# Goods Shipped to all parts of the World. 

II
$\qquad$

## $w$

## a. buchar

## PHILADELPHIA

> General Agent Tor the Sale of
Platinotype I laterked in the United States.

the sale of

1993
American Agent for Percy Lind \& Co. Bradford \& london, England.

Do not mutilate this Catalogue. If you have no use for it, or have received a Duplicate Copy, notify us and we will remit stamps for its return.

## NOTICE.

THE following pages contain a list of Staple Goods and Novelties of interest to the photographer, both professional and amateur. The prices quoted are in accordance with present terms, and are subject to change without notice.

## TERTIS:

Thirty days' credit will be given when satisfactory reference accompanies the order.

Our cash discount on all bills paid within io days from date of shipment is 2 per cent.

In all cases where parties are unknown to us, money must accompany the order.

When goods are ordered C. O. D., a remittance sufficient to cover the express charges both ways, is expected.

On all C. O. D. orders, amounting to $\$ 10.00$ or over, no charges for the return of the money will be made. On orders of a less amount such charges will be added to the amount of bill.

No charge for boxing, except on Accessories, Trays and Glassware Cartage charged at cost.
We pack our goods with the utmost care, and can assume no responsibility for breakage in transit.

We ship goods promptly, and being in the great centre of supply, are enabled to get at once any new goods that may be introduced.

Do not send money by mail. A Post Office or Express money order is safest, or a certified check or Bank draft. When neither of these can be conveniently procured, money can be sent by Express with safety.

Experienced hands in every department, and a trial order will convince you that ours is the best house from which to purchase Photographic Supplies in the United States.
CORRESPONDENCE SOLICITED.
Yours truly,
W. P. Buchanan,

January, 1893.

## Greeting.

## To Our Friends :

)HILADELPHIA today is the best Photographic Supply Market in the United States. More than eight year 3 ago we saw the necessity of establishing here a FirstClass Photographic Supply House. In 1884 this necessity became a fact under the firm name of Buchanan, Smedley \& Bromley, who were succeeded in 1887 by Buchanan, Bromley \& Co., and on March dst, 1892, by the undersigned.

To-day there is no better equipped Photographic Supply House in the World. The advisability of having a complete. Illustrated Catalogue of our goods became apparent, and we now, therefore, take pleasure in handing you this complete Illustrated List. Please accept the same and give it room either on your desk or in your library. It will save you money every day.

We need offer no apologies for the history of the retiring firms -but wish to thank you, one and all, for your kind and liberal patronage in the past, and sincerely hope we have merited your confidence, and that we may still enjoy a share of your patronage in the future.

Our policy shall be liberality, as far as consistent with business principles. Our prices will always be the lowest market rates, and any order you may entrust to us will be attended to with care and ability.

Yours truly,

## W. P. Buchanan.

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## RAPID RECTILINEAR AND WIDE ANGLE LENSES <br> IMPORTED BY <br> W. P. Buchanan, <br> \section*{PHILADELPHIA.}

This List Cancels All Previous Quotations.
Please take Notice.-Upon receipt of price we will send to any address in the United States or Canada any of our Lenses on approval. After giving them a fair trial, if they are not perfectly satisfac tory, we will return the amount paid, upon receipt of Lens if returned in good condition within to days from date of invoice. Lenses lept on trial longer than time named above, will not be accepted if returned. Parties returning Lenses, must prepay all express charges on the same.


| No. | Size of Plate. |  |  |
| :---: | :---: | :---: | :---: |
| I | 4 | X | 5 |
| 2 | 5 | x | 7 |
| 3 | 5 | X | 8 |
| 4 | $61 / 2$ | X | 81/2 |
| 5 | 8 | X | 10 |
| 6 | IO | X | 12 |
| 7 | 12 | X | 14 |
| $71 / 2$ | 14 | X | 17 |
| 8 | 17 | X | 20 |
| 9 | 20 | X | 24 |

## THE LECLAIR LENS.

This is a very rapid-working Lens. It has great depth of focus, and is perfectly rectilinear. For portraits, groups, architecture and copying, it has no equal, even among the socalled "high-priced Lenses." It is the best Lens in the market for instantaneous work.


## THE AJAX LENS.

Next to the wonderful Leclair, we recommend the Ajax Lens. It is also rectilinear, perfectly aplantic, and for parties wishing a general indoor and outdoor Lens, at a reasonable price, "it is just what they want."


| No. | Size of | Plate. |
| :---: | :---: | :---: |
| 10 | 4 | X 5 |
| 1 I | 5 | $x \quad 8$ |
| 12 | $61 / 2$ | X $81 / 2$ |
| 13 | 8 | X 10 |
| 14 | 10 | X I 2 |
| J 5 | I I | $\times 14$ |


| Diameter of Lens. | Back Focus. | Price. |
| :---: | :---: | :---: |
| $11 / 8 \mathrm{in}$. | 53/4 in | \$9 00 |
| I $1 / 4$ 6 | $71 / 26$ | 1000 |
| I 5/8 '6 | $93 / 4$ | 1500 |
| I $\frac{1}{1} \frac{1}{6}$ 6 | $10 \quad 6$ | 1800 |
| 2 | $15^{1 / 4} 46$ | 2500 |
| 21/8 ${ }^{6}$ | 18 6 | 3500 |

## THE AUSTRIAN WIDE ANGLE LENS.

Designed for working in confined localities, interiors, etc. Possesses an angle of about $90^{\circ}$. Revolving stops. A first-class Lens.
No.
16
17
18

| Size of Plate. |  |
| :---: | :---: |
| $4 \times$ | 5 |
| $5 \times$ | 8 |
| 8 | X |

Diameter of Lens
$11 / 8 \mathrm{in}$.
$1 \frac{5}{16} 66$
$13 / 8$
Back Focus.
$43 / 4$ in.
$53 / 4$
$71 / 2$
76

Price.
\$I2 20
I5 00
2000


## STEINHEIL PATENT ANTIPLANETIC GROUP LENS.

Designed for Portraits, Groups, Architecture, Landscape, Instantaneous Work and Enlargements.


