celverex or Unicum shutter for time, bulb and instantaneous exposures, combined with (2) another lens separated from it by a focussing mount.

Price:—			With Unicum Shutter.	With Celverex Shutter.
Complete, including Case and Flange	..	(Size I.)	£3 3 0	£4 0 0
"	"	Magnalium	4 4 0	5 1 0
"	"	..	4 4 0	5 0 0
"	"	Magnalium	5 5 0	6 1 0
Beck-Harris Filter (Size I. or II.)	..	..	0 7 6*	0 7 6
The Multiflex Set, consisting of camera, slide, turntable, tripod and lens complete, Size I. (1/4)	..	..	5 10 0*	6 7 6
Do., do., 1/2-plate	..	..	6 15 0*	7 12 6

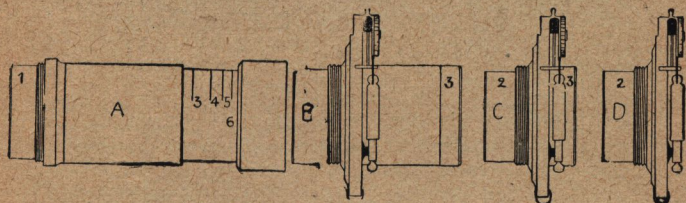
R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

BECK LENSES.

To use the "Multiflex" Lens.

The "Multiflex" is a number of lenses suitable for all branches of work—snapshots, street scenes, portraiture, telephoto, architectural, etc., and varies in its suitability according to how it is used. The lens is manufactured in two sizes, one for quarter-plate and 5×4 inch, and the other for $\frac{1}{2}$ -plate and $1\frac{1}{4}$ -plate.

Sharp definition is obtainable with the "Multiflex" Lens whatever form it is used in. The definition is improved over a larger area in the same way as with an ordinary lens by merely stopping down by means of the Iris diaphragm.



For snap-shot and ordinary field work, the back lens (A) is unscrewed from the shutter and the extension tube shown in (B) is removed, the lens being used mounted as shown in (C). It is then just such a lens as is most suitable for ordinary work, of 6-in. focus and an aperture of $f/7.7$ possessing no peculiar properties. For landscape work or portraiture where a focus of about 11-in. is required, remove the front lens of the system and use the back combination mounted as shown in (D). If the extension piece is screwed in behind the shutter so as to remove the back combination further away from the Iris, the definition at full aperture will be improved. This is again in no way remarkable, it is simply a specially corrected single lens of good quality suitable for the work mentioned. If still larger pictures are required of the subject under consideration, use the lens complete, being careful to replace the extension piece behind the front combination of the system. Set the edge of the focussing mount (A) to the figure 3 and sharply focus; this will give an image 3 times the size of that produced by the lens (C) alone, or $1\frac{1}{2}$ that produced by the single combination only.

In a similar way if (A) is set to 4, 5, and 6 respectively, pictures 4, 5, and 6 times as big as the original can be produced. The greater the magnification the larger will be the plate covered.

A copy of practical notes on Telephotography is supplied free with each lens.

BECK MULTIFLEX LANTERN OBJECTIVE.

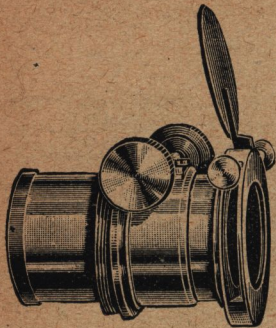


Fig 1

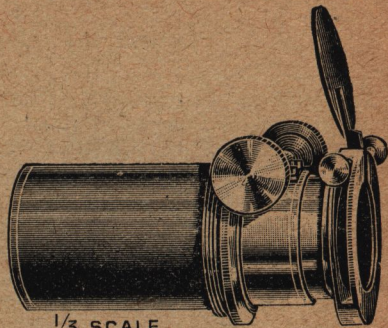


Fig 2.

Hitherto, the usual plan for the lanternist who might wish to project different sized pictures at various distances from the screen, has been for him to possess a number of objectives of some of the following foci: 6, 8, 9, 10, 12, 14, 16 inches, and to make a selection of one as occasion demands. Now all this can be achieved with one lens, and the lantern itself need not be moved should it be desired that pictures on the screen be required even alternately very large and extremely small.

The advent of the Beck Multiflex Lantern Objective gives quite a new power to those using the optical lantern. By using this new Objective without its supplementary lens attachment (as Fig. 1), we have an excellent objective of six inches focus, whereas by screwing on the attachment and making it as (Fig. 2), and slightly pulling out the draw-tube of the lantern front, the objective, when focussed, is equivalent to a lens of eight inches focus. In like manner, by still further pulling out the draw-tube and again focussing, one is enabled to obtain an objective of any desired focus from the last-mentioned up to twenty inches. The definition given on the screen is very crisp, with a flat field, no matter what the size the picture may be when projected.

Price of the Beck Multiflex Lantern Objective £5 5 0

The possession of one such objective is equivalent to the possession of a battery of lenses ranging in focus from six to twenty inches; it is therefore apparent that the introduction of this objective will revolutionize lantern work, for it is only necessary to take the one objective to be able to fulfil any or all conditions usually imposed upon the lanternist.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

A NEW DIAPHRAGM SHUTTER.*

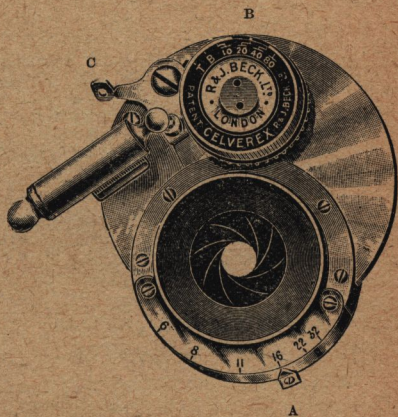
The "Cilverex" Shutter (Patent).

This is a photographic shutter which gives accurate speeds. It has four instantaneous speeds of 1/10th, 1/20th, 1/40th and 1/80th of a second. Each shutter is supplied with a test card showing the exact speeds, and it will be found that they only vary from the engraved speeds by a small amount. The principle upon which the "Cilverex" shutter has been designed is such that the speeds must of necessity be relatively accurate, because there is no brake or variable tension, but simply a driving spring, which will retain its power indefinitely. The shutter plates, which always revolve at one and the same speed, encounter no friction beyond what is necessary, in the light centre on which they rotate. The difference in speed is obtained by increasing or decreasing the size of the opening which passes over the lens aperture, so that at one time this aperture is about four times that of the lens diaphragm and at another only one half. Thus a perfect adjustment of the light which can enter the camera, and of the duration of exposure, can be made.

Anyone can, with care, hold a hand camera steady while an exposure of 1/10th of a second is made, and thus four exposures, each twice as quick as the last, are provided, all of which can be made with safety without fear of shaking the camera. These four exposures will be found to cover the entire ground of ordinary instantaneous photography.

The "Cilverex" shutter also gives so-called "Bulb" and "Time" exposures. When set for "Bulb" exposures the shutter remains open as long as the bulb is squeezed and closes when it is released, and by this means exposures from 1/5th of a second to two seconds can be made quite sufficiently accurately by estimation. When set for "Time," squeezing the bulb once opens the lens and squeezing it again closes the lens.

The shutter is provided with an Iris diaphragm which is worked by means of a pointer (A), the shutter is wound by revolving the milled head (B) about half a turn as far as it will go. This does not uncover the lens during the process of winding. The shutter is set off either by pressing the trigger (C) or by squeezing the pneumatic ball. The shutter is set to the various speeds or for Time or Bulb exposures by lifting the winding milled head (B) slightly and revolving it one way or the other until the speed required is opposite the indicator.



The "Cilverex" Shutter (*continued*).

The "Cilverex" shutter is exceptionally small and thin and can be fitted to small folding cameras as well as those of the larger model. The working parts are all simple and there is no delicate mechanism which is liable to get out of order. All makes of lenses can be fitted, and many lenses fitted into diaphragm shutters will screw straight into the "Cilverex" shutter without alteration.

The "Cilverex" Shutter is made in Three Sizes:—

No. 1, $\frac{7}{10}$ inch aperture, **£1 15s. Od.** No. 2, $\frac{8\frac{1}{2}}{10}$ inch aperture, **£1 17s. 6d.**
 No. 3, $1\frac{1}{10}$ inch aperture, **£2 5s. Od.**

OPINIONS OF THE PRESS.

"*Morning Post*," May 5th, 1906.

"In many cases a shutter marked $\frac{1}{100}$, $\frac{1}{50}$, and $\frac{1}{25}$, practically has but one speed, which may be about $\frac{1}{35}$. An attempt to improve upon this hardly satisfactory state of things has been recently made by Messrs. Beck and Co., who have introduced a new design of shutter, to which the name of 'Cilverex' has been given. The maximum errors as regards the highest speed of a score of these shutters proved on testing them to be less than ten per cent."

"*Amateur Photographer*," May 22nd, 1906.

"We have had the opportunity of seeing and trying the new shutter, the 'Cilverex.' In the first place it gives the speeds most useful for hand camera work, and in the second place the user can rely on it that the speed which is marked on the indicator is accurate, and that if it is set at $\frac{1}{20}$, the exposure made will have been $\frac{1}{20}$ second. The new shutter wisely begins its speed indicator at $\frac{1}{10}$, estimated to be the slowest time in which the camera can be held steadily in the hand; then the remaining speeds are $\frac{1}{20}$, $\frac{1}{40}$, $\frac{1}{80}$, and, except for special purposes, such as races, etc., no faster would be required for the ordinary worker. The second point which Messrs. Beck emphasize with regard to this shutter is that what its speeds profess to be they are. Moreover, Messrs. Beck test each shutter before it is sent out, and send a card with it, giving the slight variations, if any, that are discovered, from the engraved exposures, so that the user will still know EXACTLY what speeds he is giving. It will be no small matter to have a shutter which really gives always the speed which it professes to give."

"*British Journal of Photography*," May 11th, 1906.

"By this device Messrs. Beck provide the user with speeds of $\frac{1}{10}$, $\frac{1}{20}$, $\frac{1}{40}$, $\frac{1}{80}$, in addition to 'time' and 'bulb' exposures, a sufficient range, it will be admitted, for all ordinary hand camera work. But the most important feature of the shutter is the accuracy of the speeds which the makers guarantee. Each instrument is tested before it is sent out, and a card of speeds enclosed showing the difference usually negligible from the engraved speeds. In other respects the 'Cilverex' possesses desirable features. It is thin, light, and therefore can be fitted between the components of a double lens, even with those supplied with the smaller folding cameras. The working parts appear to be reduced to such simple proportions that the shutter may be expected to preserve its accuracy of working throughout a protracted period of constant use."

We supply the following well-known Cameras fitted with the new "CELVEX" Shutter at prices given.

