## SPECIAL OFFER

TO FURTHER POPULARISE THE

# "Challenge" British-Made Cameras. 

"They speak for themselves when compared with any foreign or other vival."

THE
"Challenge"
DAYSPOOL.


Simplicity.
Reliability.
Efficiency.

200 Cameras of this Popular Model in $\frac{1}{\frac{1}{2} \text {-plate Size, }}$ retailing at $£_{3} 126$, are offered at the price of Lens and Shutter only,

## Namely 46/w

This offer is simply an advertisement and is made in order to further establish the sterling qualities of the

> "CHALLENGE" CAMERAS.

SPECIAL NOTE,
Only the above number of Cameras will be supplied at this price, and orders will be execuled strictly in rotation.
The Canteras are leather-covered, and are fitted with the famous Beck Symmetrical Lens in Unicum Shutter. (For full particulars see next page).

## The Simplest and Most Perfect DAYLIGHT LOADING FILM CAMERA MANUFACTURED.



# Lizars' "Challenge" Dayspool 

 No. 1.Can also be used with Plates.

Comera-Of the Folding Pocket type, either polished or covered in best hard Morocco grained leather. Handsome leather bellows with a new and improved method of fixing to the Camera safeguarding all risk of admission of stray light. Instantly opened and securely fixed at any position with quick acting clamping screw. There is also an automatic catch, which locks the front when at the infinity distance. A carefully graduated scale for various distances is fixed to the baseboard. Rising and cross front for horizontal and vertical pictures. Can be used on a stand.

Lenses. -Is the famous Busch \& Lomb " Unicum," with time and instantaneous movements. with -All lenses are carefully selected and tested before fixing to the cameras, and each fitted with Iris diaphragm.
-The new brilliant form, giving approximately the same view as that shown by the lens and reversible for horizontal or vertical pictures.
-Great exactness and most beautiful work throughout.
PRICES, as per Specification.


## Lizars' "Challenge" Junior Dayspools.

## Ideal Pocket Cameras

For<br>DAYLIGHT<br>LOADING FILMS.



# High-Class 

Construction.

## Exceedingly

## Compact.

THE Junior Dayspool Cameras have been designed to meet the demand for a highclass and really compact instrument, suited for the most serious workers.
They are in every respect identical with the specification of the No. I Dayspool with the exception of the shutter, which is a Bausch and Lomb, with time and instantaneous movements, approximately from $\frac{1}{25}$ th to $\frac{1}{2} \frac{1}{0}$ th part of a second. This Shutter is automatic, or ever-set, on the same principle as the famous automatic "Unicum."

The Lenses are Rapid Rectilinear of superior quality, and have Iris Diaphragm.
The Cameras can be loaded and unloaded in daylight, and are supplied with the new brilliant view-finders.

## MADE IN THREE SIZES.

PRICES- JUNIOR "A" JUNIOR " $B$ " JUNIOR " $C$ "


The Junior "B" Model is also made suitable for use with plates.
Focussing Screen and one Slide, 9/-; Extra double dark Slides, 4/- each.

## Lizars" "Challenge"

## DE <br> LUXE CAMERA. <br> '(Patent



An Unqualified Success.


De Luxe Camera oren for ordinary work. De Luxe Camera showing enormous front rise.
A Camera possessing an invaluable range of adjustments hitherto unable ito be acquired in an instrument of moderate dimensions.
The fact that it can be used as an ordinary Hand or Stand Camera, embracing at the same time all the requirements for Copying, architectural, wide angle, and telephotographic work, with sufficient extension to use the single component of most lenses, will convey an appreciable idea of its many accomplishments, which are all attained in a very simple manner.

As a result of much careful thought and experiment, the combination in a single instrument capable of being utilized for all the work described will appeal to the serious worker as well as the beginner, who will in time recognise the great advantages to be gained by such a camera.

For ordinary hand use the camera is simply opened and pulled forward to position, the universal movements being brought into action only when actually required.


Showing great bxtinsion of Camera.

## LIZARS" "CHALLENGE" DE LUXE CAMERA.-Corhmed. SPECIFICATION.

Camera-Reversing back Camera made of the finest Spanish Mahogany, carefully selected for its soundness, and thoroughly matured. Diagonal rack and pinion focussing movement. The bellows is of special grained varnished leather, with great latitude of adjustment in conjunction with the swiag front. The Camera is supplied polished, or covered in hard grained morocco leather.

Shulter, -This is the well known Bausch and Lomb "Unicum.

Leanses. - All the Lemses are oarefully tested before being sent out and each is fitted with Iris diaphragm.

Slides-Three Bookform Double Dark Slides, manufactured on the latest principle, having rabbeted frames and shutters, tengued in well.

Finder. - The improved brilliant form giving approximately the same view as that shewn by the Lens.

Level, A spirit level is attached to the baseboard close to the finder.

Special features.-The Lens, shutter, and finder, all close up within the Camera, and with focussing screen and hood, combiee in one; indepeadent lens panel, rising and falling front; Camera ean be instantly opered, and securely fixed at any position by means of quick acting lever; automatic lock, which fixes the front at infinity distance, also a graduated graduated lens seale.

The make and finish of the "Challenge" de Luxe are faultless, and having all the characteristics of British workmanship, which for excellence of quality and reliability cannot be surpassed.

PRICE, as per Specification.

| Description of Lems. | $4 \frac{1}{4} \times 3 \frac{4}{4}$ $\frac{1}{2}$-plate. |  | $5 \times 4$ |  | $\begin{aligned} & 6 \frac{1}{2} \times 4 \frac{3}{2} \\ & \text { 2 } 2 \text {-plate. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lizars' "Kram" Convertible Three Foci Lens | ¢7 10 |  | 690 |  | £ 1115 | 0 |
| Aldis Series 1I., F/6 Lens | 88 |  | 918 |  |  | 0 |
| Taylor, Taylor and Hobson Lens |  |  | 100 |  | 140 | - |
| Ross' Symmetric Anastigmat Lens ${ }^{\text {Ross }}$ Homocentric Lens, Series C., F/6 | 110 | 0 | 1210 | 0 | 1515 | 0 |
| Taylor and Hobson "Cooke" Lens, F/6 ${ }^{\circ} 5$ | 110 | 0 | 1210 |  | 1515 | 0 |
| Ross-Goerz Double Anastigmat Lens, Series III., F/6.8 | 1210 | 0 | 1310 | 0 | 1610 | $\theta$ |

The $\frac{1}{4}$-plate and $5 \times 4$ are fitted with the No. ${ }_{2}$ and the $\frac{1}{2}$-plate with the No. 3 Dallmeyer Lens. Note. Any make of Lens and Shutter supplied. Prices on application.
Camera and three Double Book Slides, including fitting customers own Lens and Shutter supplying and fitting View Finder and Scaling ..
Brass Binding Camera and Three Slides
Extra Double Book Slides

| $£ 6$ | 0 | 0 | $£ 7$ | 2 | 6 | $£ 9$ | 5 | 0 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | 5 | 0 | 1 | 10 | 0 | 1 | 17 | 6 |
| 0 | 9 | 0 | 0 | 9 | 6 | 0 | 10 | 0 |
| 1 | 10 | 0 | 1 | 10 | 0 | 1 | 15 | 0 |
| 0 | 11 | 0 | 0 | 11 | 0 |  |  |  |

## IMPORTANT.

The "CHALLENGE" DE LUXE CAMERA can also be supplied with three double dark slides, with Aluminium Draw-out shutters, at the following reductions on above prioes.
plate, \&1, $5 \times 4$, \&1 10s, ; ) plate, 515 s .
Camera and three double dark slides with aluminium drawout shutters, including fitting customer'sown lens and shutter, supplying and fitting view-finder and scaling Extra double dark slides..
Solid Leather Case with lock and key, and hand and shoulder straps to hold Camera and six slides

| $£_{5}^{5}$ | 5 | 0 | $£ 6$ | 5 | 0 | $£_{8}^{8}$ | 5 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | ---: | ---: | ---: |
| 0 | 5 | 0 | 0 | 6 | 6 | 0 | 8 | 0 |
| 0 | 12 | 0 | 0 | 15 | 0 | 1 | 0 | 0 |

# The "Challenges Tropical De Luxe Camera -(Patent). an UnQualfiried sugeess. 



In the manufacture of the "Challenge" Model De Luxe Cameras in Teakwood, considerable thought has been given, and every care exercised, which will make these instruments suitable for the most severe climatic variations.