| No | Apert. Inches. | Focal Length Inches. | Size of Portrait or Group Inches. | Size of View or Landscape Inches. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| O | $3 / 8$ | $17 / 8$ | $15 / 8 \times 15 / 8$ | 2 x 2 | \$1800 |
| I |  | 33/4 | $31 / 4 \times 31 / 4$ | $4^{1 / 4} \times 31 / 4$ | 2100 |
| * 16 |  | 47/8 | $4^{1 / 4} \times 3^{1 / 4}$ | $41 / 2 \times 33 / 4$ | 2500 |
| 2 | 1 | 55/8 | $41 / 2 \times 33 / 4$ | $5 \times 4$ | 2800 |
| * $2 b$ | $\mathrm{I}_{1}{ }^{3} 6$ | $61 / 2$ | $5 \times 4$ | $51 / 2 \times 43 / 4$ | 33 oo |
| 3 | $1 \frac{5}{16}$ | $71 / 4$ | $5^{1 / 2} \times 4^{1 / 4}$ | $7 \times 5$ | 37 00 |
| 4 | $1 \frac{1}{1}$ | $91 / 2$ | $7 \times 5$ | $81 / 2 \times 61 / 2$ | 48 00 |
| 5 | $17 / 8$ | 107/8 | $81 / 2 \times 61 / 2$ | 10 x 8 | 60 00 |
| 6 | $21 / 2$ | $141 / 8$ | IO $\times 8$ | $12 \times 10$ | 9500 |
| 7 | $3 \frac{1}{16}$ | $173 / 4$ | $12 \times 10$ | $15 \times 12$ | 14000 |

* Special Detective Camera Lenses : No. $\mathbf{I} b$ for plates, $41 / 4 \times 31 / 4$; No. $2 b$ for plates, $5 \times 4$.

Nos.o to 3 are made in matched pairs for Stereo Work.

## STEINHEIL APLANATIC LENS.

20. Designed for Portraits, Groups, Architecture, Landscape and Instantaneous Work.
 $91 / 2$ inches.

## STEINHEIL RAPID WIDE ANGLE APLANAT.

Angle about $75^{\circ}$ and covering a larger field than the lenses of Series III. Effective aperture about f. $\mathbf{I O}$.


STEINHEIL EXTREME WIDE ANGLE APLANAT.

| No. | Aperture Inches. | Focal <br> Length. <br> Inches. | Size of Sharp Picture. Inches. | Price. |
| :---: | :---: | :---: | :---: | :---: |
| I | $\frac{3}{16}$ | $33 / 4$ | $5 \times 5$ | \$26 00 |
| 2 | $\frac{5}{16}$ | $43 / 4$ | $7 \times 7$ | 30 00 |
| 3 | $\frac{7}{16}$ | $71 / 4$ | 101/4 $\times 101 / 4$ | 4200 |
| 4 | 9 | 103/8 | $121 / 4 \times 121 / 4$ | 6100 |
| 5 | $\frac{1}{16}$ | 16 | $181 / 2 \times 181 / 2$ | 9300 |

The proportionately short focus and large angle (about $\mathbf{r o o}^{\circ}$ ) of these lenses make them particularly adapted for Interiors, Architecture and for very high, broad objects taken from short distances.


STEINHEIL WIDE ANGLE APLANAT FOR COPYING.


| Size of Sharp <br> Picture. |  |
| :---: | ---: |
| Inches. | Price. |
| $10 \times 10$ | $\$ 7500$ |
| $13 \times 13$ | 10500 |
| $17 \times 17$ | 14500 |
| $20 \times 20$ | 21000 |
| $24 \times 24$ | 32000 |
| $28 \times 28$ | 54000 |
| $34 \times 34$ | 76000 |

Designed specially for Copying Maps, Charts, Drawings, Paintings and Engravings and Photo-mechanical work generally.


* These Lenses are supplied accurately paired for Stereoscopic purposes.

The first ten of the series, having their screws alike, fit into the same flange, and are so very light and portable that they can conveniently be transmitted by post. Nos. II and 12 fit into the same flange.

Nos. I to 8 have Rotating Diaphragms.
Nos. 9 to 12, Waterhouse Diaphragms.
Or any of the series are supplied with Ross' Improved "Iris" Diaphragm without any increase in the outside dimensions of the Body Tube.

## ROSS' RAPID SYMMETRICAL LENSES.

| Size of View. | Size of Groups. |  | eter of ses. | f Equiv. Focus. | With Waterhouse Diaphragm. | Aluminium Settings. | Extra for Iris Diaphragm. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 \times 3$ | . . . . . . |  |  | 3 inch. | \$28 00 | \$36 00 | \$400 |
| * $31 / 4 \times 41 / 4$ | Stereo. | $3 / 4$ | ، | $4^{1 / 2}{ }^{\prime \prime}$ | 3200 | 4160 | 400 |
| * $4 \times 5$ | $31 / 4 \times 41 / 4$ | 1 | 6 | 6 " | 3400 | 4440 | 400 |
| $5 \times 6$ | $4 \times 5$ | $1 \frac{1}{10}$ | ' | 71/2" | 4200 | 5280 | 4 on |
| $5 \times 8$ | $41 / 2 \times 71 / 4$ | $13 / 8$ | ، | 9 " | 46 00 | 5760 | 500 |
| $61 / 2 \times 81 / 2$ | $5 \times 8$ | $11 / 2$ | " | 101/2" | 5200 | 6560 | 560 |
| $7 \times 9$ | $61 / 2 \times 81 / 2$ | 13/4 | " | 12 | 6000 | 7360 | 600 |
| $8 \times 10$ | $7 \times 9$ | $17 / 8$ | " | 14 | 6800 | 84 co | 700 |
| IO $\times 12$ | $8 \times 10$ | 2 | ، | 16 | 84 00 | 11200 | 840 |
| $11 \times 13$ | 9 XII | 2 1 / $/$ | 6 | 18 | 9200 | 13200 | 1000 |
| $12 \times 15$ | II XI 3 | $21 / 2$ | " | 20 | 11600 | 16400 | 1200 |
| $16 \times 18$ | $12 \times 15$ | 3 | " | 24 | 14800 | 21200 | 1680 |
| $18 \times 22$ | $16 \times 18$ | 33/4 | ، | 30 | 2 CO 00 | 28000 | 2400 |
| $22 \times 25$ | 18 x 22 | 41/4 | " | 34 | 24000 | 36000 | 3000 |