			£	s.	d.
Zambex , No. 2	...	Beck Symmetrical Lens	...	1/4-plate	4 15 0
"	No. 3	Beck Steinheil Unofocal Lens	...	"	8 0 0
"	No. 12d	Beck Symmetrical Lens	...	"	5 0 0
"	No. 12f	Beck Steinheil Unofocal Lens	...	"	7 10 0
"	No. 16	Beck Double Aplanat Lenses	...	"	11 5 0
"	No. 16b	Beck Steinheil Unofocal Lenses	...	"	15 15 0
Roll Film Cornex ,		Beck Symmetrical Lens	...	"	4 7 6
"	"	Beck Steinheil Unofocal Lens	...	"	7 2 6
"	"	Beck Steinheil Orthostigmat Lens	...	"	9 12 6
Dai Cornex D	...	Beck Symmetrical Lens	...	"	4 19 0
"	F	Beck Steinheil Unofocal Lens	...	"	7 15 0
"	G	Beck Steinheil Orthostigmat Lens	...	"	10 0 0
Cornex ,	D	Beck Symmetrical Lens	...	"	3 18 0
"	F	Beck Steinheil Unofocal Lens	...	"	7 5 0
"	G	Beck Steinheil Orthostigmat Lens	...	"	9 5 0
"	H	Beck Steinheil Unofocal F/4.5 Lens	...	"	10 15 0
"	I	Beck Double Aplanat Lenses	...	"	12 6 0
"	Ib	Beck Steinheil Unofocal Lenses	...	"	17 3 6
Telephoto Cornex I		Beck Steinheil Unofocal F/4.5 Lens	...	"	21 15 0
"	Ia	Beck Steinheil Orthostigmat Lens	...	"	18 17 6
"	II	Beck Steinheil Unofocal F/6 Lens	...	"	17 7 6
"	III	Beck Double Speed R.R. Lens	...	"	13 9 6
Ensign , Model V	...	Beck Symmetrical Lens	...	"	4 13 6
"	"	Beck Steinheil Unofocal Lens	...	"	7 3 6
"	Model D	Beck Symmetrical Lens	...	5 x 4	6 8 6
"	"	Beck Steinheil Unofocal Lens	...	5 x 4	9 6 0
Carbine , No. 4	...	Beck Symmetrical Lens	...	1/2-plate	4 13 6
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	7 3 6
"	No. 5	Beck Symmetrical Lens	...	"	5 5 0
"	"	Beck Symmetrical Lens	...	1/2-plate	6 8 6
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	7 15 0
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	10 11 0
"	Postcard	Beck Symmetrical Lens	...	5 1/2 x 3 1/2	5 16 0
"	"	Beck Steinheil Unofocal Lens	...	5 1/2 x 3 1/2	9 18 6
Day Spool , No 1	...	Beck Symmetrical Lens	...	1/2-plate	4 17 6
"	"	Beck Symmetrical Lens	...	"	5 17 6
"	"	Beck Symmetrical Lens	...	5 1/2 x 3 1/2	6 0 0
"	"	Beck Symmetrical Lens	...	7 x 5	6 15 0
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	7 7 6
"	"	Beck Steinheil Unofocal Lens	...	5 x 4	8 15 0
"	"	Beck Steinheil Unofocal Lens	...	5 1/2 x 3 1/2	10 5 0
"	"	Beck Steinheil Unofocal Lens	...	7 x 5	11 0 0
T.E.B. , No. 6	...	Beck Symmetrical Lens	...	1/2-plate	5 1 6
"	"	Beck Steinheil Unofocal Lens	...	"	7 11 6
"	No. 8	Beck Symmetrical Lens	...	5 1/2 x 3 1/2	5 10 0
Maxim , No. 5 Box	...	Beck Symmetrical Lens	...	1/2-plate	4 4 0
Tudor , No. 4 or 5	...	Beck Symmetrical Lens	...	"	4 13 6
"	"	Beck Steinheil Unofocal Lens	...	"	7 3 6
"	No. 4a	Beck Symmetrical Lens	...	5 1/2 x 3 1/2	5 1 0
"	"	Beck Steinheil Unofocal Lens	...	5 1/2 x 3 1/2	8 18 6
Cameo , No. 5	...	Beck Symmetrical Lens	...	1/2-plate	4 1 0
"	"	Beck Symmetrical Lens	...	5 x 4	4 18 6
"	"	Beck Symmetrical Lens	...	1/2-plate	5 8 6
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	6 11 0
"	"	Beck Steinheil Unofocal Lens	...	5 x 4	7 16 0
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	9 11 0
"	No. 6	Beck Symmetrical Lens	...	1/2-plate	4 13 6
"	"	Beck Steinheil Unofocal Lens	...	"	7 3 6
Minimum Cameo , No 2	...	Beck Symmetrical Lens	...	"	5 16 0
"	"	Beck Symmetrical Lens	...	1/2-plate	6 18 6
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	8 6 0
"	"	Beck Steinheil Unofocal Lens	...	1/2-plate	11 1 0
Xit ,	...	Beck Symmetrical Lens	...	1/2-plate	4 8 0
"	"	Beck Steinheil Unofocal Lens	...	"	8 0 6
Aluminium Xit ,	...	Beck Symmetrical Lens	...	"	6 2 6

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

We supply the following well-known Cameras fitted with the New "CELVEX" Shutter at prices given. £ s. d.

Aluminium Xit	...	Beck Symmetrical Lens	...	5×4	6 19 6		
"	"	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	7 16 6		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	8 2 0		
"	"	Beck Steinheil Unofocal Lens	...	5×4	9 7 0		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	11 6 0		
T.E.B. Excelsior,	No. 3	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	4 10 0		
"	No. 4	Beck Symmetrical Lens	...	"	5 3 6		
Challenge "C,"		Beck Symmetrical Lens	...	"	5 10 0		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	8 0 0		
"	"	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	6 5 0		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	8 15 0		
"	"	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	6 15 0		
"	"	Beck Symmetrical Lens	...	5×4	7 12 6		
"	"	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	8 15 0		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	9 0 0		
"	"	Beck Steinheil Unofocal Lens	...	5×4	10 9 6		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	12 17 6		
"	"	Kram Convertible 3-foci Lens	...	$\frac{1}{2}$ -plate	8 15 0		
"	"	Kram Convertible 3-foci Lens	...	5×4	10 7 6		
"	"	Kram Convertible 3-foci Lens	...	$\frac{1}{2}$ -plate	12 10 0		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	10 15 0		
"	"	Beck Steinheil Unofocal Lens	...	5×4	12 10 0		
"	"	Beck Steinheil Unofocal Lens	...	$\frac{1}{2}$ -plate	16 0 0		
Midg	No. 3	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	4 1 0		
"	No. 4a	Beck Steinheil Unofocal Lens	...	"	7 1 0		
"	No. 4b	Beck Steinheil Unofocal Lens	...	"	7 1 0		
"	No. 5	Beck Symmetrical Lens	...	"	5 11 0		
Saxon	"	Beck Steinheil Unofocal Lens	...	"	8 1 0		
"	"	Beck Symmetrical Lens	...	"	4 4 0		
"	"	Beck Steinheil Unofocal Lens	...	"	7 4 0		
Holborn Ilex	No. 5	Beck Symmetrical Lens	...	"	5 3 0		
"	"	Beck Steinheil Unofocal Lens	...	"	7 13 0		
"	No. 6c	Beck Steinheil Unofocal Lens	...	"	8 18 6		
"	"	Beck Steinheil Unofocal Lens	...	5×4	10 12 6		
"	No. 5pc	Beck Symmetrical Lens	...	5 $\frac{1}{2}$ ×3 $\frac{1}{2}$	5 13 6		
Klito	No. 6	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	4 4 0		
T.E.B. Empire	No. 4	Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	4 10 0		
Aptus New Century		Beck Symmetrical Lens	...	$\frac{1}{2}$ -plate	4 11 0		
Sanderson—				$\frac{1}{2}$ -plate.		5×4.	$\frac{1}{2}$ -plate.
Regular, Beck Double Aplanat Lens	...	...	...	7 13 6	8 13 6		£ s. d.
De Luxe, Beck Double Aplanat Lens	...	...	...	11 3 6	12 13 6		£ s. d.
Regular, Beck Steinheil Unofocal Lens	...	...	...	10 3 6	11 16 0		£ s. d.
De Luxe, Beck Steinheil Unofocal Lens	...	...	...	13 13 6	15 13 6		£ s. d.
Regular, Beck Steinheil Orthostigmat Lens	...	...	...	11 18 6	14 1 0		£ s. d.
De Luxe, Beck Steinheil Orthostigmat Lens	...	...	...	15 6 0	17 18 6		£ s. d.
Regular, Beck Steinheil Convertible Orthostigmat Lens	...	...	...	12 18 6	15 1 0		£ s. d.
De Luxe, Beck Steinheil Convertible Orthostigmat Lens	...	...	...	16 6 0	18 18 6		£ s. d.
Junior Sanderson,	Beck Symmetrical Lens	...	...	6 13 6	7 8 6		£ s. d.
Tropical Sanderson,	Beck Double Aplanat Lens	...	...	8 18 6	10 3 6		£ s. d.
"	Beck Steinheil Unofocal Lens...	...	...	11 8 6	13 6 0		£ s. d.
STAND CAMERAS.				$\frac{1}{2}$ -plate.		$\frac{1}{2}$ -plate.	
Triple Extension Set	...	Beck Symmetrical Lens	...	4 7 6	4 15 6		
"	"	Beck Convertible Double Aplanat Lens	...	5 7 6	7 0 0		
"	"	Beck Steinheil Unofocal Lens	...	6 12 6	9 0 0		
"	"	Beck Steinheil Convertible Orthostigmat Lens	...	9 17 6	11 10 0		
Thornton-Pickard Royal Ruby,	Beck Symmetrical Lens	...	...	13 4 0	14 13 0		
Thornton-Pickard Amber No. 2,	Beck Symmetrical Lens	...	...	7 16 0	9 6 0		
Thornton-Pickard Imperial	Beck Symmetrical Lens	...	...	4 14 0	5 16 0		
Thornton-Pickard Imperial, Brass Bound—							
	Beck Symmetrical Lens...	...	...	6 4 0	6 16 3		
Multiflex Set,	Triple Extension Camera	...	...	6 7 6	7 12 6		

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

ZAMBEX CAMERAS.*

The Zambex System.

New Form Envelope.

STIFF FLAT FILMS.

This is a Daylight Loading System ;

that is,

NO DARK-ROOM IS REQUIRED.

It uses stiff flat films—as stiff as a post-card.

Each Film is held in a strip of black paper.

Twelve of these are contained in an opaque envelope, with their ends protruding and to change a film after exposure, all that is required is to pull one of the protruding tags.

The Zambex Skeleton is the name for this envelope with its 12 films enclosed, and to take photographs, the Zambex Skeleton is simply slid into the camera and allowed to remain till the 12 films have been exposed, after which it can be removed and another one inserted.

Everything can be done in full daylight.

The Zambex Skeleton can be removed for direct focussing, if desired, after each exposure.

A single film can be removed for developing at any time, if desired.

The Price of Zambex Skeletons, loaded with 12 of the best and quickest films is only **2/9.**

Zambex Skeletons are not spoilt when used one ; the photographer can reload them himself.

No Special Films are required. The photographer can load his own favourite films into the Zambex Skeleton if he so desires.

The complete loaded Zambex Skeleton is less than half an inch thick.

There is no mechanism.

It is absolutely Light-Tight.

Every Zambex is supplied with a handbook of instructions so complete that those who have no knowledge of Photography need have no further assistance. This handbook is in the form of a handsome pocketbook, with a notebook and 2 pockets for photographs.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

ZAMBEX CAMERAS.

The Zambex System.



Fig. 1.
Zambex Skeleton
back view.



Fig. 2.
Zambex Skeleton
front view.

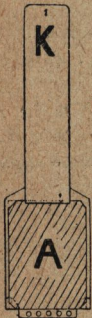


Fig. 3.
Zambex Sheath
carrying stiff
flat film.