The value of Teakwood as a damp and heat resisting material is known to all who are resident in a Tropical country. The Cameras are Polished in place of being Leather Covered, the latter being so liable to decay and leave its support when exposed to a damp atmosphere.

All Tongues and Mitres where not brass bound are of Metal, instead of wood as usualiy employed, and these and all other joints, are not only glued, but carefully screwed.

In addition the Cameras and Book Form Double Dark Slides are Brass
Bound at all the important parts. Bound at all the important parts.

The Bellows are made of Real Russia Leather and attached to the bodies of the Cameras with Brass Plates.

Otherwise these instruments are the same as the specification of the "Challenge" De
Luxe Cameras described on the two preceding pages.

## Prices as per Specification.



The $1 / 4$-plate and $5 \times 4$ are fitted with the No. 2 , and the $1 / 2$-plate with the No. 3 Dallmeyer Lens Note.-Any make of Lens and Shutter supplied. Prices on application.
Extra for "Koilos" Shutter in place of Unicum in $1 / 4$-plate and $5 \times 4$ sixes $11 /$-.
Camera and Three Double Book Slides, including fitting Customer's own Lens and Shutter, supplying and fitting Level, View Finder and Scaling supplying and Extra Double Book Slides, each
Solid Leather Case with lock and key to hold Camera and tbree Slides.
Do. to hold Camera and six Slides $\quad . \quad . \quad . \quad$ Isochromatic Screen, in form of Cap, with Leather Case ..
Wide-Angle Lens, interchangeable with the Lens fitted to the Bausch \& Lomb Shutter. completo in Leather Case ..

# The 

With special cross-grained varnished leather Bellows, in place of the real Russia leather, and three Teak Double Plate Holders in lieu of three Brass-boand Book-form Dark Slides.

Prices, as per Specification.


The $1 / 4$-plate and the ${ }_{5} \times 4$ are fitted with the No. 2 and the $1 / 2$-plate with the No. 3 Dallmeyer Lens.
Nore.-Any make of Lens or Shutter supplied. Prices on application.
Camera and three Double Plate Holders, including fitting customer's own Lens and Shutter, supplying and fitting Level, View Finder and Scaling
Extra Double Plate Holders, each
For Additional Extras see previous page.

## LIZARS" "KRAM" CONVERTIBLE LENS.

## F8. (3 Foci.)

This Lens has been introduced for use on the "Challenge,"
 De Luxe, Triple Extension or similar Cameras; the combination being of different focal lengths, and so combining three lenses in the one instrument.

The advantages of this construction are considerable, as it is possible to materially vary the amount of subject included in the picture by using either the whole lens or the back or front combinations the comparative focal lengths of these latter being approximately $11 / 2$ and $21 / 4$ times that of the complete Lens.

The single combinations will also be found very useful for portraiture, the result obtainable, especiafly for large heads, being much superior to that given by the whole lens.

The "Kram" Convertible Lens is rectilinear, works at F/8, and produces good definition at a large aperture, and is capable of covering the plate well, even when the front is raised, considerably. The single combination may be thoroughly relied on and the lens itself is one that can be well recommended.

PRICES.

| No. | To Cover. | Approximate Focal Length. |  |  | In Mount with Iris Diaphragm. | Mounted in Unicum Shutter. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 2 \\ & 3 \end{aligned}$ | $\begin{aligned} & 41 / \times 3 \times 1 / 4 \\ & 51 / 2 \times 43 \\ & 61 / 2 \times 4 \end{aligned}$ | Whole. $5 \frac{1 / 2}{}$ in. $6 / 2$ in. 9 in. | $\begin{array}{r} \text { Back. } \\ 9 \mathrm{in} . \\ \text { ri in. } \\ \text { x in. } \end{array}$ | Front. 12 in. 141/2 in. 20 in . | $\begin{array}{ccc}\ell & s . & \text { d. } \\ 1 & 15 & 0 \\ 2 & 0 & 0 \\ 2 & 10 & 0\end{array}$ | $\begin{array}{rrr} t & \text { s. } & d . \\ -3 & 0 & 0 \\ 3 & 5 & 0 \\ 3 & 15 & 0 \end{array}$ |

## Lizars' "Challenge" Minor De Luxe Camera.

A Camera of not quite the same


De Luxe Camera showing enormous Front Rise. pretensions as the "De Luxe," although practically possessing all the universal movements of the Swing Front. These include ENORMOUS RISE, GREAT EXTENSION, TILTING OF THE LENS TO ANY DEGREE UPWARDS OR DOWNWARDS AS WELL AS THE EXTENT TO WHICH IT CAN BE SET BACK FOR USE WITH SHORT FOCUS LENSES. This instrument will appeal to many who do not desire the great range of movements which are included in the "De Luxe" (described on preceding pages), yet possessing many of the important features of that instrument.

## "Minor De Luxe" Camera, complete with Unicum Shutter, Brilliant View Finder, Spirit Level, Solid Leather Case, three Double Dark Slides with Aluminium Draw-out Shutters and Focussing Hood.

PRICES.


The $\frac{1}{2}$-plate and $5 \times 4$ are fitted with the No. 2, and the $\frac{1}{2}$-plate with the No. 3 Dallmeyer Lens. Note.-Any make of Lens and Shutter supplied. Prices on application.
Complete Set excepting Lens and Shutter, but including fitting
cutsomer's own Lens and Shutter, supplying and fitting
View Finder and Scaling

| . |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10 | 0 | 5 | 5 | 0 | 6 | 12 | 6 |
| 0 | 4 | 0 | 0 | 5 | 0 | 0 | 6 | 6 |
| 1 | 5 | 0 | 1 | 10 |  | 1 | 17 | 6 |

SPECIAL.-Three Book Form Double Dark Slides will be supplied, in place of those with Aluminium Drawout Shutters, at $10 /$ extra for -plate and $5 \times 4$, and 15 . exira for itplate.

## Lizars" "Ghallenge" Tripio Extension Outfit.

# Half-Plate Camera, Rapid Rectilinear Lens RollerBlind Time and Instantaneous Shutter, 3 -fold Ash Stand and BOOK-FORM DOUBLE DARK SLIDE, for 



SPECIFICATION,
Camers. - Made of the finest Spanish Mahogany with all practical movements including triple extension of 24 inches The extensions are actuated by rack and pinion; the back moves forward on brass guides for the use of Wide Angle lenses. The camera is also provided with square panel front (detachable), swing back, reversing back, extensive rising and swing front, and with substantial turntable in base.
shide, -Double Book. Form, with rabbeted frames, also triple jointed hinge, rabbeted shutters, which is a great preventative from light being admitted in the event of the hinge-cloth getting worn.

Lens.-Is Rapid Rectilinear, of fine quality, working at F/8, and fitted with Iris diaphragm.
Shitter, Is of the well-known roller-blind pattern, which works either time or instantaneous from a 1sth to a goth part of a second, with speed indicator of the latest form, and pneumatic release. The shutter forms part of the front of the Camera, but can be detached when desired.

Stand. -Is 3 -fold, with sliding bottom joint, thoroughly well made, compact and perfectly rigid,

## PRICE AS SPECIFICATION, <br> IN $\frac{1}{2}$ PLATE SIZE ONLY, <br> $N E T T$

With Bausch and Lomb " Unicum" Shutter in place of Roller-Blind Shutter -.. $68 / 6$ nett
With Beck Symmetrical Lens and Roller Blind or Unicum Shutter

With Beck Symmetrical Lens and Roller Blind or Unicum Sbutter With "Challenge" Convertible 3 -foci Lens in Unicum Shutter.. Extra Book-Form Slides, each

.. 70/0 nett
. 75/0 nett


OR WITH THE

## Beck - ....

## Symmetrical Lens

Bausch and Lomb

## Unicum Shutter,

The outfit consists of Camera, book-form double dark slide, Beck Symmetrical Lens, Thornton-Pickard or Bausch and Lomb "Unicum" Shutter and three-fold stand.