## ROSS' UNIVERSAL SYMMETRICAL LENSES.



| Size of View. | Size of Group. | Diameter Lenses. | of $\underset{\mathrm{F}_{0}}{\mathrm{Eq}}$ | uiv. | With Waterhouse Diaphragm. | Aluminium Settings. | Extra for Iris Diaphragm. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 \frac{1}{4} \times 4 \frac{1}{4}$ | $3 \times 3$ | I inch. |  | inch. | \$40 00 | \$50 80 | \$460 |
| $4 \times 5$ | $31 / 4 \times 41 / 4$ | $1_{1} \frac{3}{10}$ " | 6 | " | 5200 | 6390 | 500 |
| $5 \times 6$ | $4 \times 5$ | 11/2" | $71 / 2$ | " | 6280 | 7580 | 560 |
| $5 \times 8$ | $5 \times 6$ | 13/4" | 9 | " | 69 00 | 8260 | 600 |
| $61 / 2 \times 81 / 2$ | $5 \times 8$ | 2 " | $101 / 2$ | " | 7800 | 9400 | 700 |
| $7 \times 9$ | $61 / 2 \times 81 / 2$ | 21/4" | 12 | " | 9200 | 12000 | 1000 |
| $8 \times 10$ | $7 \times 9$ | $2 \frac{6}{10}{ }^{\prime \prime}$ | 14 | " | 11200 | 15200 | 12 co |
| $10 \times 12$ | $8 \times 10$ | $29_{10}{ }^{\prime}$ | 16 | " | 134 40 | 18040 | 1680 |
| 11 xi3 | $10 \times 12$ | $31^{3} 0$ | 18 | " | 15120 | 21520 | 2000 |
| $12 \times 15$ | $11 \times 13$ | $33 / 4{ }^{\prime \prime}$ | 20 | , | 19200 | 27200 | 2100 |
| $16 \mathrm{xi8}$ | $12 \times 15$ | $4{ }_{10}^{4}{ }^{\prime}$ | 24 | ' | 25600 | 37600 | 2800 |
| $18 \times 22$ | $16 \times 18$ | $5^{1 / 2}{ }^{\prime \prime}$ | 30 | ، | 40000 | 56000 | 3400 |

## STEINHEIL IRIS DIAPHRAGM.

Made in all sizes suitable for Steinheil Lenses as well as lenses of any other maker. The prices are as follows:
—Price List-

To fit lenses having barrel diameter less than $1^{1} / 2 \mathrm{in}$., ........ $\$ 8$ co

| " | " | ' | " | of $11 / 2$ | and | ess | $21 / 2$ | in, |  | 900 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| " | " | " | " | $21 / 2$ | " | " | 3 | " |  | oo |
| " | " | " | " | 3 | " | " | $31 / 2$ | " |  | Oo |
| " | " | " | " | $3^{1 / 2}$ | " | " | 4 | " |  |  |
| " | " | " | " | 4 | " | " | 5 | " |  |  |

The above prices include the charge for fitting the Iris Diaphragms in lens barrel. At the option of the buyer the Iris Diaphragms are fitted either into the original lens barrel, or into a duplicate lens barrel, which is furnished without extra charge.

$+$
Portrait-Euryscope. Short Focus. in very short or dimly-lighted studios.

| No. | Diameter. | Equivalent Focus. | Size of Plate. | Price |
| :---: | :---: | :---: | :---: | :---: |
| 3 | 2 in. | $72 / 3 \mathrm{in}$. | $41 / 4 \times 61 / 2$ | \$62 0) |
| 4 | $21 / 2$ " | 93/4/ | $61 / 2 \times 81 / 2$ | - 8600 |
| 5 | 3 | I I 1/2 ${ }^{\text {c }}$ | $8 \times 10$ | 11650 |
| 6 | 31/2" | 14 " | $10 \times 12$ | 14500 |
| 7 | 4 " | $171 / 2$ | $12 \times 15$ | 1750 |

Nos. 3, 4 and 5 have Rack and Pinion. Nos. 6 and 7 mounted in rigid settings.

## THIRD SERIES.

Portrait-Euryscope. Longer Focus. Ratio, I to $4 \frac{1}{2}$, or $\underset{\frac{F}{40}}{ }$. Unrivalled for general portrait-work. Excellent for groups in short studios.

| No. | Diameter. | Equivalent Focus. | Size of | Plate. | Frice. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 A | $11 / 2 \mathrm{in}$. | $61 / 2$ in. | $3^{1 / 2} \mathrm{x}$ | $4^{1 / 2}$ | \$45 co |
| 2 A | $13 / 4 \cdots$ | $71 / 2$ " | $4^{1 / 2} \times$ | 6 | 5300 |
| 3 A | " | $82 / 3$ " | 5 x | 8 | 7000 |
| 4A | 21/2 " | $10 \frac{5}{6}$ " | $61 / 2 \mathrm{x}$ | $81 / 2$ | 9500 |
| 5 A | 3 | 13 | 10 x | 12 | 13000 |
| 6A | $31 / 2$ | $15^{1 / 3}$ | 11 x | 14 | 18650 |
| 7 A | 4 " | 191/3 " | 14 x | 17 | 22650 |
| 8A | 5 " | 25 | 17 x | 20 | 42650 |

All these are mounted in rigid settings.
Note.-In removing the lenses from the tubes for the purpose of cleaning or inspection, it is essential that they be replaced in their proper original position, otherwise the diaphragms will not, a they ought, pass through the optical centre of the instrument. The best plan is to remove, clean, and return one combination at a time, thus ensuring the correct adjustment of the objective.

## FOURTH SERIES.

Voightländer \& Son's Extra Rapid Euryscope, known heretofore as the "Improved" Euryscope For Groups, Standing Figures, Large Heads, Buildings, Landscapes, Instantaneous Work, and Copying.


Nos. o and oo can be had in matched pairs of equal focus for Stereoscopic work.
The first five sizes of this series can also be had without the front hood, which renders the linses more compact.


FIFTH SERIES.
Voightländer \& Son's Rapid Wide Angle Euryscope. A New Group-l.ens.

| No. | Diameter uf Lens. | Equivalent Fincal length | Size of Picture, Full Opening. | Size of Picture. Smallest Stop. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\bigcirc$ | 1 in . | $51 / 2 \mathrm{in}$. | $5 \times 7 \mathrm{in}$. | $6 \times 8 \mathrm{in}$. | \$36 50 |
| 0 : | 114 | 8 " | $7 \times 9$ " | $8 \times 10$ | 5000 |
| 1 | $11 / 2$ | $9^{1 / 2}{ }^{\prime \prime}$ | $8 \times 10{ }^{\prime \prime}$ | $10 \times 12$ " | 6550 |
| 2 | $13 / 4$ | 11 | $10 \times 12{ }^{6}$ | $1 \mathrm{I} \times 14{ }^{\text {6 }}$ | 8550 |
| 3 | 2 | 1212 | 15xIA" | $14 \times 17{ }^{\text {" }}$ | 1035 |
| 4 | $21 / 2$ " | $151 / 2$ | $13 \times 16 "$ | $17 \times 20$ " | 14000 |
| 5 | 3 " | 19 | $17 \times 20{ }^{6}$ | $2.5 \times 2+{ }^{\circ}$ | 18650 |