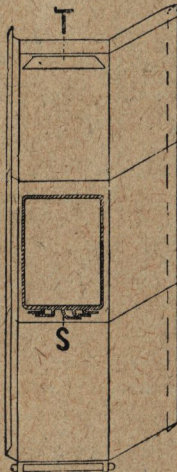


Fig. 4.

Zambex Skeleton, envelope portion, opened
ready for loading with Zambex Sheaths.

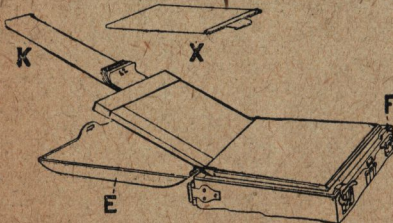


Fig. 5.
Zambex Skeleton in a Zambex Camera.

Zambex Cameras, which are described in detail later, are all made with a folding back cover E, Fig. 5, and with grooves into which a Zambex Skeleton, Fig. 2, is slid against a velvet face on the camera. A folding flap F, Fig. 5, locks the Skeleton into position and the Zambex is loaded.

The Zambex Skeleton consists of a tough folded paper envelope, Fig. 4, carrying a dozen films held by their corners in paper sheaths, Fig. 3. The loaded envelope is double the length of the film and in the front of this envelope at the lower end is an aperture through which the photographs are taken; this is closed by a thin metal slide X, Fig. 5, which is pulled out as soon as the Skeleton is slid into the camera. By replacing this slide the Skeleton can be safely removed from the camera at any time, either to insert another Skeleton or to focus on to a ground glass. The Skeleton is folded in half under all circumstances except for changing the film, when it is unfolded.

To Change the Film. The numbered tags K, Fig. 5, are pulled up one by one which draws the films from the lower into the upper half of the envelope. As fast as the lower end of the envelope is emptied, the upper half is filled and thus when the back E, Fig. 5, of the camera is closed a constant pressure is always exerted to press the films up into the correct register. When the films are all transferred to the upper half of the envelope, the metal slide

ZAMBEX CAMERAS.

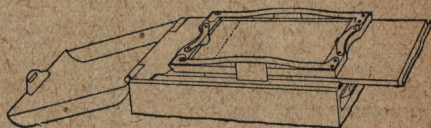
The Zambex System (continued).

X, Fig. 5, is inserted in front of the Skeleton, which is removed from the camera and replaced by a fresh one. All the sheaths, Fig. 3, have small holes at their lower ends and when the Skeleton is loaded, one of the metal strips S, Fig. 4, of the envelope is bent up for the purpose and passed through one of the holes in each sheath, after which it is bent down, thus securing all the films in the correct position and preventing more than one pulling-up at a time. In order that the sheaths can be used over again with fresh films by those who care to reload them, a number of such holes are provided.

The Simplicity of the Zambex will commend itself to all—there is absolutely no mechanism. The process consists of pulling up a paper sheath containing the film. It is difficult to conceive of any less complicated contrivance, and it is the simplest that invariably proves to be the best.

A Ground Glass can be slipped into the same grooves for direct focussing.

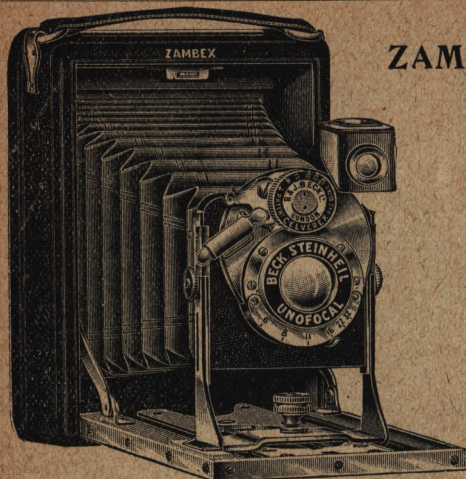
The Zambex Dark Slide Attachment and Focussing Screen.



Notwithstanding the simplicity of the Zambex Changing system and the many advantages possessed by stiff flat films, it is sometimes convenient to use plates in the ordinary dark slide. This is often the case when the subject requires a time exposure, preceded by careful focussing, as, for instance, in taking portraits at home where the proximity of the dark-room allows this method to be followed with some advantage.

Zambex Cameras of every type are quickly converted to this use by the employment of the Zambex Dark Slide Attachment, a piece of apparatus that slides into place in the grooves provided for the film envelopes. The ground-glass screen which forms a portion of the attachment is then ready in position, and the image may be focussed upon it without any further adjustment being necessary. The plate-holder is inserted by sliding it beneath the screen which yields under pressure and gives place to it, so that the sensitive film of the plate occupies the position formerly held by the ground-glass. The sheath can be drawn and replaced in the ordinary way, and when the plate has been exposed and the dark slide removed the focussing screen automatically resumes its correct position.

ZAMBEX CAMERAS.*



The .

No. 3 Folding Zambex.

Quarter-plate size,

4½ in. × 3½ in.

Price, with the finest Modern
Anastigmat Lens, f/6.

£8 0 0.

Specification.

Camera Body. Polished and framed mahogany, metal bound tailboard. Covered in fine grain solid leather, Nickel fittings. Rising front with clamps. Focussing front with clamp and infinity catch.

Lens. Beck-Steinheil Unofocal, f/6, 4½-in. focus. The finest modern Anastigmat provided with Iris diaphragm.

Shutter. Celverex or Bausch and Lomb Unicum.

Focussing. Snap catch for infinity focus, and "Cornex" Patent Index.

Finder. Rotating brilliant stationary finder, specially strongly built.

Size. 5¾ in. × 4½ in. × 2½ in. **Prices—**

No. 3 Folding Zambex, ¼-plate size with Beck-Steinheil Unofocal (Anastigmat) Lens, f/6 and complete handbook of instructions, Tripod Screw, and Celverex Shutter	£8 0 0
Ditto, ditto, with Bausch and Lomb Unicum Shutter	7 7 0
Wide-Angle Lens, 3-in. focus, which can be used in place of the ordinary lens	1 7 6
Telephoto Attachment, giving magnifying power of 3 to 4	1 15 0
Focussing Screen, and 3 single Plate-holders, in case	0 12 0
Single Plate-holders for glass plates each	0 1 6
Beck-Harris Spectrum Filter	0 7 6
Leather Sling Case, lined	5/6 and 0 7 6
Aluminium Tripod, best quality	1 8 6
Light Ash Tripod	0 6 3
12 Zambex Films, packed in Skeletons, ready for use. Double Instantaneous. Stiff celluloid	0 2 9
Zambex Film Skeletons, empty	0 1 0
Zambex Plate Skeletons, empty	0 1 0
Zambex Exposure Meter	0 1 6
Exposure Note Book, with special notes on Telephotography	0 1 0

For different lenses see:—

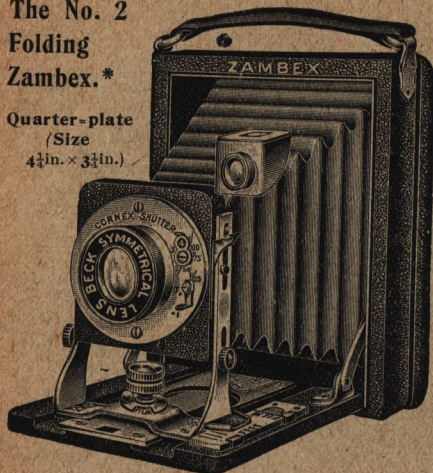
"Photographic Lenses: a Simple Treatise," 1/- Post-free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

ZAMBEX CAMERAS.*

The No. 2
Folding
Zambex.*

Quarter-plate
(Size
4½ in. × 3½ in.)



This Camera is exactly the same as the Folding Model, No 3, with the following exceptions; the levels are not fitted to the tailboard, the tailboard is not metal edged, the shutter is the Gem or Celverex, and the lenses are either the Beck Symmetrical, Double Aplanat (Rectilinear) or Beck-Steinheil Unofocal with a somewhat smaller aperture, *f*/6. The workmanship is equal in every respect, but the external finish is not carried to quite the same pitch of perfection, although it requires careful examination to detect the difference.

SPECIFICATION.

Camera Body — Framed Mahogany, covered solid leather, Nickel-fittings, Rising Front with clamps, Focussing front with clamp and infinity catch.

Lens—Beck Symmetrical 5¼ in. focus, *f*/8, Beck double Aplanat *f*/7.7, 5½ in. focus, or Beck-Steinheil Unofocal *f*/6, 4½ ins.

Shutter—The Gem or Celverex Shutter

Focussing—Snap Catch for infinity focus and "Cornex" patent index.

Finder—Rotating Brilliant Stationary Finder, specially strongly built.
Size—5¾ in. × 4¼ in. × 2½ in.

PRICES.

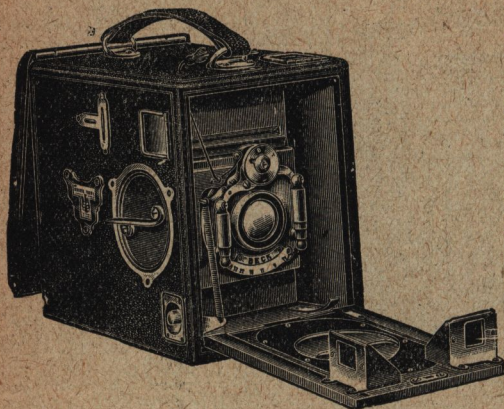
No. 2 Folding Zambex, with complete handbook of instructions and tripod screw, Beck Symmetrical Lens <i>f</i> /8. Gem Shutter ..	£3 12 6
Do., do., fitted with Celverex Shutter in place of Gem Shutter ..	4 15 0
No. 2a Folding Zambex, do. do. Beck Double Aplanat Lens, <i>f</i> /7.7. Gem Shutter ..	4 10 0
Do., do., fitted with Celverex Shutter in place of Gem Shutter ..	5 12 6
No. 2b Folding Zambex, do. do. Beck-Steinheil Unofocal Lens, <i>f</i> /6.3. Gem Shutter ..	6 6 0
Do., do., fitted with Celverex Shutter in place of Gem Shutter ..	7 5 0
Wide-Angle Lens, which can be used in place of ordinary lens ..	1 7 6
Focussing Screen with three single Plate-holders in case ..	0 12 0
Adapter for Plate-holders and Focussing Screen combined ..	0 5 6
Single Plate-holders for glass plates ..	each 0 1 6
Beck-Harris Spectrum Filter ..	0 7 6
Leather Sling Case ..	5/6 and 0 7 6
Canvas Sling Case ..	4/0 and 0 5 6
Aluminium Tripod ..	best quality 1 8 6
Light Ash Tripod ..	0 6 3
12 Zambex Films packed in Skeletons ready for use, stiff celluloid ..	0 2 9
Zambex Film Skeletons, empty ..	0 1 0
Zambex Plate Skeletons, empty ..	0 1 0
Zambex Exposure Meter ..	0 1 6
Exposure Note Book ..	0 1 0

For different lenses see:—"Photographic Lenses: a Simple Treatise." Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

ZAMBEX CAMERAS.

The No. 12 Box Model Zambex.*



Focussing Model.

Quarter-plate Size ($4\frac{1}{4} \times 3\frac{1}{2}$ in.)
Daylight Loading.

A well-made and neatly finished Box Model Camera fitted with the Zambex back. It has a particularly good focussing movement which is worked by a handle on the right-hand side of the case, and by means of this the lens board, supported on a rigid slide, is moved backwards and forwards, fitted with a Beck Symmetrical, F/8, or Beck-Steinheil Unofocal Lens, F/6. Cornex Index, Tripod and Screw for tripod work.