NEW SWING FRONT.

## SPECIFICATION.

Camera made of finest Spanish Ma. hogany, moves forward on brass guides, to allow the use of wide angle Lenses, fitted with Turntable, square panel front (detachable), swing back, reversing back, rising front, and long double-extension leather bellows.
slide, Double Book form, has Rabbeted Frames, also Triple-jointed Hinge Rabbeted Shutters.

Lens is Rapid Rectilinear of fine quality, working at $F / 8$, and fitted with Iris Diaphragm.

Shutter, the well-known Roller, blind pattern, time and instantaneouswith speed indicator.
Stand is 3 -fold with sliding bottom joint, thoroughly well made, and perfectly rigid. PRICE of Outfit, as per Specification.

| Particulars. | $\begin{gathered} \text { Size } \\ 4 \frac{1}{4} \times 3^{\frac{1}{4}} \\ \text { t-plate. } \end{gathered}$ | $5 X_{4}$ and $6 \frac{1}{2} \times 4^{\frac{3}{2}}$ iz-plate. | $8 \frac{1}{2} \times 6 \frac{1}{2}$ I/x plate. | $10 \times 8$ | $12 \times 10$ | $15 \times 12$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Complete Outfit as Specification | $\begin{array}{ccc}\text { f } & \text { s. } \\ \text { t2 } & 15 & \\ 0\end{array}$ | $\begin{array}{cccc}\text { E } & s . & \text { d. } \\ 3 & 5 & 0 \\ 0 & 0 & 0\end{array}$ | $\mathrm{f}_{5}^{5} \mathrm{~s} . \mathrm{d}$ d. |  | $\begin{array}{ccc}f & \text { sid } \\ \text { di } \\ \text { if }\end{array}$ | ${ }_{14}^{14}$ s. 0 d. |
| Extra Double Book Slides, each | 080 | 080 | 0126 | 10 | $1 \begin{array}{lll}1 & 4 & 0\end{array}$ | 110 |
| Camera, with Turntable only .. | 118 | 112 | 212 | 410 | 55 | 615 |
| Camera with Turntable and One Double Book Slide only | +1 16 | 200 | 35 | 510 | 9 | 5 |
| Camera with Turntable and 3 -fold Tripod only | +1 15 | 200 | 33 | 5150 | 610 | 850 |
| Camera, with Turntable, Double | 115 | 200 | 33 |  | 610 | 850 |
| Book Slide, 3 -fold Tripod and Roller Blind Shutter only | +2 100 | 216 |  | 79 | 812 | 1016 |
| Brass Binding Camera | 0130 | 015 | 015 | 10 | 13 | 16 |
| Brass Binding Slides, each |  | 5 | 5 | 06 | 060 | 07 |

$\dagger$ Note. The $\frac{1}{4}$-plate Camera is slightly modified in form to closf moreccmpactly and kas no turntable.

## LIZARS" "CHALLENOE" COMBINATION STAND GAMERA.

SPECIFICATION.
Camera, finished in the best style of workmanship, the bellows is varnished cross-grained leather. The back of the Camera moves forwara by means of a pack and pinion, for the use of wide angle Lenses. The baseboard is also extended by rack and pinion. thus giving the advantage of rack focussing for the whole extension. A reversing back, swing back, swing front and Turntable are also fitted.

Stide, double book form, with rabbeted frames also triple jointed hinge rabbeted shutters.
Lens is of the rapid rectilinear form, works at F/8, and fitted with Iris diaphragm.
Shutter Thornton-Pickard bebind Lens, time and instantaneous, with speed indicator.
Stand is three-fold, with sliding bottom joint and spring clips.
Case is of the best waterproof canvas, with shoulder and hand strap attached.
PRICE of Outfit, as per Specification.

| Particulars. | $6 \frac{1}{2} \times 4_{4}^{3}$ t-plate. | $8 \frac{1}{2} \times 6 \frac{1}{2}$ x/x plate. |
| :---: | :---: | :---: |
|  | $f_{5} \mathrm{~s} . \mathrm{d}$ : | $\mathrm{f}_{\text {c }} \mathrm{s}$ d. |
| Complete Outfit as specification Extra Double Book Slides, each | $\begin{array}{llll}5 & 0 & 0 \\ 0 & 10 & 0\end{array}$ | 7100 |
| Extra Double Book Slides, each Camera with Turntable only | 010 210 2 | 0150 |
| Camera with Turntable only ${ }_{\text {a }}$ Double Book Slide only Camera with Turntable and | 210 3 0 | 4 5 |
| Camera with Turntable and Three-fold Tripod only ... . | 2190 | 4186 |
| Camera with Tuntable, Double Book Slide, Three-fold Tripod and Thorr ton-Pickard Shutter only | 470 | 64 |
| Camera with Turntable, Double Book Siide, Three-fold Tripod Thornton-Pickard Shutter, and Mailcloth Waterproof |  |  |
| Case only .. .. .., .. . .. .. .. | 4100 | 690 |
| Extra Lens Panels to fit Shutter, each | 016 | 016 |



## Double Extension. Reversing Back.

This model is designed to provide a camera suitable in every way for Amateur or Professional use. It is equally serviceable for work in the Field, or Studio, and also for Railway, Shipyard and Engineering Photographic work.

The cross-grained varnished Leather Bellows being square, makes the Camera eminently adapted for long or short focus lenses.

The extending baseboard is actuated by solid diagonal rack and pinion, ensuring a steadiness and smoothness of action, not obtainable with the ordinary form of focussing.

A Reversing Back enabling pictures to be taken on either the vertical or horizontal way of the plate is fitted, and the swing back his double motion, this latter can be arranged with rack and pinion adjustment if desired, at a slight extra cost.

The front of the camera has both rising and cross movements, the lens panel being of large size so as to ensure perfect rigidity when using heavy lenses.

The workmanship is of the highest order and substantial, and the materials used throughout of the finest quality.
Camera and Book Form Double Dark Slides are made from selected Spanish Mahogany, and
are handsomely finished.

| Particulars. | $6 \frac{1}{2} \times 4^{\frac{3}{4}}$ $\frac{1}{2}$ plate. | $\begin{array}{cc} 8 \frac{1}{2} \times 6 \frac{1}{2} \\ \mathrm{I} / \mathrm{x} & \text { plate. } \end{array}$ | 10 $\times$ |  | $12 \times$ |  | $15 \times 12$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Camera and 3 Book Form Double Dark Slides .. Extra Double Book Form Double Dark Slides | 7100 | $10 \quad 00$ | 110 | 0 | 130 | 0 | 16150 |
| Brass Binding Camera only .. .. .. .. | $\begin{array}{lll}0 & 17 & 6 \\ 0 & 15 & 0\end{array}$ | $\begin{array}{cccc}1 & 0 & 0 \\ 0 & 15 & 0\end{array}$ | $\begin{array}{ll}1 & 2 \\ 1 & 0\end{array}$ | $\sigma$ | $\begin{array}{rrr}1 & 10 \\ 1 & 7\end{array}$ | 6 |  |
| Brass Binding Dark Slides, each .. | 0050 | 050 | 16 | 0 |  | 0 | $\begin{aligned} & 1126 \\ & 076 \end{aligned}$ |
| Three Fold Tripod Stand | $\begin{array}{lll}1 & 0 & 0\end{array}$ | $1{ }^{1} 50$ | 110 | 0 | 115 | 0 | 200 |
| Rack and Pinion to Double Swing Back ... Lo. ${ }^{\text {Solid }}$ Leather Travelling Case with Spring Loct | 0100 | 0100 | 015 | 0 | 015 | 0 | 100 |
| Camera to hold Camera and 3 Slides | 1100 | 1,15 0 | 25 | - | 35 | 0 | 4100 |
| and 3 Slides in Teakwood in place of Mahogany, extra | 100 | 110.0 | 20 | 0 | 210 | 0 | 300 |



# "Challenge" Model B Stereoscopic Plate Camera FOR PLATES $6 \frac{8}{4} \times 3$ 

Dimensions of Camera when closed:

This Camera has been constructed in two forms-namely, with fixed division in bellows, and with loose division. With the fixed division, pictures either Stereoscopic or Lantern Slide size ( 34 inch square), two on one plate, may be produced, the latter being obtained by capping the one lens and making the exposure with the other. The instrument with the loose division will produce either Stereoscopic Pictures or, by the removal of the division, the Artistic Landscape or Panel Shape, $6 \frac{3}{4} \times 3 \hbar$. For the Landscape size it is necessary to have an extra front panel and a $\frac{1}{2}$-plate lens, which take the place of the stereo shutter and lenses.