## SIXTH SERIES.

Voightländer \& Son's Rapid Euryscope, for Landscapes, Buildings, Instantancous Work, as well as Standing Figures, Groups, and Large Heads in the Studio.

| Size. | Diameter of Lens. | Equivalent Focal Length. | - Size of Purtrait or Groutp. | Price. |
| :---: | :---: | :---: | :---: | :---: |
| No. of | $\underline{\text { I }}$ in. | 7 in . | $4 \times 5 \mathrm{in}$. | \$30 0\% |
| " ooA | $11 / 4 \times$ | 81/4" | $5^{1 / 2} \times 7^{1 / 2}$ | 4003 |
| " IA | 1 1/2" | 103/4 ${ }^{\text {c }}$ | $61 / 2 \times 81 / 2{ }^{\text {c }}$ | 520. |
| " 2 A | $13 / 4$ | 13 | $8 \times 10$ " | 6400 |
| 3 A | $2{ }^{\prime \prime}$ | 16 | 1) $\times 12$ | 80 co |
| " 4 A | 21/2" | 20 | $12 \times 15$ | 1106 |
| " 5 A | 3 | 24 | 16.18 | 157 cos |
| " 6A | $31 / 2{ }^{1 / 4}$ | 28 | $18 \times 22$ | 208 co |
| 7 A | 4 | 32 | $20 \times 24$ 6 | 24000 |

No. oA can be had in matched pairs of equal focus for Stereoscopic work.


## SEVENTH SERIES.

Voightländer \& Son's Wide Angle Euryscope, fur Interiors, Buildings, Landscapes, and Cıpying.


No. o can be had in matched pairs of equal fucus for Stereoscopic work.

## SUPPLEMENTARY SEPIES

Of Voigtländer \& Son's Wide-Angle Euryscope, for Interiors, Buildings, Landscapes and Copying.

| Size, | Diameter of Lens. | Equivalent Focal Length, | Size Plate with Full Aperture. | Price. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. 1 | ${ }_{16}^{7}$ in. | $41 / 2 \mathrm{in}$. | $4 \times 5$ in. | \$2700 |  |  |
| 6 2 | $8{ }^{8} 6$ | $51 / 2 "$ | $5 \times 7$ " | 2900 |  | cle |
| " 3 | 10 " ${ }^{10}$ | 65\% " | $6 \times 8$ " | 3400 | \% | werde |
| " 4 | $\frac{1}{1} 16 \times$ | $73 / 4$ | $8 \times 10$ " | 3900 | + | $\longrightarrow$ |
| " 5 | $\frac{1}{3},{ }^{\text {c }}$, | 95/8 " | 1) 112 \% | 4800 |  |  |
| " 6 | $\mathrm{I}_{1}{ }^{1}$ " | II " | $12 \times 15$-6 | 6500 |  |  |
| " 7 | I $1 / 4$ " | $131 / 2$ " | $17 \times 19$ " | 7100 | B | - |

## VOIGTLANDERS \＆SON＇S NEW QUICK WIDE－ANGLE SINGLE LANSCAPE LENS．



Number．Diameter of Lens．Equivalent Focus．
Size of Plate．

Price．

| 4 | $\times$ | 5 |
| ---: | ---: | ---: |
| 5 | $\times$ | 7 |
| 7 | $\times$ | 9 |
| 8 | $\times 10$ |  |
| 10 | $\times 12$ |  |
| 12 | $\times 15$ |  |
| 15 | $\times 18$ |  |
| 17 | $\times 21$ |  |
| 20 | $\times 24$ |  |
| 22 | $\times 26$ |  |

$\$ 165^{\circ}$
1850
2300
2800
3300

$11 / 8$
$11 / 4$
$11 / 2$
$13 / 4$
2
$21 / 4$
$21 / 2$
3
$31 / 2$
$41 / 8$

| $51 / 2$ | in |
| :--- | :--- |
| 7 | $"$ |
| $81 / 2$ | $"$ |
| 10 | $"$ |
| 12 | 6 |
| $131 / 2$ | $"$ |
| 16 | $"$ |
| 20 | $"$ |
| $231 / 4$ | $"$ |
| $271 / 2$ | $"$ |

3900

## $445^{\circ}$

6050
7950

## VOIGTLANDER \＆SON ANASTIGMAT LENSES．

Anastigmat，Series III，Ratio I to 7．2．Rapid lens for Instantaneous work，Views and Groups．Front combination composed of two lenses，back combination of three．Angle of view over 80 degrees．

| No． | Diameter of Lenses． | Equivalent Focus． | Standard Size Plate． | Diameter of Jisk at $80^{\circ}$ ． | With <br> Sliding Stops． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ${ }_{1}^{10} 0$ inch． | $3{ }^{1} \frac{3}{6}$ inch． | $31 / 4 \times 41 / 4$ | $6 \frac{2}{8}$ inch． | \＄29 00 |
| 2 | $\frac{1}{1}{ }_{6}^{3}{ }_{6}{ }^{3}$ | $4 \frac{12}{6}$＂ | $4 \times 5$ | $77 / 8$＂ | 3300 |
| 3 | ＂ | $5 \frac{1}{1} \frac{4}{6}$ | $41 / 4 \times 51 / 4$ | 97／8＂ | 3700 |
| 4 | $11 / 4$ | $7 \frac{11}{16}$ | $41 /+\times 61 / 2$ | 13 | 5000 |
| 5 | $1{ }^{7}{ }^{7}$ \％${ }^{\text {d }}$ | $8 \frac{11}{6}$＂ | $5 \times 8$ | 15 | 6200 |
| 6 | 110 | $9{ }_{16}^{14}$ | $61 / 2 \times 81 / 2$ | 161／2 | 7500 |
| 7 | $2 \frac{1}{16}$＂ | $12{ }_{1}^{65}$ \％ | $8 \times 10$ | 207／8 | 9900 |
| 8 | $2 \frac{13}{13}{ }^{3} \times$ | $17{ }_{1}{ }^{7}$ | $10 \times 12$ | $29 \frac{2}{8}$＂ | 15700 |
| 9 | 33／4 | $23{ }^{2}{ }^{2} 6$ | $12 \times 15$ | $38{ }^{8}{ }_{8}^{4}$＂ | 22300 |