SPECIFICATION.

Camera Body—Strong wooden box, covered in fine grained leather, strong carrying handle, Tripod socket and screw.

Lens—Beck Symmetrical F/8, or Beck-Steinheil Unofocal F/6.

Finders—2 Cornex Brilliant Stationary.

Levels—Two T-shaped, for horizontal and upright pictures.

Shutter—Celerex or Bausch & Lomb Unicum.

Focussing—Machine-cut silent spiral cam, moving the lens board which is supported on a rigid slide.

Scales—The Cornex patent depth of focus Index and Scale; a rapid and certain method of focussing.

Size— $7 \times 6\frac{1}{4} \times 4\frac{1}{4}$ in. **Weight**— $2\frac{1}{2}$ lbs.

PRICES.

No. 12d Box Model Focussing Zambex , fitted with Beck Symmetrical Lens, complete with handbook, with Celerex Shutter	£5	0	0
Do., do., with Bausch & Lomb Unicum Shutter	4	4	0
No. 12f Box Model Focussing Zambex , fitted with Beck-Steinheil Unofocal Lens, complete with handbook, with Celerex Shutter	7	10	0
Do. do., with Bausch & Lomb Unicum Shutter	6	15	0
Focussing Screen and 3 single Plate-holders in case	0	12	0
Single Plate-holders for glass plates each	0	1	6
Leather Sling Case	7/6	and	0 10 6
Canvas Sling Case	4/0	and	0 5 6
Aluminium Tripod	12/6	and	1 8 6
Light Ash Tripod	0	6	3
12 Zambex Films packed in Skeletons ready for use	0	2	9
Zambex Film Skeleton , empty	0	1	0
Zambex Plate Skeleton , empty	0	1	0
Zambex Exposure Meter	0	1	6
Exposure Note Book	0	1	0

For explanation of the qualities of different lenses, see:—

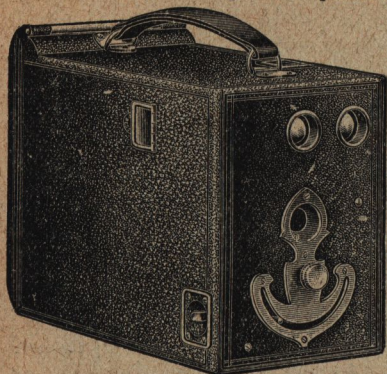
“Photographic Lenses: a Simple Treatise,” 1/- Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

ZAMBEX CAMERAS.

The No. 11 Box Model Zambex.*

Quarter-plate size ($4\frac{1}{4} \times 3\frac{1}{4}$ in.)



This is a well-made Box Model Camera of a small size with the Zambex back. It has the advantage over the folding type that it is always ready for use. The fixed focus lens gives all objects sharp from distance to twenty feet. It is the simplest form of camera to use owing to the fact that there are no adjustments, and by means of supplementary lenses, called magnifiers, objects as near as 3 feet may be photographed.

SPECIFICATION.

Camera Body—Strong wooden box covered with imitation leather. Strong carrying handle. Tripod sockets and screw. Sound made throughout.

Lens—Single Achromatic $f/11$ with diaphragms. Focus $5\frac{1}{2}$ inch. Specially designed to give no appreciable distortion.

Shutter—Frena type giving correct exposures, $1/5$, $1/10$, $1/20$, $1/40$, $1/80$ second and time exposures.

Focussing—Fixed focus, distance to 20 feet. Near objects up to 3 feet may be focussed by Zambex magnifiers.

Finders—2 Brilliant Stationary, well-sunk to avoid reflections.

Size— $5\frac{3}{4} \times 4\frac{1}{4} \times 8$ in.

PRICE.

No. 11 Box Model Zambex, with Complete Handbook of Instructions	2	2	0
Set of 3 Zambex magnifiers in morocco case	0	7	6
Focussing Screen and 3 single plate-holders in case	0	12	0
Single Plate-holders for glass plates	0	1	6
Leather Sling Case	7/6	and	0 10 6
Canvas Sling Case	4/0	and	0 5 6
Aluminium Tripod	0	12	6
Light Ash Tripod	0	6	3
12 Zambex Films, packed in Skeleton, ready for use, stiff Celluloid	0	2	9
Zambex Film Skeletons, empty	0	1	0
Zambex Plate Skeletons, empty	0	1	0
Zambex Exposure Meter	0	1	6
Exposure Note Book	0	1	0

For explanation of the qualities of different lenses see:—

“Photographic Lenses: a Simple Treatise,” 1/- Post-free 1/3.

R. & J. BECK, Ltd, 68 Cornhill, London, E.C.

CORNEX INDEX

is fitted to Zambex, Cornex, and Dai Cornex Cameras. It is a scale and pointer that renders a focussing hand camera as reliable as a fixed focus camera.

The Difficulties it Overcomes.

There is weight in the argument put forward by the users of fixed focus cameras—that a greater percentage of their pictures will be sharply focussed than is the case with users of "focussing cameras," where the focussing is judged of by a scale and pointer. Thus many prefer the more certain, if less adaptable, fixed focus camera.

Of course, the absence of mind which forgets to set the focus at all before snapping off a picture can only be corrected by the photographer himself, and the "**Cornex Patent Index**" does not claim to rival the fixed focus form of camera for the pure "button presser," but even with the most careful, the fixed focus camera often proves more reliable for the following reasons:—

1. *The difficulty of judging the distance of the object.*
2. *The difficulty of setting the pointer exactly to the correct distance on the scale, particularly if that distance is not one of those actually marked.*
3. *The fact that a picture generally requires that more than one distance shall be sharp. Except in figure studies it is seldom that everything of importance is at the same distance from the camera.*
4. *A lack of accurate knowledge of what range will be rendered sharply at any particular aperture.*
5. *Where there is insufficient light on the subject, such as is the case with interiors, the Cornex Index is indispensable.*

The above points are grave objections to the use of a focussing camera.

In Fig. 1 the arrow (B) and the cross lines take the place of the usual pointer. The arrow B, if set to the scale, indicates the "sharpest plane" (in Fig. 1 at about 40 ft.). The cross lines at right angles to this arrow indicate the distance sharp on both sides of this plane for the lens apertures f/8, f/11, f/16, f/22.

For larger apertures than f/8 such as f/5.8, f/4, etc., there is but little depth of focus.

Turning to Fig. 2 it will be noticed that the central arrow lies between 30 and 15 ft., consequently only objects at a distance of some 20 ft. could be sharply depicted if the aperture of the lens in use was larger than f/8. Now, suppose the lens is stopped down to f/8, objects anywhere between 15 and 30 ft. will be sharp; continuing this further, stop the lens to f/16,

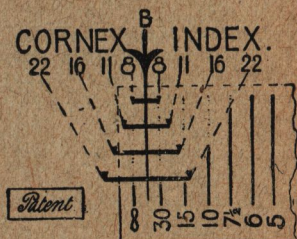


FIG 1. (Registered).

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and objects from 12 ft. to about 50 ft. are sharp; while if F/22 is used one could be certain of having everything sharp from infinity to 10 ft., because the cross line giving the depth of focus (as explained above) for F/22, includes within its extremities, both these distances.

The difficulty of judging the distance of the object is overcome by this scale, because it is an easy matter to judge that the object is, say, between 12 ft. and 40 ft. away (the depth of focus at F/11, Fig. 2), but very hard to judge if it was exactly 30 ft. away, as would have to be done with an ordinary scale.

The second difficulty is overcome in a similar manner, Supposing F/11 is in use with an ordinary camera, the pointer has to be put to a line, a difficult matter to do accurately if the pointer is not in actual contact with the scale; while with the "**Cornex Patent Index**" the horizontal line, indicating depth of focus at F/11, is the pointer, and the photograph will be sharp if any portion of this cuts the line on the lower scale, representing the distance of the object being photographed.

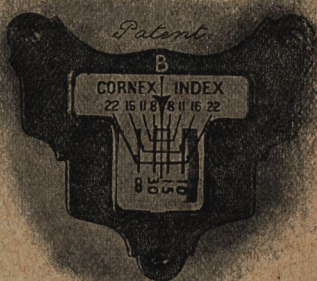


Fig. 2.

At first sight, the photographer might think the index difficult to use. This is not so, it can be used as simply as an ordinary scale by simply setting the arrow (B) to the required distance, and neglecting the other lines and figures:—the following is the simplest means of using the scale to its full advantage. In hand-camera work there are two classes of views—first, those open ones, where everything is a long way off; and secondly, those that contain objects of interest near to the camera.

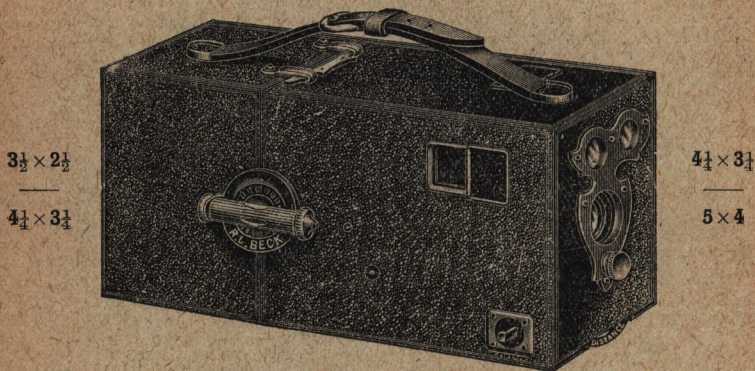
In the first case, set the left-hand end of the cross line for the aperture in use, beyond the most distant object that must be sharp (usually just beyond the infinity mark). In Fig. 2 the line for aperture F/22 overlaps the infinity line to a slight extent.

In the second case, set the right hand of the line just over the distance of the nearest object that must be sharp. Take a definite example: Suppose there is a street scene, with a group of carts as the chief object of interest, these must be sharp, the rest does not matter, the nearest horse comes to within 15 ft. of the camera, and the most distant cart is 40 ft. away, the light is not good, and one might be tempted to use F/8, the scale must be set with the right-hand end of the F/8 line at 15 ft., and the photographer looks to see if the 40 ft. is included as well; it is not (Fig. 2) the left-hand end only reaching to 30 ft. The whole will not be quite sharp, but the F/11 line includes both 15 ft. and 40 ft. (see Fig. 2). The scale shows this at once without calculation, and if, therefore, F/11 be used all the objects of interest will be sharp.

THE FRENA*

STANDARD BOX MODEL TYPE.

8 Sizes.



THE BOX MODEL FRENAS.

These Cameras have established a reputation which is justly envied, and have done so largely through their reliability.

They all take Forty Flat Films like a Pack of Cards which are dealt out one by one—they always remain Flat.