## SPECIFICATION.

Camera.-Made in finest Spanish mahogany, either polished or covered in best quality hardgrained leather. Focussing hood, and leather bellows.

Sauttor, - The famous Bausch \& Lomb, which works either time or instantaneous. The two shutters are ever set, and are operated simultaneously by one pneumatic or trigger release.

Shiles. - Three in number double, and of the solid form, with aluminium draw out shutters.
Lenses.- A pair of fine quality rapid rectilinear lenses, with Iris diaphragms, controlled by one lever.

Hider-The new brilliant series, and set as near as possible to show the same view as that given by the lenses.

Fintish-This is carried out with great exactness, and the pictures are fosussed from 6 feet to infinity on a carefully graduated scale.

Special Points-Camera, Lenses, Shutter, Finder, and Focussing Hood all close up together. Rising front and swing back. Focussed by diagonal rack and pinion. Admirably adapted as a Stand Camera, for which purpose bushes are provided. Instantly opened, and immediately set at infinity by the new and improved pull-out front, with quick clamping action.

PRICE as per 'Specification.

| Description of Lenses. | Fixed Division in Bellows. | Loose Division in Bellows. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Fitted with accurately paired Rapid Rectilinear Lenses | E s. d. | E s. d. |  |  |
|  |  |  |  |  |
| Aldis Lenses, Series II., F/6 | 510 <br> 810 <br> 10 |  |  |  |
| Taylor, Taylor \& Hobson Lenses | 912 |  |  |  |
| Ross' Homocentric Lenses, Series C, F/6.3 | 1312 | 1317 |  |  |
| Taylor \& Hobson 'Cooke" Lenses, F/6.5 . | 1312 | 13176 |  |  |
| Ross-Goerz Double Anastigmat Lenses, Series III., F/6.8 1515 |  |  |  |  |
| Note,-Any make of Lenses supplied. Prices on applicatio |  |  |  |  |
| Extra Front Panels for Camera with loose division in Bellows .. .. each |  |  |  |  |
| Extra Double Dark Slides |  |  |  |  |
| Book-Form Double Dark Slides .. <br> "Challenge" Changing Box to carry 6 Plates, with leather bag |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Solid Leather Case, with lock, hand and shoulder straps, lined baize, to hold Camera |  |  |  |  |
| and three Slides <br> Stiffened Maileoth Canvas Case, lined baize, with hand and shoulder straps |  |  |  |  |  |
|  |  |  |  |  |

Note.-A Time Exposure Valve can be fitted to this Shutter, giving the indicated speeds exceedingly accurate.
SPECIAL. - This Camera is also supplied with the Bausch \& Lomb New Variable Speed Automatic Stereoscopic Shutter at an additional cost of $£ 200$.

# LIZARS' "CHALLENGE" MODEL B STEREOSCOPIC FILM AND PLATE CAMERA. 

The Specification of this Camera is similar in every respect to the "CHALLENGE" Model B Stereoscopic Plate Camera described on the preceding page.


For Daylight Loading Films or for Plates, $6 \frac{3}{2} \times 3$. Dimensions of Camera when closed, $11 \times 4 \frac{5}{8} \times 2 \frac{1}{6}$.

## PRICES.

## Description of Lenses.

Fitted with accurately paired Rapid Rectilinear Lenses, F/8 Aldis Lenses, Series II., F/6. Taylor, Taylor \& Hobson Lenses Ross-Homocentric Lenses, Series C, F 6/3 Taylor \& Hobson " Cooke" Lenses, F $6{ }_{5}$
Ross' Goerz Double Anastigmat Lenses, Series III., F/6.8

Fixed Division Loose Division in Bellows. in Bellows.

| t | s. | d. |
| ---: | ---: | ---: |
| 5 | 10 | 0 |
| 8 | 10 | 0 |
| 9 | 12 | 6 |
| 13 | 12 | 6 |
| 13 | 12 | 6 |
| 15 | 15 | 0 |


| E | s. |  |
| :---: | :---: | :---: |
| 5 | 15 | 0 |
| 8 | 15 | 0 |
| 9 | 17 | 6 |
| 13 | 17 | 6 |
| 13 | 17 | 6 |
| 16 | 0 | 0 |

Note.-Any make of Lenses supplied. Prices on application.

Extra Front Panels for Camera with loose division in bellows
Stand Attachment for taking upright pictures
Plate Adapter, Foccussing Screen with Hood and one double dark slide with improved light traps, and Aluminium Draw-out Shutters .. .. .. .. .. each Extra Double Dark Slides
Book-Form Double Dark Slides ... .. .. .. .. .. .. .. each
"Challenge" Changing Box to carry six plates, with leather bag
each 0126

Stiffened Mailcloth Canvas Case, lined baize, with hand and shoulder straps .. $\quad . \quad$. 080
Limp Mailcloth Canvas Case, lined baize, with hand and shoulder straps
Daylight Loading Films ( $3 \frac{1}{2} \times 3 \frac{1}{2}$ spool), 12 exposures
Note.-Only Six Stereoscopic or Panel Pictures can be obtained from the spool, every odd number ( $I, 3,5.7,9$ and $I I$ ) indicates film in position.

These Cameras can be fitted with Lenses by almost every maker. Prices on application.

The attachment (1) to bring the film back to position if overwound, (2) to put a tension on the film, (3) and to wind the film out of the way in the event of the worker desiring to use a plate, can be fitted to the Stereoscopic Film and Plate Camera, Price $7 / 6$.

SPECIAL.-See Note on preceding page regarding Time Exposure Valve, and Bausch \& Lomb New Variable Speed Automatic Stereoscopic Shutter.

# LIZARS" "ChALLENGE" MODEL 1 B STEREOSCOPIC GAMERA. 



This Stereoscopic Camera, of the very best workmanship, is for plates $6 \frac{3}{4} \times 3 \frac{1}{4}$, with loose division in bellows and similar in design to the Model B Stereoscopic Plate Camera. It differs only so far as the shutter, front, and slides are concerned, and with these alterations and extra movements, it may appeal to some stereoscopic workers as more suitable for this particular class of photography. The Shutter is the "Challenge" Focal Plane or the new model Geerz-Anschutz Focal Plane working from $1 / 25$ th to 1/10ooth of a second, or the Thornton-Pickard Behind Lens with adjustable centres, and is built into, and forms part of the camera.

The Focal Plane Shutters are fitted with quick wind and Speed Indicator.
The front (as shown in. illustration) is constructed to give various separations to the lenses, and is fitted with a carefully graduated scale. The panel is detachable.

The three slides supplied are of the best quality Book-form, tongued in well, mitres cross-keyed on surface, rabbeted Frames and Shutters, and with automatic closing springs and automatic Stop Springs to shutters.