ANASTIGMAT，SERIES IV，RATIO I TO $\mathbf{1 2 . 5}$.
Wide－Angle lens for Views，Interiors and Reproductions．Doublet composed of four lenses．Width of angle 96 to Ioo degrees；the four largest sizes 85 degrees．

| No． | Diameter of Lenses． | Equivalent Focus． | Standard Size Plates， with Stops． F－18 to $\boldsymbol{F}_{-25}$ | Diameter of Largest Disk． | With <br> Rotating Stops． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | 1／4 inch． | $2 \mathrm{I} / 2 \mathrm{inch}$ ． | $31 / 4 \times 41 / 4$ | $5{ }_{1 \text { ij }}{ }^{8}$ inch． | \＄2700 |
| 2 | $3 / 8$＂ | $37 / 8$＂ | $4 \times 5$ | $81 \frac{1}{16}$ | 2700 |
| 3 | $\frac{4}{8}$＂ | $4 \frac{6}{8}$＂ | $5 \times 6$ | 10116 | 2700 |
| 4 | 5／8＂ | 6 ＂ | $61 / 2 \times 81 / 2$ | $13{ }^{7} 9$ | 3300 |
| 5 | 13 ＂ 16 | 73／4 6 | $8 \times 10$ | $173 / 8$ | 4200 |
| 6 |  | $101 / 4$ | $10 \times 12$ | $227 / 8$ | 6200 |
| 7 | $15{ }^{5} 6$ | 151／4 ${ }^{1 / 4}$ | \％． 133 x 16 | 28 ＊ | 8300 |
| 8 | 2 ＂ | $237 / 8$ | ¢ั $15 \times 18$ | $43^{\frac{5}{6}}$ | $\stackrel{\sim}{0}$ 哏， 14500 |
| 9 | 3 ＂ | $35_{8}^{6}$＂ | 号何 $20 \quad \times 24$ | 64 ＂ | 和灾 33000 |
| 10 | $31{ }^{15}$ | $483 / 8$ | $=\quad 124 \times 29$ | 861／4＂ | －174500 |

## ANASTIGMAT，SERIES V，RATIO I TO 18.

Wide－Angle lens for Views，Interiors and Reproductions．Doublet composed of four lenses．Angle of view about 104 degrees．

| No． | Diameter of Lenses． |
| :---: | :---: |
| I | ${ }_{1}^{5} 5$ inch． |
| 2 | ${ }^{7} 6$ |
| 3 | 1／2＂ |
| 4 | 5／8＂ |
| 5 | 3／4 ${ }^{\text {c }}$ |
| 6 | 13.6 |
| 7 | $\frac{15}{16}$ 6 |
| 8 | ＂ |
| 9 | $13 / 8$ |
| 10 | $2 \frac{3}{16}$＂ |
| 11 | 3 ＂ |
| 12 | 4 |

Equi


| StandardSize Plate |  |
| :---: | :---: |
| 4 | x 5 |
| 5 | x 7 |
| $61 / 2$ | $x \quad \$ 1 / 2$ |
| 8 | $\times 10$ |
| 10 | X 12 |
| II | $\times 14$ |
| 13 | $\times 16$ |
| 13 | $\times 16$ |
| 15 | x 18 |
| 20 | x 24 |
| 28 | $\times 34$ |
| 36 | $\times 44$ |


| Diamet Largest | er of Disk． |
| :---: | :---: |
| 811 | inch． |
| 1 I | 6 |
| 141／4 | ＂ |
| $153 / 4$ | ＂ |
| $21^{1 / 4}$ | ＂ |
| 263／4 | ＂ |
| ． $11 / 2$ | ＂ |
| 33 | ＂ |
| 455／5 | ＂ |
| 68 | ، |
| $94^{1 / 2}$ | ＂ |
| 18 | ${ }^{6}$ |

With
Rotating Stops．
$\$ 2700$
2700
3300
4200
5000
6200
75

## DARLOT'S RAPID HEMISPHERICAL.

For Portraits and Views. These Lenses embrace an angle of from $60^{\circ}$ to $75^{\circ}$; are quick acting, perfectly rectilinear.

| No. | Diameter. | Back Focus. | Portrait. | View. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{*} \mathbf{I}$ | 1 in. | $51 / 2 \mathrm{in}$. | $4 \times 5$ in. | $5 \times 7$ in. | $\$ 1350$ |
| *2 | I $1 / 46$ | 96 | $5 \times 7$ | $6 \times 8$ " | 2000 |
| 3 | 1 $1 / 2$ " | $101 / 26$ | $6 \times 8$ " | $8 \times 10 \%$ | 3000 |
| 4 | I $3 / 46$ | 14 6 | $8 \times 10$ " | $11 \times 14$ | 4500 |
| 4 | $21 / 86$ | 18 " | II $\times 14{ }^{\prime \prime}$ | $14 \times 17{ }^{\prime \prime}$ | 7600 |
| 6 | 36 | 216 | $14 \times 17$ 6 | $17 \times 20{ }^{6}$ | 9000 |

Nos. I and 2 can be had in matched pairs of equal focus for Stereoscopic work.
*These sizes can also be had in rigid settings, and provided with rotating stops suitable for Detective Cameras.

## DARLOT'S WIDE-ANGLE HEMISPHERICAL.

These Lenses embrace an angle of $90^{\circ}$, and, being rectilinear, they are valuable for Interiors, Buildings, Landscapes, etc., and in confined localities, where lenses of longer focus cannot be used. Provided with three lever diaphragms.


Nos. 1 and 2 furnished in matched pairs for Stereoscopic work.

## DARLOT PORTRAIT LENSES.

Darlot Portrait-Lenses, with rack and pinion, plain. These Lenses are made also for Magic Lanterns and Stereopticons. Can be had in matched pairs of equal focus.


The $\mathbf{I}-4, \mathbf{I}-3$ and $\mathbf{I} 2$ can be had in matched pairs of equal focus.
DARLOT QUICK-WORKING PORTRAIT LENSES, WITH RACK AND PINION, AND CENTRAL STOPS.
Size
$1-2$
$2-3$
$4-4$
Extra
$4-4$


## alvan g. CLARK Lenses.

When using these lenses as a wide. angle lens, care should be used in beveling the back of the front board so as to allow free passage of the rays.