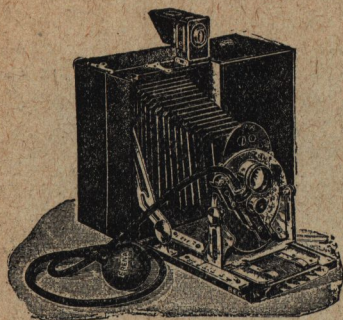
No.	Lens.	Size.	Apertures.	Shutter Speeds.	Weight.	Size.	PRICE.
00	SINGLE ACHRO.	$3\frac{1}{2} \times 2\frac{5}{8}$	f/11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	$2\frac{3}{4}$	$9\frac{1}{2} \times 5 \times 3\frac{1}{2}$	£2 18 8*
0	R.R.	$3\frac{1}{2} \times 2\frac{5}{8}$	f/8 11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	$2\frac{3}{4}$	$9\frac{1}{2} \times 5 \times 3\frac{1}{2}$	5 5 0*
0	B.S.O.	$3\frac{1}{2} \times 2\frac{5}{8}$	f/6.3 11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	$2\frac{3}{4}$	$9\frac{1}{2} \times 5 \times 3\frac{1}{2}$	8 15 0*
22	S.A.L.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	4	$11\frac{1}{2} \times 5\frac{1}{2} \times 4\frac{1}{2}$	5 8 6*
2	R.R.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/8 11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	4	$11\frac{1}{2} \times 5\frac{1}{2} \times 4\frac{1}{2}$	8 17 6*†
2	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.8 11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	4	$11\frac{1}{2} \times 5\frac{1}{2} \times 4\frac{1}{2}$	13 12 6*†
3	R.R.	5×4	f/8 11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	$5\frac{1}{2}$	$12\frac{1}{2} \times 6\frac{1}{2} \times 5\frac{1}{2}$	12 12 0*†
3	B.S.O.	5×4	f/6.3 11 16 22 64	$\frac{1}{5} \frac{1}{10} \frac{1}{20} \frac{1}{40} \frac{1}{80}$	$5\frac{1}{2}$	$12\frac{1}{2} \times 6\frac{1}{2} \times 5\frac{1}{2}$	18 2 0*†

* Complete with 40 Flat Films and a Handbook of Instructions. † Including 4 Magnifiers.

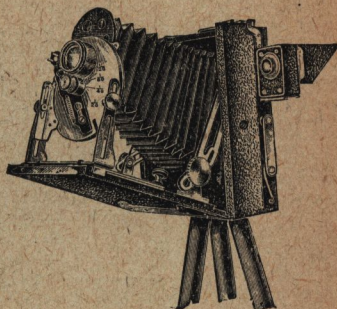
SOLID. RELIABLE. ELEGANT. SERVICEABLE. ENGLISH.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

THE FOLDING FRENAS*



No. 8 Frena.



8G.

TAKES 40 FLAT FILMS LIKE A PACK OF CARDS.

These Cameras are the outcome of the "Frena System" of film changing, and possess all the adjustments of the most complicated cameras. They take up very little room, all the adjustments of front and shutter occupy a space of 1½ deep. The shutter gives a faithful range of speeds from $\frac{1}{10}$ second to $\frac{1}{120}$. Full descriptive list on application.

No.	Lens.	Size.	Apertures.	Shutter Speeds.	Size.	Price.
8	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.3 8 11 16 22	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	£11 18 6†
8G	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.3 8 11 16 22	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$5\frac{5}{8} \times 4\frac{1}{4} \times 1\frac{5}{8}$	10 7 0
*8GG	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.3 8 11 16 22	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	14 7 6
8A	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.3 8 11 16 22	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$5\frac{5}{8} \times 4\frac{1}{4} \times 1\frac{5}{8}$	12 16 0†
8AG	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.3 8 11 16 22	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	11 4 6
*8AGG	B.S.O.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/6.3 8 11 16 22	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	15 4 6
7	R.R.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/8 11 16 22 32	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	9 8 6†
7G	R.R.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/8 11 16 22 32	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	7 17 0
6	S.V.A.	$4\frac{1}{4} \times 3\frac{1}{4}$	f/11 16 22 64	$\frac{1}{10}$ $\frac{1}{20}$ $\frac{1}{40}$ $\frac{1}{80}$ $\frac{1}{120}$	$8\frac{1}{4} \times 5\frac{5}{8} \times 3\frac{1}{4}$	5 8 6†

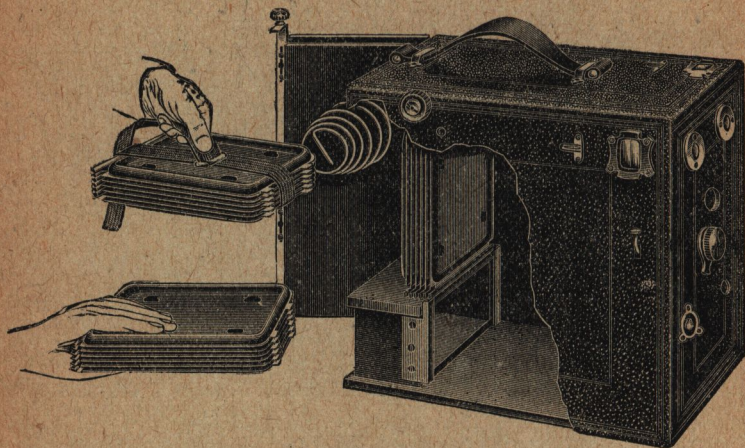
* For Telephoto Work.

† Complete with 40 Flat Films and a Handbook.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

THE DAI-CORNEX CAMERA.†

The Daylight Loading Camera for the P.P.P.



THE "DAI-CORNEX" MODEL A.

The first of this series of Magazine Daylight Loading Plate Cameras is the popular fixed focus form, with a first quality single achromatic lens. "Frena type" of shutter giving approximately *correct speeds*. We have not added to this camera additions and adjustments of doubtful use; we have endeavoured to produce an instrument absolutely reliable as to changing, finders, shutter and lens, and embodying our new Daylight system. The camera is British made throughout.

DESCRIPTION.

The one essential difference between the Dai-cornex Cameras and all the rest of genus "Box Model Magazine Hand Cameras" lies in the sheaths.

In Fig. 1, a Dai-cornex sheath is represented lying upon another as it would do either before or after changing in the camera. A portion of the top sheath has been cut away to make the drawing clearer.

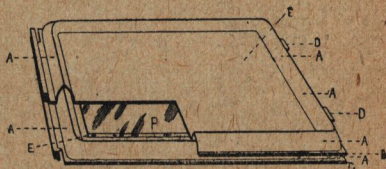


Fig. 1.

The whole sheath is slightly larger than the ordinary type and is surrounded by a V-shaped ridge or groove (a ridge if you look at the back of the sheath, a groove if you look at the front) running completely round it.

The Dai-Cornex Camera (Continued).

(A, Fig. 1). The sheath is composed of thin metal as usual (B and C, Fig. 1), and has on its face the usual projection for holding the plate (P, Fig. 1) firmly during exposure. It has also projections (D, Fig. 1) on its upper end for the sorting mechanism to work against and so change the plates. The backs (E, Fig. 1) are completely opaque, so that no light can pass through the lower sheath to fog the plate (P). Likewise no light can pass in between the two sheaths (C and B, Fig. 1) because of the ridge (A) fitting into the groove (A, Fig. 1) which runs completely round the plate, making a most efficient light trap. Every pair of sheaths makes a completely light-tight box for each plate—12 in all, and the whole pack of 13 sheaths and 12 plates can be handled with perfect impunity in the most brilliant sunlight. Extended tests have been made, and after an hour in the daylight no fog appeared on the plates so treated.

Fig. 2 will explain how the new patent Dai-cornex sheath works in the Camera. The illustration shows the first or blank sheath (O, Fig. 2) and three other sheaths safely dropped after exposure. The fourth sheath (4, Fig. 2) is shown as if it had not completed its fall. This could not happen in practice, but it shows clearly the ridge (D) passing into the other ridge (D) of sheath 4, ready to make the light-tight box. Sheath 5 with its plate (C) is dropping, and the remaining six plates are in a compact, light-tight group, waiting for exposure.

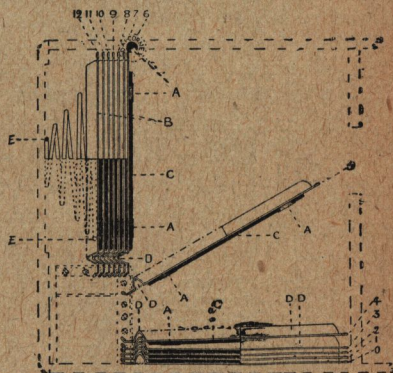


Fig. 2.

A, (Fig. 2) are the metal clips holding the plates to their respective sheaths (B) on the edges of those sheaths, showing that notwithstanding the ridges on them they lie as closely together as ordinary sheaths. (C) are the plates, (D) the ridges running round the sheaths, (E) the pressure spring.

The ingenious will see at once by reference to Fig. 2, that one or more plates can be taken out of the Camera before the whole 12 are exposed, and only one plate will be sacrificed, an advantage that cannot be offered by any roll film Camera. Thirty-nine sheaths are included with each Camera, and these can be loaded with 36 plates, put back in their boxes, and taken out on a photographic excursion. Any larger number of sheaths can be purchased, and so any number of pictures can be procured in a day's outing.

The Manipulation of the Dai-Cornex Cameras.

The essential point of the Dai-Cornex system is that anyone who is acquainted with a Magazine Box Model Plate Camera can use the Dai-cornex without any further knowledge. It does not necessitate a revolution of method, it only entails a revolution in possibilities.

To load the Dai-cornex in daylight slip one dozen or fewer plates into the Dai-cornex sheaths (39 are supplied with each Camera) and place the strap supplied round them. Place the fingers beneath the strap and the thumb above the buckle (see Fig. 3). A notch will be seen at the bottom of each sheath at either side. Slip the 13 sheaths, the dummy being outwards, in a block along the two runners in the Camera, so that these runners enter the notches. Take hold of the loop on the buckle, and holding the sheaths in place, in the Camera, pull, and the strap will undo, and can be removed. Close the back door and push down the bolt. Before the plates are ready to be exposed the dummy sheath must be dropped.

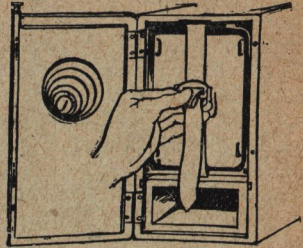


Fig. 3.

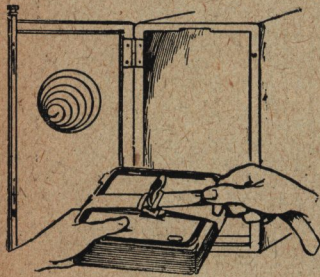


Fig. 4

Camera by raising the bolt, and pull the plate receiver towards you till the bundle of sheaths are just projecting beyond the Camera; grasp them as in Fig. 4, between the thumb and finger, and place the band round them and put in a box. Reload, still in daylight as described above, with further plates.

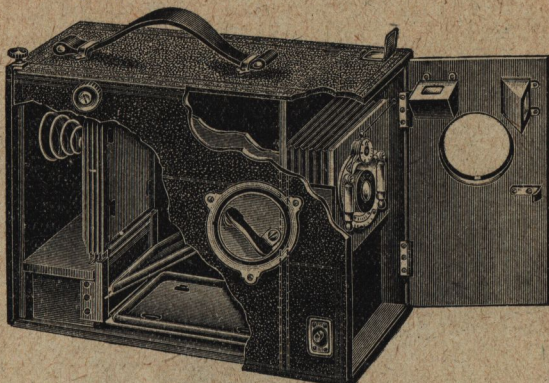
To remove a small number of exposed plates in daylight, some not yet being exposed.—It may not at all times be convenient to remove a complete dozen exposed plates from the Camera. Under such circumstances drop all the unexposed plates, as explained above, and remove from the Camera; then if six have been exposed and six not, divide the parts and put away the six exposed in a box, replacing the six unexposed in the Camera. The first will be fogged, but only the first, so that five are still good. At any time, if one plate only is sacrificed, the Camera can be opened in daylight, if some but not all the plates are exposed.