## PRICES, as per Specification, Polished or Leather-covered:

| Description of Lenses. | With Thorn-ton-Pickard Behind-Lens Shutter. | With "Challenge" Focal Plane Shutter. | With Goerz Focal Plan Shutter. |
| :---: | :---: | :---: | :---: |
| Fitted with accurately paired Beck Symmetrical Lenses, F/8 | 68100 | t9 0 | £10 10 |
| Aldis Lenses, Series II., F/6 |  | 1010 |  |
| Taylor, Taylor \& Hobson Lenses | 11.2 | 1112 | 13 |
| Ross Homocentric Lenses, Series C., F/6'3 | 152 | 1512 | 17 |
|  | 15.26 | 1512 | 172 |
| Ross-Goerz Double Anastigmat Lenses, Series III., F/6-8 | 175 | 1715 | 19 |
| Dallmeyer Stigmatic Lenses, F/6 |  |  |  |

Note.-Any make of Lenses supplied. Prices on application.

| mera, Shutter and three Book-form Double Dark Slides, ncluding fitting of customer's own lenses, supplying and fitting View Finder and Scaling |  | 0 12 | 910 |
| :---: | :---: | :---: | :---: |
| tra Book-form Double Dark Slides, each | 012 | 012 | 012 |
| Challenge" Changing Box to carry six plates bag | 5 | 150 | 150 |
| Solid Leather Case, with hand and shoulder straps, lock and key, to hold Camera and three Slides |  |  |  |
| Extra Front Panels for Camera, each |  |  |  |
| Brass-binding Camera and three Slides | 17 | 117 | 117 |
| Dimensions of Camera when closed | $\times 5{ }^{\frac{1}{2}} \times 3^{\frac{8}{8}}$ | $8 \frac{1}{2} \times 5 \frac{1}{2} \times 3$ | $\times 5 \times 3$ |



## SPECIFIOATION.

Gamess-Either polished or covered in Morocco leather, Automatic Catch for Slide when entered in Camera, leather Bellows and Focussing Hood.

Shutter - This forms the front of the Camera and is the Thornton-Pickard best quality, it works either time or instantaneous, and has a speed Indicator attached. The Shutter has adjustable centres, and an extra panel is supplied with the outfit to use with a single Lens when making half-plate exposures.

Slider-Three Double book form, tongued in well, Mitres cross-keyed on surface and with Rabetted Frames and Shutters. Will take two sizes of plates, $6 \frac{1}{2} \times 4 \frac{4}{4}$ and $6 \frac{3}{3} \times 3 \frac{1}{4}$.

Lenses. - All the Lenses are carefully tested and selected, and are fitted with Iris D aphragms.
Finder.-Of the New Brilliant Series, and gives approximately the same picture as that shown by the Lenses.

Spegial Feavires - Camera, Lenses, and Focussing Hood all fold up together. Rising Front and Swing back. Adapted for Horizontal and Vertical Pictures. Scale for various distances Automatic Catch which locks the Front at infinity distance. The usual focussing arrangement is provided and actuated by diagonal rack and pinion.

## PRICE, as per Specification.

Fitted with accurately paired Beck Symmetrical Lenses. F/8 .. $£ 1000$
Aldis Lenses, Series II., F/6 .. $\quad 1126$
Taylor, Taylor \& Hobson Lenses.. 1250
Taylor \& Hobson "Cooke" Lenses, $\mathrm{F} / 6 \times 516 \quad 5 \quad 0$

Ross Homocentric Lenses, Series C:, F/6.3

む16 50
Ross Goerz Double Ana stigmat Lenses, Series III, F/6:8
$18 \quad 7 \quad 6$
Dallmeyer Stigmatic Lenses, $\mathbf{F} / 6^{\prime \prime} \quad 19 \quad 7 \quad 6$ For Camera and Shutter only $67 \quad 0 \quad 0$
For Camera, Shutter and three Book-Form Double Dark Slides, including fitting of customer's own lenses, supplying and fitting view finder and scaling.
Solid leather Carrying Case with lock, hand and shoulder straps to hold Camera and 3 Slides,

## LIZARS" "CHALLENGE"

## Reversing Back Stereoscopic or Half-Plate Camera.

This is identical in every respect with the description given above, with the additions of Reversing Back and extra extension.

## PRICES, as per Specification.

Fitted with accurately paired Beck
Symmetrical Lenses paired Beck $\quad 1100$
Aldis Lenses, Series II.. F/6 .. 12.26
Taylor, Taylor \& Hobson Lenses . $\quad 13 \quad 50$
Taylor \& Hobson "Cooke" Lenses F/6 $517 \quad 5 \quad 0$
For Camera and Shutter only
Ross Homocentric Lenses, Series C., F/6.3 $\quad \because \quad . \quad$.. $£ 17 \quad 5 \quad 0$ Ross-Goerz Double Anastigm Lenses, Series III., F/6.8 ... 1976

$$
6800
$$

For Camera, Shutter and three Book-form Double Dark Slides, including fitting of

# LIZARS' "CHALLENGE DE LUXE REFLEX CAMERA. 

The "Challenge" De Luxe Focal Plane Reflex Camera is without doubt the most perfect instrument of the Reflex pattern that has ever been introduced. The greatest thought and care has been exercised to obtain efficiency and compactness in the simplest possible form, ana these efforts have been in every way successful. The camera is built for practical use, and the material throughout is of the highest order; the workmanship is of the finest description, and although in a compact form, rigidity and strength have been in no way sacrificed.
ive
It is particularly suitable for picture studies, portraiture, press work and sporting subjects.
The difficulty of estimating distances is entirely overcome in this type of camera, as the finder, being full size, shows the exact view with the same definition as it will appear on the negative, either horizontally or vertically, and can be focussed right up to the moment of exposure.


The Lenses listed have the scales of apertures engraved on the face of flange collar, and are visible and adjustable from the outside.
A Shoulder Strap is fitted to the camera, which leaves both hands free for manipulation. The focussing gear being on the right and the release button on the left, the hands are consequently always in position at the required moment.

Pocussith is regulated by diagonal rack and pinion, insuring exceedingly easy and fine adjustment.
The Rising and Falling Frout is actuated also by rack and pinion action.
The Reflecting Mirror is silvered on the surface and specially treated to preserve the polish, and shows the image absolutely free from distortion.
The Lever for setting is in close proximity to the focussing pinion head, as shown in illustration, and the action of setting and releasing is perfectly smooth and silent.
The cone, or chamber containing the mirror, is absolutely light tight, so that there is no possible chance of stray light getting at the sensitive plate should the shutter of the dark slide remain open for some little time.
shenter-This is the "Challenge" Focal Plane, which is operated either with the finger or the Antinous non-perishable release. It is fitted with, a quick wind and set with a half turn of the setting handle, so that there is practically no wasted time in preparing for toe next exposure. The speeds of the shutter are from $x /$ oth to $x /$ roooth part of a second, in addition to time exposures as long as desired.
All adjustments are made from the outside, the width of slit or opening of blind is recorded on the dial on the left hand of camera, and this, combined with the tension of the shutter, as tabulated on the speed plate, shows at a glance the rate at which the shutter is travelling without the necessity of any complicated calculation.

A revolving back is fitted to the Camera, so that the plate can be changed from the horizontal to 'the vertical position with the greatest of ease, and in the least possible time. It is not necessary to close the shutter of the slide if you desire to change from one position to another.

## tizars' "CHALLENGE" DE LUXE REFLEX GAMERA.-continacal.

Hood, - The hood is a special feature in this instrument. It stands $81 / 2 \mathrm{in}$, high in the $1 / 4$-plate size, and creates a perfect dark chamber, so that the finest and most accurate focussing can be carried out. It is automa ic in rising and automatic in closing, and is undoubtedly the most perfect hood existing. The hood is also hinged for access to the ground glass for the purpose of dusting and cleaning. The ground glass is easily removed, so that the mirror can also be dusted. Note. - this should be carefully and gently done to avoid damage to the surface of the mirror.

The front panel is automatically opened, and acts as a sun-shade ; when the camera is not in use the lens is carefully protected and free from dust and injury.

The $1 / 4$-plate Camera extends to $10 \frac{1}{2}$ ins., and at that extension bas a solidity which makes it particularly suitable for telephotography.