Full Size $61 / 2 \times 81 / 2$ Alvan G. Clark Lens.
$\left.\begin{array}{cccc} & \begin{array}{c}\text { Size of Plate } \\ \text { Working with } \\ \text { Stop F. }\end{array} \\ \text { No. } \\ \text { Angle about } 55^{\circ}\end{array}\right\}$

| Size of Plate Working with Stop F. 20 Angle about $75^{\circ}$ |
| :---: |
|  |
| $10 \times 12$ |



| Diameter of Lenses. | Back Focus. | Price. |
| :---: | :---: | :---: |
|  |  |  |
| ifins. | $31 / 2 \mathrm{in}$. | \$14 on |
| $3 / 4{ }^{\prime \prime}$ | 45/8" | 1800 |
| 7/8" | 53.4 | 2200 |
| 11/5" | $73 \%$ | 2800 |
| $11 / 2{ }^{\text {c }}$ | 103/8 | 3600 |
| 133 | 121/4" | 4800 |
| 21/5" | 15 | 6000 |
| $25 / 8$ | 18 | 7800 |
| 31/8" | 22 | 10000 |
| $4^{1 / 8}{ }^{\prime \prime}$ | 28 | 14000 |

## ZEISS-ANASTIGMAT.

Series III. I:7.2.
For Instantaneous Work, Studio Work on Groups and Large Heads, Out-door Work of all kinds and Copying.

Nos. I and 2 sufficient to admit of the introduction of the Diaphragm Shutter.

The lenses of this Series have an angular aperture from $85^{\circ}$ to $90^{\circ}$, and can therefore be used as wide angle lenses if desired.

| Size of P | Diam. of | Fre |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Covered with | Image Circ | Diam | Equivalent |  |
| Stop F. 12.5 | at $80^{\circ}$. | of Lar. | Fccus. | Price. |
| $31 / 4 \times 41 / 4$ | $6 \frac{5}{115}$ in. | 5/8 in. | $31_{13}^{13} \mathrm{in}$. | \$29 00 |
| $4 \times 5$ | $77 / 8$ | $3 / 4$ | 43/4 | 3300 |
| $41 / 4 \times 61 / 2$ | $9 \frac{1}{13}{ }^{\frac{1}{6}}$ " | I " | $5^{1 / 3}$ | 3700 |
| $5 \times 7$ | 13 | I $1 / 4$ | $7 \frac{1}{1} \frac{1}{6}$ | 5000 |
| $5 \times 8$ | $141 \frac{1}{6}$ | $\mathrm{I}_{1}{ }^{\text {\% }}$ | $8 \frac{1}{111}$ | 6200 |
| $61 / 2 \times 81 / 2$ | $16 \frac{9}{16}$ | $15 / 8$ | $9{ }_{1}^{13}$ | 7500 |
| $8 \times 10$ | 207/8 | 2 | 125 | 10000 |
| $10 \times 12$ | 291/8" | 213.6 | $173 / 8$ | 15700 |
| $12 \times 15$ | $38 \frac{9}{16}{ }^{-6}$ | 31]" | 23115 | 22300 |



Full Size, No. 4.


## ZEISS-ANASTIGMAT.

## Series. IV. I: $\mathbf{1 2 . 5}$.

For Instantaneous Work, Landscapes, Interiors, Arcinitecture and Copying.
The field of the smaller sizes including No. 6 measures an angle of $100^{\circ}$. Larger sizes about $85^{\circ}$.

| No. | Size of Plate covered with Stop 18. | Diam, of Image Cir. at 96 Deg. | Free Diam. of <br> Lar. Lens. | Equivalent Focus. | Price, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $31 / 4 \times 41 / 4$ | $51 / 2 \mathrm{in}$. | $1 / 4 \mathrm{in}$. | $2{ }_{1}^{7}{ }^{7}$ in. |  |
| 2 | $4 \times 5$ | $8 \frac{11}{1}$ " | $3 / 8$ " | 37/8 ${ }^{\text {c }}$ |  |
| 3 | $41 / 4 \times 61 / 2$ | 105/8 " | 1/2 " | $4 \frac{11}{1}$ " ${ }^{\text {a }}$ | . |
| 4 | $5 \times 8$ | $133 / 8{ }^{\prime}$ | 5/8 | $6 \frac{1}{15}$ " | E0 3300 |
| 5 | $8 \times 10$ | $17 \frac{5}{16}{ }^{\prime \prime}$ | $\frac{1}{1} \frac{3}{6}$ " | 7116 | 硡 4200 |
| 6 | $10 \quad \times 12$ | $22 \frac{1}{1} \frac{3}{6}$ " | I " | 101/4 ${ }^{1 / 4}$ | 은 6200 |

The following sizes for Copying with stop F 36 at $85^{\circ}$. For Landscape Work larger plates may be used.


Full Size, No. 5.
ZEISS-ANASTIGMAT.

## Series V. $\mathbf{I}: \mathbf{I} 8$.

WWide angle for Copying, Interiors, Architecture and Lamdscapes.

T'he field of the smaller numbers, including No. 7, measures $108^{\circ}$. Larger sizes $90^{\circ}$.

| .o. | Size of Plate Covered with I Stop F. ${ }^{36 .}$ | Diam. of nage Circle at $104^{\circ}$ | $\begin{aligned} & \text { Free Diam. } \\ & \text { Lar. Lens. } \end{aligned}$ | Equivalent Focus. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | $41 / 4 \times 65 / 2$ | $81 \frac{1}{6} \mathrm{ill}$. |  | $33 / 8 \mathrm{in}$. | \$2700 |
| 2 | $5 \times 7$ |  | 38 | 43/8 | 27 |
| 3 | $x$ x $81 / 2$ | $14{ }^{3}{ }^{3}$ |  | $5 \frac{9}{16}$ | 33 oo |
| 4 | $\times 10$ | 153/4 |  | $7{ }^{\frac{3}{6}}$ | 4200 |
| 5 | 10 X 12 | $211 / 4$ |  | $83 / 8$ | . 5000 |
| 6 | II $\times 14$ | 263/4 |  | $10_{1}^{\frac{7}{16}}$ | 6200 |
| 7 | $12 \times 15$ | $311 / 2$ |  | $12{ }^{\frac{5}{15}}$ | 75 |

For reproductions of charts and all kinds of copying on large plates when used at an angle of $85^{\circ}$.

| S | 12 | $\times 15$ | $33{ }^{1}$ | 66 | I |  | 1.91/8 | ${ }^{6}$ | 99 | 00 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9 | 16 | $\times 18$ | $45^{11}$ | 6 | I $3 / 8$ |  | $2.47 / 8$ | ، | I 45 | 00 |
| 10 | 20 | $\times 25$ | $681 / 8$ | ${ }^{6}$ | $21 / 8$ |  | $37 \frac{5}{16}$ | 6 | 290 | CO |
| I I | 28 | $\times 37$ | 941/2 | ${ }^{6}$ | 3 |  | $51 \frac{9}{16}$ | 6 | 495 | 00 |
| 12 | 36 | $\times 44$ | $1181 / 8$ | 66 | $3 \frac{1}{1} 5$ |  | $651 / 8$ | 66 | 825 | CO |



Full Size, No. 6.