To change the plates—Pull the milled knob engraved "Dai-cornex" away from the Camera, and rotate counter clockwise one complete revolution, holding the Camera with the lens pointing slightly downwards, and a sheath or sheath and plate will drop. Repeat this after each exposure till all the plates are exposed. The indicator counts from 1 to 12.

To remove the exposed plates in daylight.—Open the back door of the

THE DAI-CORNEX CAMERA.†

The Daylight Loading Camera for the P.P.P



The "Dai-Cornex" Focussing Models, F₁, G, H.

The new Dai-cornex Cameras are made in two patterns:—

Fixed Focus Pattern. Models A, B and C.

Machined body, leatherette covered, new daylight changing mechanism, 2 levels, Cornex brilliant finders, Frena or Cornex shutter, Beck lenses leather handle, and 39 daylight loading sheaths. This system enables any number of pictures to be taken without recourse to a dark-room.

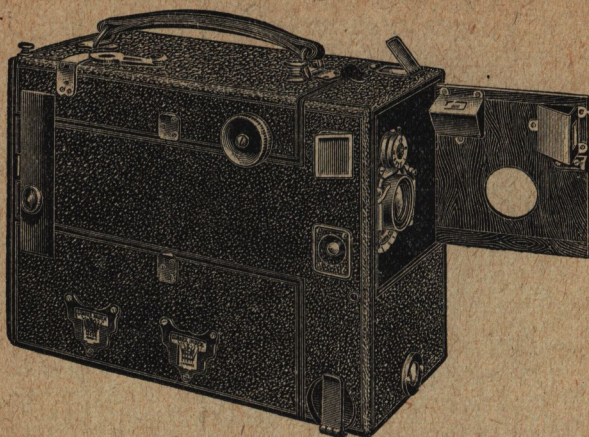
Focussing Pattern. Models D, E, F, F₁, G. and H.

Solid, thick, fine-grain leather covering; machined body, leather-sewn handle, Beck lenses of all grades, Cornex brilliant patent stationary finders, levels, Cornex patent index and scale, silent focussing motion, B. & L. or Celverex shutter, and 39 daylight loading sheaths. This system enables any number of pictures to be taken without recourse to a dark-room.

					With Celverex Shutter.
A	with	Single Achromatic Lens	.. ..	£2 2 0	
B	..	Rectilinear Double Meniscus Lens	.. ..	3 3 0	£4 4 0
C	..	Beck Symmetrical R.R. Lens	.. ..	3 10 0	4 11 0
D	..	Beck Symmetrical R.R. Lens	.. ..	4 4 0	4 19 0
E	..	Beck Double Aplanat Lens	.. ..	5 5 0	6 0 6
F	..	Beck Biplanat Lens	.. ..	6 6 0	7 1 0
F ₁	..	Beck-Steinheil Unofocal Lens, f6	.. ..	7 0 0	7 15 0
G	..	Beck-Steinheil Orthostigmat Lens, f6.3	.. ..	9 5 0	10 0 0
H	..	Beck-Steinheil Unofocal Lens, f4.5	.. ..	10 9 6	11 0 0

Above prices complete with 39 sheaths.

THE TELEPHOTO CORNEX CAMERA.*

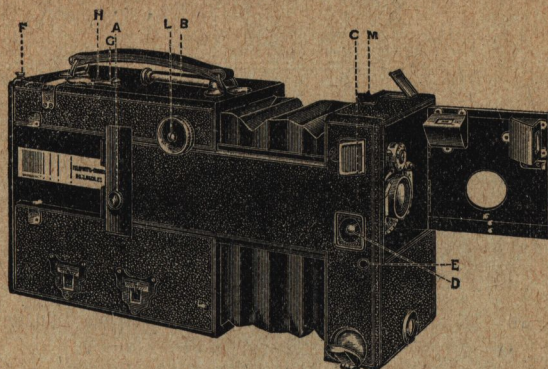


A Magazine Hand Camera, equally suitable for ordinary work or for Telephotography.

Although it may not be a serious inconvenience to the user of the stand camera to be obliged to remove his positive lens, attach the telephoto element, and then the whole to the camera front, previous to focussing with more than usual care upon the ground glass before he can obtain a telephotograph, these difficulties, though not serious, limit this branch of photography to those who do not object to the expenditure of a little time and trouble in procuring pictures. The Cornex Telephoto Magazine Hand Camera, however, places Telephotography within the reach of the less studious worker, besides placing a practical instrument in the hands of the public. Whilst possessing all the essentials of a good magazine hand camera, rigidity, simplicity, etc., it is also a Focussing Magazine Telephoto Hand Camera, for twelve plates or films, complete in every detail, and places at the disposal of the operator all the advantages of a Telephoto instrument. It has a lens giving an equivalent focus of about 18 inches and will render a picture eight times the area or about three times the lineal size of the original. One point of great importance is that the camera is in no way handicapped through being useable as a Telephoto instrument, it is just as useful a $\frac{1}{4}$ -plate magazine camera as one constructed for that purpose only, and, in addition, has the great advantage for many branches of work, of giving a picture eight times that of the normal.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

THE TELEPHOTO CORNEX CAMERA.*



Telephoto Cornex Extended—Explanation—(a) self-locking bolt to ensure perfect register at the two positions; (b) rod carrying Telephoto Lens; (c) button to open front; (d) set off; (e) pneumatic tube hole; (f) back door bolt; (g) changing lever; (h) automatic indicator hole; (l) clamp for securing front at intermediate positions.

PRICES OF THE TELEPHOTO CORNEX.

MODEL I.	As above, complete with sheaths and a Cilverex or large (8×5) Bausch and Lomb Automatic Shutter, and a Beck-Steinheil Unofocal Lens, F/4·5	£21 0 0	With Cilverex Shutter. £21 15 0
MODEL 1o.	Do. do. with the New Compound Automatic Shutter in Aluminium	22 0 0	
MODEL 1a.	Do. do. fitted with a Cilverex or Unicum Shutter and a Beck-Steinheil Orthostigmat, F/6·3	18 0 0	18 17 6
MODEL 1b.	Do. do. same as 1a, but fitted with a Volute Shutter	20 10 0	
MODEL II.	Do. do. as 1a, but fitted with a Beck-Steinheil Unofocal F/6	16 10 0	17 7 6
MODEL IIa.	Do. do. as II, but fitted with a Volute Shutter	19 0 0	
MODEL III.	Do. do. as II, but fitted with a Beck Double-speed R R. F/6	12 12 0	13 9 6
	Any of the above, covered in sewn buff calf leather, extra	£3 3 0	
	Extra sheaths per doz.	0 2 6	
	Specially corrected magnifiers, per set of four	2 2 0	
	Do. do. single	0 12 6	

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

THE FOCAL PLANE REFLEX HAND CAMERA.

The Camera is made in the best Mahogany, covered in fine leather, the exterior fittings are ebonised and black metal, with nickel points—a stout leather carrying handle is provided. The measurements over all when closed, $\frac{1}{4}$ -plate size are $6\frac{1}{2} \times 7 \times 6$ inches; bellows extension $10\frac{1}{2}$ inches. 5×4 size: $8\frac{1}{4} \times 8 \times 7$ inches, 13 inch bellows extension. $\frac{1}{2}$ -plate size: $10\frac{1}{2} \times 10 \times 9$ inches, $16\frac{1}{2}$ inch bellows extension.

The Camera has rising and falling front—the back turns in a circular movement to allow of horizontal or vertical pictures; lenses can be changed by specially devised springhold front.

The focussing chamber rises into position on releasing the catch G. The Reflecting Mirror is in a single piece, it is surface worked and silvered and specially treated to preserve the polished silver surface. It is released by the release point B. This point B also acts as the release of the Shutter, but the Mirror and Shutter act independently.

The Focal Plane Shutter is a special feature of this Camera and will be found most efficient—all adjustments can be made from the outside without opening the Camera in any way. Exposures can be regulated from $\frac{1}{100}$ th of a second to $\frac{1}{8000}$; time exposures can also be made. The Shutters are all tested and the speeds given are approximately accurate; in fact, except for the very highest speed when a slight stretching of the blind may take place, the speeds are practically exact.

The usual tension spring has been abolished, experience having shown that the speed of a Focal Plane Shutter depends on the width of the slit, while tension springs are liable to much variation of strength and introduce inaccuracies.

We list overleaf a number of the most suitable lenses;

The most rapid F4.5 lens gives perfect definition with small depth of focus at full aperture, and can be stopped down where depth is required. It is specially recommended not only for its rapidity for obtaining fully exposed pictures with very quick snapshots, but also because focussing in a dull light is much more easily accomplished, and the lens can be stopped down instantly if required, before taking the photograph.

The precision of the whole instrument and the special freedom from vibration of this camera renders it also particularly suitable for *telephotography*. We have confidence in recommending it for this work, and would draw attention to the telephoto lenses listed below the prices of the cameras.

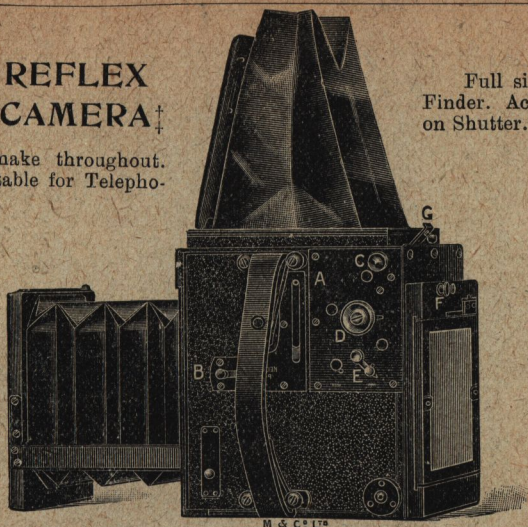
The Beck Harris Isocromatic Spectrum filter is also a most useful addition to this camera, especially for Telephotography, as in addition to its Isochromatic qualities it neutralises to a great extent the effect of mist. It is almost perfectly transparent to all coloured light except dark green, blue and violet and thus does not increase the exposure more than is absolutely necessary.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

THE REFLEX HAND CAMERA †

Finest make throughout.
Specially suitable for Telephoto-
graphy.

Full size Focussing
Finder. Accurate speeds
on Shutter.