Hellaws is of real leather, specially cross-grained, varnished, with truncated corners.
There are three Book-form Double Dark Slides supplied with the Camera. They have rabbeted frames and shutters, tongued in well, with automatic closing spings and automatic stop springs to shutters.

A Focussing Screen with hood or protector is also fitted to the back, so that the Camera may be used on a stand equally as well as for hand work.

The exposures are obtained with a sensitiveness of pressure for the release of the mirror and shutter, which minimises the risks of vibration when taking a picture.

The many points of vantage cannot be adequately expressed, but to any one who has been accustomed to handling a camera of this type the points of perfection will appeal to them as a revelation in camera construction.

Price as per Specification, with three Best Quality Book.form Double Dark Slides.

| Particulars of Lens. | $4 \frac{1}{1} \times 3^{\frac{1}{4}}$ ( 1 -plate) | $5 \times 4$ | $6 \frac{1}{2} \times 4{ }^{\frac{3}{4}}$ ( $\frac{1}{2}$-plate) |
| :---: | :---: | :---: | :---: |
| Aldis Lens, Series II, F/6 |  | £17 50 | 21 |
| oss Homocentric Lens, Series C | 61510 | $7 \frac{1}{4}$ inch Lens 191000 | $8 \frac{1}{2}$ inch Lens $2400$ |
| Taylor \& Hobson "Cooke" Lens, Series III., F/6.5 .. | 6 inch Lens <br> 1600 | $\begin{aligned} & 7 \text { inch Lens } \\ & 20000 \end{aligned}$ | $8 \frac{1}{2}$ inch Lens 23150 |
| Zeiss "Tessar"Lens, F/6*3 | $\begin{aligned} & 6 \text { inch Lens } \\ & 161500 \end{aligned}$ | $7 \frac{1}{2}$ inch Lens $2100$ | $\begin{aligned} & 8 \frac{1}{2} \text { inch Lens } \\ & 25100 \end{aligned}$ |
|  | 6 inch Lens | 7 inch Lens | $8 \frac{1}{2}$ inch Lens |
| oss Homocentric Lens, Series B, F/5 ${ }^{\circ} 6$ | $1700$ | 2100 | 825100 |
| Zeiss "Unar" Lens, Series xB, F/5 . | $17 \quad 00$ |  | $2600$ |
| Goerz Double Anastigmat Lens, Series III., F/6'8 | $1750$ |  |  |
| Zeiss "Protar" Convertible 2-Foci Lens, Series | 6 inch Lens 201500 | inch Lens 23150 | $8 \frac{1}{4}$ inch Lens 28150 |

Lenses by other makers.
Prices on application.

| Camera and three Book-firm Donble Dark Slides Extra Book-form Double Dark Slides, ea h | $\begin{array}{rrr} 12 & 0 & 0 \\ 0 & 9 & 0 \end{array}$ |  | 09 |  | $\begin{array}{rrr} 18 & 0 & 0 \\ 0 & 10 & 0 \end{array}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |
| "Challenge" Changing Box with leather bag, for 6 plates | 018 | 1 | 2 |  |  | 5 | 0 |
| Daylight Cartridge Film Holder, including fitting to Camera | 13 |  | 3 |  |  | 11 | 0 |
| Solid Leather Case, with lock and key, hand and shoulder straps, to hold Camera and three slides .. | 18 | 1 | 7 |  |  | 12 | 6 |

Customers' own Lenses fitted from $5 / 0$ to $10 / 0$ extra.
Size of $1 / 4$-plate Camera only, $73 / 4 \times 71 / 4 \times 53 / 4$.

## LIZARS' <br> "Challenge" Focussing Magazine Cameras. 12/- $60 /-\&>0 /=$



THE "Challenge" Focussing Magazine Camerasarethoroughly well-made of the best seasoned material and carry 12 plates or 24 Films.

The changing arrangement is simple and efficient, with an automatic indicator showing the number of plates exposed. An important feature in connection with this Changer is that the Sheaths may be inserted in any order.

The Cameras are fitted with the latest form brilliant view finders, showing the image the correct way up. Focussing is actuated by rack and pinion, and the various distances at which the lens is in focus, are accurately engraved on a disc on the outside. Two bushes are fitted for the horizontal and vertical ways of the picture.

No. 1 MODEL. Fitted with Superior Quality Rapid Rectilinear Lens working at F/8, and Bausch \& Lo b "Simplex" Automatic Shutter, giving time and Instantaneous exposures. Complete for $\frac{1}{4}$-plates $\left(4 \frac{1}{4} \times 3 \frac{1}{4}\right)$

$$
42 /-
$$

No. 2 MODEL. Fitted with "Beck"Symmetrical Lens F/8, with Iris diaphragm, and the well-known Bausch \& Lomb "Unicum" Shutter giving exposures to $\frac{1}{100}$ th of a second. Complete for $\frac{1}{4}$-plates $\left(4 \frac{1}{4} \times 3 \frac{1}{4}\right)$
No. 3 MODEL. Fitted with "Beck" Symmetrical Lens, and Bausch \& Lomb Unicum Shutter Superior finish throughout.
Complete for $\frac{1}{4}$-plates ( $4 \frac{1}{4} \times 3 \frac{1}{4}$ )
(Also fitted with Lenses of other makes).
Extras. Best Limp Canvas Case, with Shoulder Strap..


# Lizars' "Challenge" Hand Camera. Model $C$. <br> <br> Specification. 

 <br> <br> Specification.}

Camera, -Either polished or covered in Morocco leather, best quality leather bellows, and focussing hood.

## Shutter. Is the famous Bausch \& Lomb Unicum.

Finder - Latest improvement of the new brilliant form.

Slides, - Three double book form, on the latest principle ; tongued in well; and with rabbeted frames and Shutters.

Special Foatures, -Camera, lens, finder, and focussing hood all fold up together ; rising and cross front for horizontal and vertical pictures; swing back; instantly opened and front pulled out on brass guides, and securely fixed at any position with quick actir \&clamping screw; automatic catch which locks front at the infinity distance ; the usual focussing arrange. ment is provided and actuated by diagonal rack and pinion. Scaled for various distances; as a
stand Camera it is perfect.

Finish,-Most beautiful work throughout, with great exactness.
PRICE as per Specification.

| Fitted with |  | $\begin{array}{c\|c} \text { Size } & \\ 1 / 4-\text { plate } & 5 \times 4 \\ 4 / 4 \times 3^{1 / 4} . & 5 \times \end{array}$ |  |  | $1 / 2$-plate$61 / 2 \times 4^{3 / 4}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The "Challenge" Beck Symmetrical Len Aldis Lens, Series II, F/6 |  | 6440 | ¢4 15 | 0 | $\Varangle 510$ |  |
| Taylor, Taylor \& Hobson Lens |  | $5 \begin{aligned} & 5 \\ & 5\end{aligned}$ | 518 |  |  |  |
| Ross Symmetric Anastigmat Lens |  | 5150 | 65 | 0 |  | 0 |
| Ross Homocentric Lens, Series C, F/6 ${ }^{\circ}$ |  |  | 75 | 0 | 90 | 0 |
| Taylor and Hobson "Cooke" Lens, F/6. ${ }^{\text {. }}$ |  | 80 8 0 | 90 9 |  | 1015 | 0 |
| Ross Goerz Double Anastigmat Lens, Series III., F/6\%8 |  | 8 9 | 9 10 10 | 0 | 1015 | 0 |
| Dallmeyer Stigmatic Lens, F/6 .. ... .. |  | 9100 | 100 | 0 | 1210 |  |

Notr. - The Dallmeyer Lens included in the above price is No. 2 for $\ddagger$-plate,
No. 2 for $5 \times 4$, and No. 3 for $\frac{1}{2}$-plate.
Camera only
Camera and three Double Book Slides, including fitting customer's own Lens and Shutter, supplying and fitting Extra Double Book Slides, each... ... .. ..
"Challenge" Changing Box with leather bag, for 6 plates
Do. do.
for 12 Plates ..
Daylight Cartridge Film Holder including fitting to Camera, and interchangeable with Dark Slides
Brass-binding Camera and three Slides
Wide-angle Lens in Cells and interchangeable with the Lens fitted to the Bausch and Lomb Shutter, in leather case
Solid Leather Case, with Lock, Hand. Shoulder and Cycle Straps, to hold Camera and three Slides
Do. do. to hold Camera and six Slides..