## SUTER APLANATIC LENSES.

A-Aplanatic Lenses for Portraits, Groups, Architecture and Copying. Angle of View, $65^{\circ}$.

*May be had in pairs of exactly equal focus for Stereoscopic purposes, at $\$ 60$ per pair.

## SUTER APLANATIC LENSES, (Continued.)

E-Aplanatic Lens for Groups, Landscapes and Architectural Subjects. Angle of View, $60^{\circ}$

| No. | Diame | Focus. | Larg | Stop. | Small | Stop. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * 1 | $3 / 4$ | $4^{1 / 4}$ | Stere | oscopic. |  | X 4 | \$26 00 |
| 2 | I | $63 / 4$ |  | $\times 4$ | $71 / 2$ | $\times 5$ | 2800 |
| 3 | I | 83/4 | 7 | $\times 5$ | 9 | $\times \quad 7$ | 3000 |
| 4 | I $1 / 2$ | $101 / 4$ | 81/2 | x 61/2 | 10 | $\times 8$ | 4000 |
| 5 | 2 | 141/4 | 10 | $\times 8$ | 14 | X II | 5000 |
| 6 | $21 / 2$ | $173 / 4$ | 12 | X 10 | 16 | $\times 13$ | 7800 |
| 7 | $31 / 4$ | $213 / 4$ | 15 | $\times 12$ | 20 | x 16 | 12000 |
| 8 | $33 / 4$ | $251 / 2$ | 18 | X 15 | 25 | $\times 20$ | 18000 |

*May be had in pairs of exactly equal focus for Stereoscopic purposes, at $\$ 52$ per pair.
C-Wide Angle Aplanatic Lenses, for Architectural Subjects in Confined Situations, Interiors, Copy ing, etc. Angle of View, $90^{\circ}$.

| $\begin{gathered} \mathrm{No.} \\ { }_{\mathrm{*}} \mathrm{I} \end{gathered}$ | Diameter. Focus. |  | Covering. |  |  |  | Price. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | 1 | 4 | 5 x | 4 to | 7 x |  |  |  |
| 2 | 14 | 6 | 7 x | 5 to | 9 x | 7 |  | 00 |
| 3 | 112 | 8 | 9 x | 7 to | 12 x |  |  | 00 |
| 4 | 2 | II | 12 x | 10 to | $16 \times$ | 13 |  | 000 |

*May be had accurately paired for Stereoscopic purposes at $\$ 52$, including brass plates.
1D-Rapid Series, for the Studio, Groups, Copying Scientific Subjects, Interior. Angle of View, $70^{\circ}$.

| Diameter of |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Equival Focus. | Lens | lange. | Large Aperture. | Diameter of Circle. | Price. |
| I | $10^{1 / 4}$ | 2 | $21 / 2$ | $8 \times 5$ | 16 in. | \$5700 |
| 2 | $131 / 2$ | 21/2 | 31/2 | $10 \times 8$ | 20 " | 8500 |

## SINGLE (Landscape) LENSES, WITH ROTATING STOPS.

Angle of View, $50^{\circ}$.



## THE PISTON SHUTTER．

Exceedingly light，compact，made only for the Periscope Lens． PRICE Uだ PERISCOPE WITH SHUTTER

| No． | Apcrture． | Focus． | Size | f Plate |  |  | rice． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 | 9 －16 in． | $81 / 2 \mathrm{in}$ ． |  | 8 | in． | \＄22 | 200 |
| 5 | II－I6 ${ }^{\text {¢ }}$ | $10 \frac{1}{4}$＂ | $61 / 2$ | S1／2 | ＂ |  | 00 |
| 6 | $13-16{ }^{\prime}$ | 12 | 8 | 10 | ＂ |  | 00 |

## GRAY＇S PERISCOPE．

Angle $80^{\circ}$ ．The Periscupe is a rectilinear combination of the wide angle variety，and is suitable for taking Views，Flash Light Groups，Copying and Interior Work．

| No． | Diameter of Lens． | Equivalent Focus． | Size of Plate Largest stop． | Size of Plate Smallest Stop． | Price． | Price <br> With shutter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I | r／2 | 23／8 | $21 / 2 \times 21 / 2$ | $31 / 4 \times 41 / 4$ | \＄1000 |  |
| 2 i | 5／8 | $4^{1 / 2}$ | $31 / 4 \times 41 / 4$ | $41 / 4 \times 61 / 2$ | 1000 |  |
| 3 | 3 | 6 | $4 \times 5$ | $61 / 2 \times 81 / 2$ | 1200 | \＄ 1900 |
| 4 | $11 / 8$ | $81 / 2$ | $5 \times 8$ | $8 \times 10$ | 1500 | 2203 |
| 5 | $11 / 4$ | $101 / 2$ | $61 / 2 \times 81 / 2$ | $10 \times 12$ | 1800 | 2500 |
| 6 | $13 / 8$ | 12 | $8 \times 10$ | II $\times 14$ | 2200 | 3000 |
| 7 | 13.4 | 16 | $10 \times 12$ | $14 \times 17$ | 3000 | 4000 |
| 8 | 2 | 21 | $11 \times 14$ | $16 \times 20$ | 4000 |  |
| 9 | $21 / 2$ | 25 | $14 \times 17$ | $20 \times 24$ | 6000 |  |
| 10 | $3^{1 / 2}$ | 36 | $16 \times 20$ | $25 \times 30$ | 9000 |  |

## R．O．CO．＇S SINGLE VIEW LENS．

These Lenses are furnished with rolating diaphrasms， having four apertures，and are very convenient to use；the largest aperture is large enough for instantaneous views．

| No． | Length of Focus． | Size． | Price． |
| :---: | :---: | :---: | :---: |
| 1 | 6 in． | $4 \times 5$ | \＄300 |
| $11 / 2$ | 8 ＂ | $41 \% \times 6$ | 350 |
| 2 | 10 ＂ | $5 \times 8$ | 400 |
| 3 | II＂ | 61／2× 81／2 | 5 co |
| 4 | 13 ＂ | $8 \times 10$ | 700 |