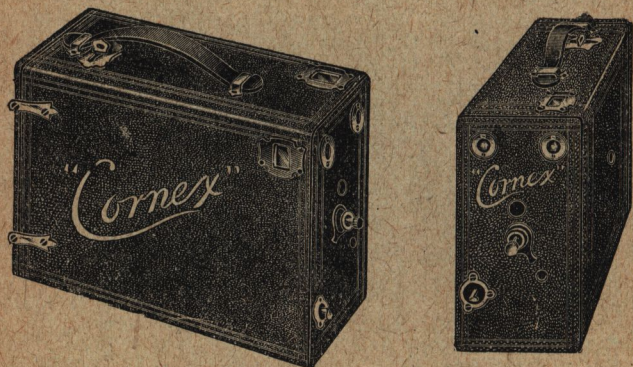
		2 RECO Prices.			
		5 × 4		5½ × 3½	
		£ s. d.	£ s. d.	£ s. d.	£ s. d.
A.	Fitted with Beck-Steinheil Orthostigmat Lens, Series I., F/6.3 ¼-plate and 5 × 4 ¼-plate. No. 4, 5½ in. focus, ½-plate No. 6, 8¼ in. focus	18 0 0	24 0 0	33 0 0	19 15 0
B.	Ditto ditto but mounted in aluminium	19 0 0	25 0 0	34 0 0	20 15 0
C.	Fitted Beck-Steinheil Convertible Orthostigmat Lens, Series II., F/6.8 (3 foci) ¼-plate No. 3a 5½ in. 5 × 4 No. 4a 6½ in. ½-plate No. 6a 8½ in.	17 17 6	25 0 0	34 10 0	21 0 0
D.	Ditto ditto but mounted in aluminium	18 17 6	26 0 0	35 10 0	22 0 0
E.	Fitted with Beck-Steinheil Unofocal Lens, Series I., F/6 ¼-plate and 5 × 4 No. 4 6 in. focus, ½ plate No. 6a 8¼ in. focus	15 15 0	21 15 0	31 0 0	17 5 0
F.	Ditto ditto but mounted in aluminium	16 16 0	22 15 0	32 0 0	18 5 0
G.	Fitted with Beck-Steinheil Unofocal Lens, Series II., F/4.5 ¼-plate No. 4 6 in. focus, 5 × 4 No. 4a 6½ in. focus, ½-plate No. 6 8¼ in. focus	18 0 0	25 0 0	34 15 0	20 10 0
H.	Ditto ditto mounted in aluminium	19 0 0	26 0 0	35 15 0	21 10 0
	Beck Universal Telephoto attachment fitted to above, Low Power	3 17 0	3 17 0	4 10 0	3 17 0
	Ditto ditto mounted in aluminium	4 10 0	4 10 0	5 10 0	4 10 6
	Beck Simple Telephoto attachment with Rack and Pinion	2 10 0	2 10 0	2 10 0	2 10 0
	Beck Harris Spectrum filter, 1st Quality for all cameras except G.	2 0 0	2 0 0	—	—
	Ditto ditto 2nd quality for all cameras except G.	0 9 6	0 9 6	0 14 0	0 14 6

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

Hand Cameras fitted with "BECK" Lenses.

THE "CORNEX"†

(Magazine Plate Cameras).



MODELS A, B and C, $\frac{1}{4}$ -PLATE.

The "Cornex" Camera takes 12 plates in sheaths, which fit into the back portion of the camera, pressed into position by a spring on the back door—by moving the sliding crown-shaped projection on the top of the camera once forward and back the foremost plate is dropped into the bottom portion of the camera. Any plate can be removed for development without disturbing the unexposed plates. The sheaths, with their plates, can be placed into the camera in any order, and the changing mechanism is simple and reliable. Two brilliant stationary finders are supplied—one for horizontal, and one for vertical positions. A tripod screw and two bushes are supplied with each camera. The shutter gives exposures $\frac{1}{10}$, $\frac{1}{20}$, $\frac{1}{40}$, $\frac{1}{80}$ second, and time exposures. The lens is provided with diaphragms, and an automatic counter registers the number of plates exposed. The camera is strong, substantially made, and is well covered.

Prices of the "Cornex" Cameras, Models A, B and C.

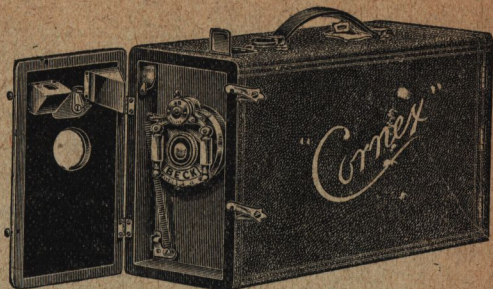
A	Single Achromatic Lens..	...	...	£1 1 0
B	Beck Double Meniscus Lens	...	...	1 10 0
C	Beck Symmetrical Lens	...	...	2 2 0

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

Hand Cameras fitted
with "Beck" Lenses.

The
"FOCUSSING
CORNEX" †

(Magazine Plate
Cameras).



MODELS D, E, F and G

(Fitted with "BECK" Lenses).



These models have the same changing apparatus for 12 plates, but are provided with an accurate and delicate focussing adjustment. At the right-hand side is a travelling scale of feet and index to indicate the position of focus for objects at different distances from the camera. The front of the camera opens, exposing the lens and shutter to view. The lens has an iris diaphragm, and the shutter is either the new Cilverex (see page 153), giving speeds $\frac{1}{10}$, $\frac{1}{20}$, $\frac{1}{40}$, $\frac{1}{80}$ and bulb and time exposures, or the Bausch and Lomb Unicum, giving exposures marked 1, $\frac{1}{2}$, $\frac{1}{5}$, $\frac{1}{25}$, $\frac{1}{50}$, $\frac{1}{100}$ of a second, and time exposures either of long duration (one press of the set-off opening and the second closing the lens) or of short duration, the lens remaining open only during the pressure of the set-off. The finders are "brilliant stationary" with folding covers. The shutter is wound and set off from outside the camera, and the speeds are changed by opening the front.

The "CORNEX" PLATE CAMERAS, D*, E*, F* and G*.

		With Unicum Shutter.	With Cilverex Shutter.
D	Beck Symmetrical Lens ...	£3 3 0	£3 18 0
E	Beck Double Aplanat Lens ...	4 4 0	5 0 0
F	Beck Biplanat Lens ...	5 0 0	5 17 6
F1	Beck-Steinheil Unofocal Lens, Series I.	6 10 0	7 5 0
G	Beck-Steinheil Orthostigmat Lens ...	8 8 0	9 5 0

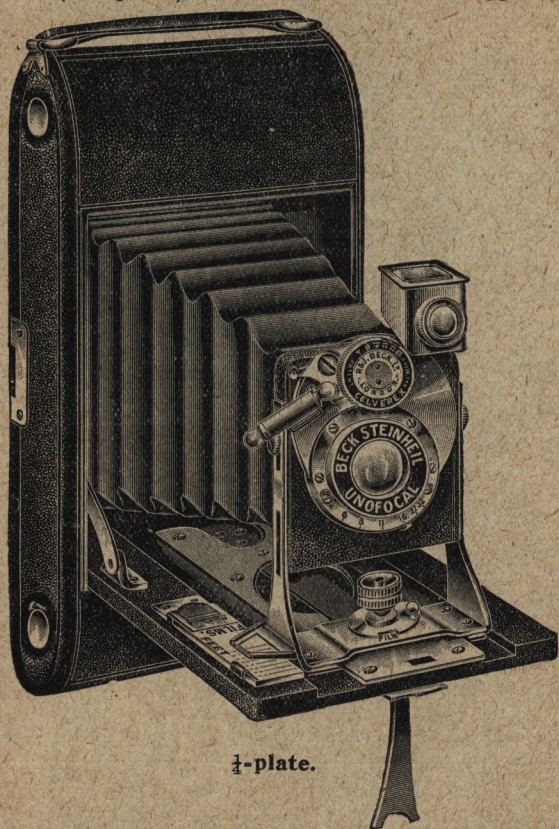
* Fitted with the "Cornex Patent Index" (see page 164).

R. & J. BECK, Ltd., 68 Cornhill, London, E.C

“ROLL FILM CORNEX” CAMERA.†

The latest designed and most perfectly finished $\frac{1}{4}$ -plate Rollable
Film Pocket Camera. (Daylight Loading.)

PRICE (complete) £2 19 6.



$\frac{1}{4}$ -plate.

Smaller, lighter, neater and better finished than ever.

Mahogany body finished and polished, covered in best solid leather, Beck Lens, Celverex, or Bausch and Lomb Gem or Unicum shutter, brilliant stationary "Cornex" finder, "Cornex" patent index, infinity catch and clamp.

For which lens to use and how to get sharp pictures with a hand camera, read:—

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews.
350 pages. 45 engravings. 150 diagrams. Post-free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

CORNEX FOLDING ROLL FILM CAMERA.

For carrying in the pocket there is no camera to approach the folding type. The Roll Film Cornex camera is, both as to appearance and utility, undoubtedly in advance of many other cameras of its type.

External Appearance.—It is covered in thick solid fine-grain leather. Fittings nickelled on brass. It has but few outside fittings and those are just sufficiently prominent to “set-off” the fine-grain leather. Handle for carrying. In the *Modèle de Luxe* the strong leather is buff and grained.

Shape.—This is unique, and has been described as “Turtle-back;” it is considerably more convenient to get into the pocket than the ordinary form with round ends.

Front and Extension Movement.—A weak point of cameras of this type is the unsteady tailboard, and the lack of rigidity of the front of the camera carrying the lens. In the Roll Film Cornex a rigid tailboard with a broad nickel base-plate fits into uprights as wide as the front itself, which are milled up to a good fit, so that the camera easily pulls out to its infinity stop and is held rigidly. In addition a clamp screw is provided. The base-board combines the advantages of wood and metal construction, the runner and infinity catch are nickel-plated. An infinity stop is provided by which the lens is automatically locked in the correct focus for snap-shots. It is adjusted for either films or plates by rotating a circular engraved collar under the clamping nut on the front. There is a rising front fitted with a range of nearly an inch.

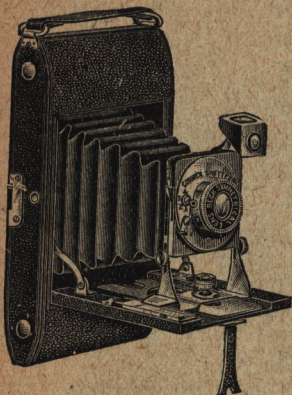
Spool Mechanism.—The changing is by the daylight spool system, with an improved and simplified centre and multiple pall ratchet. The winding is silent and without back lash. The method of attaching the plate back or removing the ordinary back so as to get at the spools has been much improved; there are two independent catches that can be undone either both together or singly, they are not likely to open accidentally and the back is easily removed from one end.

Finder, Shutter and Lenses.—These are all of first quality, the finder, of the brilliant type, being made specially strong. The shutter is the Celverex or Gem or the Bausch & Lomb Unicum. The Celverex shutter is fully described on page 153. The Unicum shutter gives exposures marked from $\frac{1}{100}$ second to 1 second, but the marks do not correspond to the exposures named. The Gem gives one all round useful instantaneous exposure. The lenses fitted to this camera are all by Beck, and are reliable, giving excellent definition at open apertures. It will be noticed that a full line of lenses is listed, including the BECK SYMMETRICAL, $f/8$; the BECK DOUBLE APPLANAT, $f/7.7$; the BECK BIPLANAT, $f/5.8$; the BECK-STEINHEIL UNOFOCAL, $f/6$ and the BECK-STEINHEIL ORTHOSTIGMAT, $f/6.3$.

For hand-camera work of any kind, read:—

“Photographic Lenses: a Simple Treatise.” By Conrad Beck & Herbert Andrews. 350 pages, 45 Engravings, 150 Diagrams. Post free 1/3.

FOLDING ROLL FILM CORNEX CAMERA.†



The $\frac{1}{4}$ -plate Roll Film Cornex.

A reliable "London-made" $\frac{1}{4}$ -plate pocket Roll Film or Plate Camera (Daylight Changing).

SPECIFICATION.

Camera Body—Machined mahogany, screwed to withstand the tropics, fine grained solid leather covering, rigid wood and metal base-board, nickelled fittings, rising front, leather handle, nickelled and frosted outside fittings specially designed to withstand wear. Spring open front.

Shutter—The B. & L. Gem Shutter, giving one instantaneous also time and bulb, fitted to rising front with Rotating stops.