| $£ 2$ | 0 | 0 | $E 2$ | 7 | 6 | $£ 3$ | 15 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| 3 | 10 | 0 | 4 | 0 | 0 | 4 | 10 | 0 |
| 0 | 9 | 0 | 0 | 9 | 6 | 0 | 10 | 0 |
| 0 | 18 | 6 | 1 | 2 | 6 | 1 | 5 | 0 |
| 1 | 2 | 0 | 1 | 6 | 6 | 1 | 6 | 6 |
| 1 | 3 | 0 | 1 | 3 | 0 | 1 | 11 | 0 |
| 1 | 2 | 0 | 1 | 5 | 0 | 1 | 10 | 0 |
| 1 | 2 | 6 | 1 | 2 | 6 | 1 | 5 | 0 |
| 0 | 10 | 6 | 0 | 13 | 0 | 0 | 16 | 0 |
| 0 | 12 | 0 | 0 | 15 | 0 | 0 | 18 | 0 |



This model combines in the one apparatus a Camera of great portability and general usefulness. It is not so small as the Model "C " described on preceding page but, as it is fitted with a reversing back and a long double extension baseboard will probably find favour with those desiring a Camera having a greater range of movements, and who donot object to a little additional bulk.

## SPECIFICATION.

Camera. - Either polished or covered in Morocco leather, leather bellows and focussing hood.
shutter.-Is the famous Bausch and Lomb Unicum.
Pinder. - Latest improvement of the new Brilliant form.
Slides, - Three double book form, on the latest principle; tongued in well, and with rabbeted frames and shutters.

Spedial Feateres:-Camera, lens, finder, and focussing hood all fold up together; rising and cross front and reversing and swing back, automatic catch, which locks the front at infinity distance. The usual focussing arrangement is provided and actuated by diagonal rack and pinion. Scale for various distances; as a stand Camera it is perfect.

Finish-Must beautiful work throughout, with great exactness.
Lenses-All the lenses supplied with these Cameras are carefully selected and tested.

## PRICES as per Specification.



Note. - The Dallmeyer Lens included in above price is No. 2 for $\frac{1}{4}$-plate, No. 2 for $5 \times 4$, and No. 3 for $\frac{1}{\frac{1}{2} \text {-plate. }}$

|  | $\frac{f}{2} 15$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Camera and three Double Book Slides, including fitting customer's own lens and shutter, supplying and fitting View Finder and Scaling | 450 | 415 | 0 | 10 |  |
| Finder Double Book Slide | 090 |  |  |  |  |
| Challenge" Changing Box with leather bag, f | 0186 |  |  |  |  |
| Do. Do. Do. for 12 plates |  |  | 6 |  |  |
| Daylight Cartridge Film Holder, including F and interchangeable with Dark Slides |  |  |  |  |  |
| ass-Binding Camera and Three Slides |  |  |  |  |  |
| lid Leather Case, with hold Camera and 3 Sli | 010 |  |  |  |  |
| Do. to hold Camera and 6 Slid | 012 | 015 |  | 0 |  |

## LIZARS? <br> "Challenge" Postcard Plate Camera

## For Plates $5 \frac{1}{2} \mathrm{in} . \times 3 \frac{1}{2} \mathrm{in}$.



Camera, - Either polished or in Morocco grained covering, and fitted with fine quality of leather bellows.
Shutter, - Bausch \& Lomb's "Unicum."

- Lenses, - Are all carefully tested before fitting to the Camera.
Sitdes - Three Double Dark Solid Slides with Aluminium Draw-out Shutters.

Finder:-Of improved brilliant form, with revolving mask, for horizontal and vertical pictures.

- Principal Adivantages.-The Lens, Shutter, Finder, and Focussing Screen all contained within the Camera when folded up; fitted with two bushes, makıng it suitable for stand as well as hand work; instantly opened, and front pulled forward on brass guides, and securely fixed at any position by means of quick acting lever; graduated lens scale, and leather handle.
Prices, as per Specification.


Extra Double Dark Slides, each

Ross HomocentricLens,Series C, F/6.3 $£ 8 \quad 26$ Taylor \& Hobson "Cooke" Lens, F/6'5 $8 \quad 2 \quad 6$
Ross-Goerz Double Anastigmat Lens, Series III., F/6:8
NOTE. - With single valve Automatic Shutter and Rapid Rectilinear Lens

3126

Double Extension Baseboard, actuated by diagonal rack and pinion, extra $£ 0150$ Solid Leather Case, to hold camera and three Slides

0106
Dimensions of Camera when closed 7 in. $\times 5 \times 2 \frac{1}{6}$
Weight of Camera, including Lens, Shutter, Finder and Focussing Screen .. 27 ounces

## LIZARS" "GHALLENGE" GAMERA: MODEL K. <br> EXCEPTIONAL VALUE,

CAMERA:-Either polished or in Morocco grained covering.

Shutter:-Bausch and Lomb single Valve "Automatic," giving Time and instantaneous Exposures, and fitted with Iris Diaphragm.
Lens:-A fine quality Rapid Rectilinear Lens, giving splendid definition.
Slides. -The Double Dark Slides possess secure light traps, and are fitted with Aluminium Draw-out Shutter.
Finder, -Of the brilliant type, fitted with rotating wheel, shewing the horizontal and vertical view.


PRICE, as per Specification.

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## LIZARS' <br> CHALLENGE" HAND CAMERA: MODEL H.

## ABSOLUTELY A POCKET CAMERA.

## The Smallest $\frac{1}{4}$-Plate Camera on Record.

## Thoroughly Efficient and Reliable.

 Casera is mace of the best Stanish mahogany, with leather bellows. Sh ${ }^{\text {Shtiter }}$ - Bausch and Lomb's "Automatic" Metal Shutter, and works for either time or instantaneous exposures.Frillder fiant form. of the usual
ber
Leqseds - The Lenses supplied with these Cameras are of excellent quality, and give fine definition.
Silides. -Three in number, double, and of the solid form, with aluminiuin draw-out shutters, but on a new and improved principle. The Light Traps, which are fitted to the Slides, are an entirely new device, making
 them equal to the best Book Form pattern.
Special Feritures. - Compactness-Camera and Slides being easily accommodated in an ordinary coat pocket. Instantly opened, and immediately set at infinity. Bushes are let into the body of the Camera so that it may be used with a stand.

Prices, as Specification.
1.-plate, with high-class Achromatic View Lens..

With Bausch \& Lomb's "Unicum" Shutter and the "Challenge Beck Symmetrical Lens
Solid Leather Case, to take Camera and Three Slides .. .. .. .. .. .. ... 0 o 66

Dimensions of Camera when closed $53 / 8 \times 41 / 4 \times 7 / 8 \mathrm{in}$. thick. Weight of Camera and Three Slides including Lens, Shutter, and Finder, is in oz.


Actual size of $\frac{1}{4}$-plate Box to hold Six, $47 / 8 \times 33 / 4 \times I^{1 / 8}$ inches. !

The advantages claimed for this box are simplicity, durability, cheapness, and absolute perfection in the changing arrangement. There are no mechanical appliances or springs to go wrong, the whole working being so simple as to preclude the possibility of a plate sticking when the box is in use, the plate being in perfect register during exposure. The plates are carried in metal sheaths, with an improved indicator for showing the number of plates exposed.

Price, complete with sheaths for plates fitted to my own Cameras.
With leather
$\frac{7}{4}$-plate (to carry 6 plates or films), $6018 \quad 6$ 7.plate
$6^{2} \times 2$

Fitting to Cameras other than my own make $2 / 6$ each extra.
When using films one glass plate must be placed at the back of the last sheath to ensure rigidity and to prevent the springs buckling the films.


Simple, Reliable and Durable.

All adjustments from the outside.
The smallest Focal Plane Shutter Man ufactured.
Slit adjusted when blind is at any Position in the daylight opening.
Instantaneous exposures can be given when slit is same size as daylight opening.
Greater range of Speeds than on any other shitter.
The widths of slit and corresponding speed of shatter shown on outside indicators.
Time exposures as long as desired.
Vibration reduced to a minimum.
Pneumatic and Finger release.
Shutter set by a half turn of Winding Key.
THE "CHALLENGE" FOCAL PLANE SHUTTER,
consisting of a roller blind with adjustable opening, can be fitted to any make of Camera. The dark slides or plate holders then fit into the back of shutter.

This type of shutter is the best for successfully pbotographing quickly moving objects, such as Herses jumping and galloping, flying birds, men diving or running, yachts sailing, all kinds of sports. \&c.
By means of the adjustable slit in the blind exposures ranging frem $x$-roth of a second up to 1-roooth of a second can be given, as well as time exposures of any duration, thus making the shutter useful for all kinds of work.
By a simple arrangement of the adjustable slit numbers and speed indicator, the speed of the shutter is shown at a glance on reference to the tablet fixed to the side of the shotter.
A charge of from 5s. to ros, is made for fitting to the camera according to the size of shutter and the amount of work necessary.



To fit a lens hood or tube up to No. 1 Pattern
No. 2 Pattern (behind lens form)
Extra Lens panels for behind lens shutter, each
Extra pneumatic balls and tubes each

## The "Cballenge" Time and Instantaneous Sbutter.

This shatter is of the well-known roller-blind pattern, and may be used for either time or instantaneous exposures.
The speed is variable, from $1-15$ th to $1-9$ oth part of a second. Time exposures of any duration may also be given by regulating the pressure upon the pneumatic release.

The shutter is simple in acrion and reliable in construction, with absolutely no vibration.

Two patterns of the "Challenge" shutter are supplied -No. 1 to fit on to the hood or body of the lens, and No. 2 to attach direct to the camera front, the lens flarge being mounted upon a loose lens panel on the front of the shutter.
Prices for shutter complete with speed
indicator and ball and tube
release.

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## Lizars' "Challenge"

 Periect Enlarging

The "Perfect" Enlarging Lantern has been designed and constructed to fulfil all the requirements necessary for obtaining the most satisfactory results. The woodwork is of the finest Spanish Mahogany, substantially and thoroughly well made and nicely polished. The Lantern body is of Russian Iron with well fitting cone over the condenser. The front is quickly pulled out, working in telescopic tubes, nicely fitted, with absolutely no shake, therefore securing perfect rigidity at the greatest extension.

The Condenser is double plano-convex, mounted in solid Brass cells, of British Manufacture, and constructed from the best optically worked glass.

The Portrait Lens is fitted with rack and pinion for fine adjustment or focussing, and supplied with Waterhouse diaphragms and orange glass cap. All the Lenses fitted to these Enlargers are carefully selected and tested.

The Carrier or negative holder is reversible, and can also be angled and held in position by a binding screw, which enables any irregularity or fault in the negative to be corrected when enlarging.

The Lantern is supplied either for Incandesent Gas or with Duplex Oil Burner, and altogether is a substantial, well considered and up-to-date instrument.

## Prices as per Specification.

No. 1. To Enlarge from $\frac{7}{5}$-plate, $5 \frac{1}{2} \mathrm{in}$. Condenser, complete with Lens
No. 2. To Enlarge from $5 \times 4,6 \frac{1}{2}$ in. Condenser, complete with Lens
No. 3. To Enlarge from $\frac{t}{6}$-plate, $8 \frac{1}{4} \mathrm{in}$. Condenser, complete with Lens

## A practical

 Enlarging Lantern in polished Mahogany, with bellows and extending front, and rack and pinion focussing. Rising front for adjustment of Lens. Perfectly light-tight Russian iron body and carrier, to take negatives vertical or horizontal, can be used with any illuminant.The $5 \frac{1}{4}$-inch is fitted with blocks so as to take an ordinary carrier for projecting Lantern Slides. $5 \frac{1}{2}, 6 \frac{1}{2}, 8 \frac{1}{2}$ condensers are the smallest sizes that will cover $\frac{1}{4}, 5 \times 4$, and $\frac{1}{2}$-plate respectively. PRICES, first quality.

Polished Mahogany Enlarger with rack and pinion No. 1-Condenser Carrier, Tray and Cowl
No. $2-$ Ditto, with Incandescent Outfit
No. 3-Ditto, with Portrait Lens, or R.R. Lens, with yellow glass cap for focussing


## Cheaper quality, also wath rack and pimon movement.




## For use

 with ordinary Photosraphic Cameras.
# LIZARS PRISM BINOCULARS. "The Radiant." 


and light weight are characteristic features of the "Radiant
Price, in best solid leather case, with shoulder straps-
To magnify 6 times, weight 17 ozs, price objectives it is claimed for the "Radiant" Binoculars that the illumination is double that of any other form.

## Adjustments:-

The focussing is manipulated by the usual screw adjustment so familiar in the older form of Field Glasses, but with this important addition; that, should the eyes be of different strength, an independent movement is used so that perfect coincidence of Focus is obtained. The varying width between the eyes is accommodated for by means of a central joint which, working on a divided scale, can be fixed when the proper distance has been found.

## Construction:-

Bars and bodies are formed out of one extremely hard alloy of aluminium, there are therefore no screws or parts to become loose, and it is rendered almost impossible for the glass to get out of adjustment.

Elegant design, perfect mechanical and optical construction, portability Prismatics. .. .. .. .. £7,58.


## THE "IZAR"

## Unprecedented value.

These glasses are of finest quality and combine all the essential features of a good instrument, high powers, large and well illuminated field of view, small size, light and portable.

For those desirous of having a first class instrument at a moderate price, they are unrivalled.

To magnify 6 times, in best solid
leather case, $\because £ 410 \mathrm{~s}$.
To magnify 8 times, in best solid leather case, $\cdots . \quad \$ 4 \mathbf{1 5 s}$.


The "Range" Field and Marine Glasses are constructed on an entirely new principle, and supersede in power and definition all other forms of Binoculars.

## Important Advantages.

## Great Magnifying

 Power. -The magnifying power of the best ordinary Field Glass is four diameters, rarely exceeded, and generally, below that estimate. The "Range" Glasses magnify 6,8 , and 11 times.
## Focussing Arrange-

 ment.-The focussing arrangement is a novel one, and does away with the trouble of focussing each time the glass is used. When the "Range" Glasses are once focussed they require no further attention, and are at any time ready for use without re-adjustment. This very great desideratum will be at once apparent to Military Men, as well as to Sportsmen and Tourists. They are exceedingly portable and light, and are in all respects of the best quality.

If mounted in Aluminium instead "of Brass, thus reducing the weight one half, $45 / ., 75 /$., $95 /$-.
a These glasses have been taken in preference to all others for Military and Sporting purposes. I now make the 8 and in times Glasses with an adjustable centre bar, so tnat varying widths between the eyes of different users can be accommodated for. Price, ro/- extra.

## LIZARS' "CHALLENGE" TELESCOPE,



This instrument is of entirely new design, giving the maximum of power in the minimum of bulk. It is made in hardened German silver, which makes it much lighter than if in brass, indeed just about half the weight. It is much to be recommended for general sporting purposes, and for deer-stalking it has been specially designed.

The object glass is $2 \frac{1}{4}^{\prime \prime}$ in diameter, thus allowing for a large volume of light, making the instrument a capable one for use in dull weather. It is very beautifully finished throughout, and will stand an immense amount of exceedingly hard wear.
The magnification is 30 diameters.
It is sent out complete in Solid Leather Case with Shoulder Strap, and is in every respect a handsome as well as an excellent Telescope. Price $\mathbf{8} 6$ 6s.


[^0]:    $\downarrow$ Plate Size, with one Slide Complete
    £1 76