Finder—One rotating Cornex brilliant stationary type, large size and very strongly made in solid metal case. Arranged to fold up into the camera.

Changing Movement—On the daylight spool system, with multiple pall system winder, allowing of accurate adjustment of the film with no back-lash, improved friction device.

Indicator—Direct through window at the back.

Focussing Motion—Optional sliding (for ordinary work the infinity catch is used), combined with the "Cornex Patent Index" and clamp.

Scale—In feet, with special adjustment for plates or films on the "Cornex" principle.

Lens—Any of the following by "Beck": Symmetrical, F/8; Double Aplanat, F/7.7; Beck-Steinheil Unofocal, series I., F/6; Double Orthostigmat, F/6.3.

Size— $8\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{8}$.

Prices.

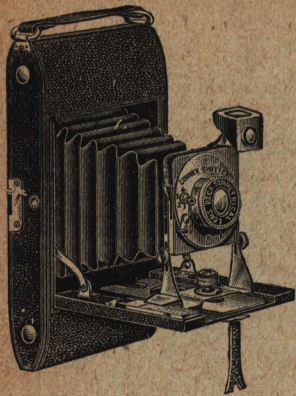
MODEL GA	Fitted with Beck Symmetrical Lens, F/8	..	£2 19 6
MODEL GB	Ditto, with Beck Double Aplanat, F/7.7	..	£3 17 0
MODEL GC	Ditto, with Beck-Steinheil Unofocal, F/6	..	£5 15 0
MODEL GD	Ditto, with Beck-Steinheil Orthostigmat, F/6.3	..	£8 4 6
Plate back, to take glass plates and 3 slides, in case	..	..	£0 13 6
Dark Slides (single, per set of 3) in case	..	..	0 5 6
Leather sling case for camera	..	..	0 5 6
Light tripod	..	..	0 6 3
Beck-Harris Screens to use with Iso films in any of the above	..	..	0 7 6
Patent Exposure Meter and Index	..	..	0 1 6

For advantages of different forms of lenses, read:—

"Photographic Lenses: a Simple Treatise." By Conrad Beck and Herbert Andrews. 350 pages, 45 Engravings and 150 Diagrams. Post free 1/3.

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

FOLDING ROLL FILM CORNEX CAMERAS. †



The $\frac{1}{4}$ -plate Roll Film Cornex

SPECIFICATION.

Camera Body.—Machined mahogany, screwed to withstand the tropics; solid leather covering, rigid wood and metal base-board, nickelled fittings, rising front, leather handle.

Shutter.—The Celverex or Bausch and Lomb Unicum.

Finder.—One rotating brilliant “Cornex” stationary type, strongly made in solid metal case.

Changing Movement.—On the daylight spool system, with patent silent multiple pall system winder, allowing of accurate adjustment of the film with no back-lash.

Indicator.—Direct visual through window at back.

Focussing Motion.—with the “Cornex Patent Index,” clamp and infinity catch.

Scale.—In feet with special adjustment for plates or films.

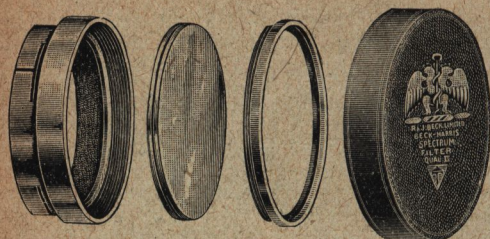
Lens.—Any of the following by “Beck”: Symmetrical, $f/8$; Double Aplanat, $f/7.7$; Biplanat, $f/5.8$; Beck-Steinheil Unofocal, $f/6$; Orthostigmat, $f/6.3$.

Size.— $8\frac{1}{2} \times 4\frac{1}{2} \times 1\frac{1}{2}$. $\frac{1}{4}$ -plate pictures.— $4\frac{1}{4} \times 3\frac{1}{4}$ in.

Prices.

	£	s.	d.
MODEL A Complete as above, but with Beck Symmetrical Lens, $f/8$. Unicum Shutter	3	12	6
Ditto, ditto, Celverex Shutter	4	7	6
MODEL B Ditto, with Beck Double Aplanat $f/7.7$. Unicum Shutter	4	10	0
Ditto, ditto, Celverex Shutter	5	5	0
MODEL C Ditto, with Beck Biplanat, $f/5.8$. Unicum Shutter	5	15	0
Ditto, ditto, Celverex Shutter	6	12	6
MODEL C1 Ditto, with Beck-Steinheil Unofocal $f/6$ Unicum Shutter	6	7	6
Ditto ditto, Celverex Shutter	7	2	6
MODEL D Ditto, with Beck-Steinheil Orthostigmat, $f/6.3$. Unicum Shutter	8	17	6
Ditto, ditto, Celverex Shutter	9	12	6
MODEL D1 Ditto, with Beck-Steinheil Unofocal, $f/4$ and large Unicum Shutter	9	12	6
	£	s.	d.
Plate back, to take glass plates and 3 slides in case	0	13	6
Dark slides (single, per set of 3) in case	0	5	6
Leather sling case for camera	0	5	0
Light tripod	0	6	3
Beck-Harris Screens to use with Iso films in any of the above	0	7	6
Patent Exposure Meter and Index	0	1	6

BECK-HARRIS SPECTRUM FILTER.*



Isochromatic Screens have been relegated to rather an unimportant position, owing to the fact that they have not always been manufactured as an optical accessory by lens makers, requiring as much attention as the lens itself. There are two points in which the Beck-Harris Screen shows a marked

advance over other screens. It allows of the truest rendering of all colour values without increasing the necessary exposure in the same proportion.

There can only be one rendering of all colours in monochrome which reproduces their luminosities in the same proportion as seen by the eye. It is just as possible to over-correct for yellow and green as it is for the ordinary plates to under-correct.

With the Beck-Harris Filter the result is obtained with an increase of exposure of but 4 to 5 times with a highly orthochromatized plate and gives a greater differentiation than the ordinary yellow glass screen with 8 times the exposure.

Surprise may be experienced with regard to the relative prices of Quality I. and Quality II. The first is composed of two thick pieces of glass, so thick as to prevent any bend, and each of the 4 surfaces is figured with the same accuracy as the best of the Process Prisms, and are specially designed for Process work, as they do not interfere in the slightest degree with the optical qualities of the finest of modern Anastigmats. If one of these screens were placed on a delicate long-focus lens of an aperture of F/6, the definition would be as critical as before, whereas if Quality II. were used, the definition would suffer slightly.

At the same time Quality II. is an advance over the ordinary Isochromatic Screen. Its 4 surfaces are such that they do not interfere with the definition for all ordinary work, landscape or architectural, and it is only at full aperture on fine lines that the difference between the two can be seen.

QUALITY I.

No.	Size.	For Orthostigmat No.	PRICE.
	Ins.		
1	1	1, 0, 0a	£1 10 0
2	1 1/4		1 15 0
3	1 1/2	2, 3, 4, 2a, 3a	2 0 0
4	1 3/4	5, 3b, 4a; 2b, 3b	2 15 0
5	2	6, 7, 8, 8a	3 10 0
6	2 1/4		4 0 0
7	2 1/2	9	5 0 0
8	2 3/4		6 0 0
9	3	10	7 0 0
10	3 1/2		12 0 0

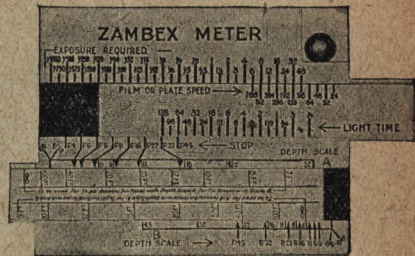
QUALITY II.

No.	Size.	For Orthostigmat No.	PRICE.
	Ins.		
1	1	1, 0, 0a	£0 7 6
2	1 1/4		0 7 6
3	1 1/2	2, 3, 4, 2a, 3a, 2b	0 7 6
4	1 3/4	5, 4a, 3b	0 9 6
5	2	6, 7, 8, 5a, 6b	0 11 6
6	2 1/4		0 13 6
7	2 1/2	9	0 14 6
8	2 3/4		0 17 6
9	3	10	1 0 0
10	3 1/2		1 10 0

R. & J. BECK, Ltd., 68 Cornhill, London, E.C.

EXPOSURE METERS.*

The "Zambex" Exposure and Depth of Focus Meter.



The new Zambex Meter embodies some of the advantages of the Cornex Index in that while it gives the exposure and stop to be used, it also gives the depth of focus that is obtained with the different apertures.

Owing to the fact that the speeds of the shutter are limited, we think it best to decide at once what exposure it is advisable to give, taking into consideration the subject of the picture to be photographed, *i.e.*, if the objects are moving rapidly it is best to give the quickest speed available.—Having decided on the exposure, say $\frac{1}{32}$, this should be set to the number of the film speed, say 256, which is on the next scale of the meter. The third scale is the one which corresponds to the length of time that it takes for the light to darken the sensitized paper to the required colour. On referring to the time, say $\frac{1}{2}$ sec., on this scale it will be readily seen what aperture should be used for taking a picture with the shutter running at $\frac{1}{32}$ sec., in this case it would be $f/22$.

The lower slide of the meter is arranged so as to show the distances that will be in focus with the different stops used. The slide is marked with 2 scales which give particulars for two different lenses, and if the slide is reversed the same scales apply to two other lenses, thus the focal depth of 4 lenses of different focal lengths can be found.

The information thus obtained is invaluable especially for snap-shot work, where a picture is often spoilt by objects being included which are too near or too far away to be in focus.

Full particulars are sent out with each meter, which is in the form of a neatly finished pocket book.

It is important when using an exposure meter that the actual speeds of the shutter should be known, and as the markings on most shutters are not accurate we advise that the shutter to be used should be carefully tested.

Price of Exposure Meter complete	1/6
Extra refils, per packet	6d.

BECK'S CATALOGUE OF OPTICAL WORK.

(FREE ON APPLICATION.)

We undertake Optical work, both Wholesale and Retail, and we supply Lenses, Prisms, Mirrors, and all kinds of articles made in Glass, Quartz, and Iceland Spar, etc., for Manufacturers of Instruments, Laboratories and Experimental Investigators.

Our Optical Catalogue describes:

- | | |
|--|---------------------------------------|
| Object Glasses (Telescope). | Prisms (Nacht). |
| Object Glasses (Field Glass). | Prisms (Binocular). |
| Object Glasses (Microscope). | Prisms (60° for Spectroscope). |
| Eyepieces (for all Instruments). | Prisms (Direct Spectroscopic). |
| Eyepiece Lenses
(for all Instruments). | Prisms (Hollow). |
| Proof Planes. | Prisms (Compass). |
| Proof Glasses (curved to any radius) | Prisms (Diffraction). |
| Mirrors (Plane). | Prisms (Polarizing). |
| Mirrors (Astronomical). | Diffraction Gratings. |
| Specula (Astronomical). | Lenses (for Condensers). |
| Parallel Plates. | Lenses (for Lime-Light). |
| Sextant Mirrors. | Lenses (Demonstration). |
| Sextant Shades. | Lenses (Cylindrical). |
| Colour Filters. | Lenses (Spherical). |
| Prisms (Right Angle). | Lenses (Loups). |
| Prisms (for Process Work). | Lenses (Various). |
| Prisms (Reading). | Spectroscopes. |
| Prisms (Wollaston). | Cathetometers. |
| Prisms (Vertical Camera lucida). | Spherometers. |
| Prisms (Amici). | Micrometer Microscopes. |
| | Dichroscopes. |