No．I furnished in matched pairs fur stereoscopic work at $\$ 6.00$ ．


## R．O．CO．＇S EXCELSIOR LENS．



Rapld Recilinfar．
They are perfectly rectilinear，have great depth of focus and flatness of field，giving brilliant definition；they will be found excellent for landscapes，architectural subjects and instantaneous work，as well as groups and portraits．

| No． | Length of 「ocus． | Size． | Price． |
| :---: | :---: | :---: | :---: |
| I | 7 im. | $4 \times 5$ | \＄1000 |
| 2 | 9 ＂ | $5 \times 8$ | 1350 |
| ． | II＊${ }^{\text {c }}$ | $6 \mathrm{~T} / 2 \times 8 \mathrm{t} / 2$ | 1800 |
| 4 | 13 ＂ | $8 \times 10$ | 2200 |

## GUNDLACH RAPID RECTIGRAPHIC LENSES.

| No. | Size of Plate. | Diam. of Lenses. | Equiv. Focus. | Price. |
| :---: | :---: | :---: | :---: | :---: |
| 0 | $31 / 4 \times 41 / 4$ | $\frac{1}{1} \frac{3}{6}$ in. | 5 in. | \$1400 |
| 1 | $4 \times 5$ | " | 61/4 " | 2000 |
| $11 / 2$ | $41 / 4 \times 61 / 2$ | 11/8" | 7 " | 2500 |
| 2 | $5 \times 8$ | 11/4 " | 81/2" | 3000 |
| 3 | $61 / 2 \times 81 / 2$ | $11 / 2$ " | $11 \times$ | 3800 |
| 4 | $8 \times 10$ | $13 / 4{ }^{\prime}$ | 13 | 5000 |
| 5 | $10 \times 12$ | 2 " | 16 " | 64 00 |
| 6 | $11 \times 14$ | 21/4 " | 181/2 " | 7600 |
| 7 | $14 \times 17$ | 23/4" | 22 " | 10000 |
| 8 | $17 \times 20$ | 31/4" | 26 " | 12500 |

## BECK AUTOGRAPH RECTILINEAR LENSES.

No. Size of Plate.
Diam. of Equivalent
Angle
Price

| $31 / 4$ | $\times 41 / 4$ |  |
| :--- | :--- | :--- |
| $41 / 4$ | $\times 5$ | $1 / 2$ |
| 5 | $\times$ | 8 |
| $61 / 2$ | $\times$ | $81 / 2$ |
| 8 | $\times 10$ |  |
| 10 | $\times 12$ |  |
| 11 | $\times$ | 14 |
| 14 | $\times 17$ |  |
| 20 | $\times 22$ |  |


| $7 / 8 \mathrm{in}$. |  |
| :--- | :--- |
| 1 | $" 6$ |
| $11 / 4$ | $"$ |
| $11 / 2$ | 6 |
| $13 / 4$ | 6 |
| 2 | $"$ |
| $21 / 4$ | 6 |
| 3 | 6 |
| $33 / 4$ | 6 |


| 5 | in. |
| :--- | :--- |
| $63 / 4$ | ". |
| $83 / 4$ | ". |
| 11 | " |
| 13 | " |
| 16 | " |
| 18 | " |
| 24 | $"$ |
| 30 | " |

$75^{\circ}$
$70^{\circ}$
$64^{\circ}$
$67^{\circ}$
$66^{\circ}$
$66^{\circ}$
$66^{\circ}$
$66^{\circ}$
$66^{\circ}$
$\$ 2500$
3000
3500
5000
6000
7500
10000
16000
20000


DALLMEYER'S RAPID RECTILINEAR LENSES.*
(Patent.)


$5 \times 4$ furnished in matched pairs for stereo. work.

* The apertures of all stops or diaphragms supplied with Dallmeyer*, lenses (portraits, views and landscapes) are so arranged that, countin: from the largest to the next size smaller, the time of exposure is doubled. Stops marked $X$ are exceptions to this rule, and require an exposure only half as long again as the preceding larger stop.


## DALLMEYER'S TRIPLE ACHROMATIC LENS.

Free from distortion. For Architectural Views, Copying, etc., also for Landscapes and Groups. Dimensions and Prices.

|  | Size of View or <br> Landscape. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| No. | 6 | $\times$ | 5 | in |
| 1 | $81 / 2$ | $\times$ | $61 / 2 "$ |  |
| 2 | 10 | $\times$ | 8 | 6 |
| 3 | 12 | $\times$ | 10 | $"$ |
| 4 | 15 | $\times$ | 12 | $"$ |
| 5 | 18 | $\times$ | 16 | 6 |
| 6 | 22 | $\times$ | 20 | 6 |
| 7 | 25 | $\times$ | 21 | 6 |


| $\begin{array}{l}\text { Size of Group } \\ \text { or }\end{array}$ |  |  |  |
| :--- | :--- | :--- | :--- |
| 5 | Portrait. |  |  |$]$. in.


| Diam. of Back |
| :---: |
| Combination. |
| $11 / 2 \mathrm{in}$. |
| 2 |
| $21 / 4$ |
| 26 |
| $23 / 4$ |
| $31 / 4$ |
| 4 |
| 4 |
| 5 |
| 5 |
| $51 / 4$ |


| Back Focus. | Price <br> Rigid Setting. |
| :---: | :---: |
| 7 in . | \$.35 00 |
| 10 " | 49 0) |
| 12 " | 5750 |
| 15 " | 7800 |
| 18 " | 9850 |
| 23 " | 12700 |
| 29 " | 18000 |
| $31 \times$ | 20500 |

DALLMEYER'S RAPID LANDSCAPE LENS, (Long Focus.)
Specially constructed for views, objects, mountain scenery, balloon photography, etc. Each lens is supplied with a set of Waterhouse diaphragms, the apertures of the stops of these lenses being too large to admit of their arrangements in the form of a rotating diaphragm as supplied with the " wide angle" landscape series.

|  | Largest Dimensions of Plate. Inches. | Diameter of Lenses. Inches. | Equiv. Focus. Inches. | Price. |
| :---: | :---: | :---: | :---: | :---: |
| No. 1 | $43 / 4 \times 61 / 2$ | 1.3 | 9 | \$37 00 |
| " 2 | $61 / 2 \times 81 / 2$ | 1.6 | 12 | 4725 |
| " 3 | $8 \times 10$ | 2.125 | 15 | $6150^{\circ}$ |
| " 4 | $10 \times 12$ | 2.6 | 18 | 7800 |
| " 5 | $12 \times 15$ | 3. | 22 | 9450 |
| " 6 | $16 \times 18$ | 3.5 | 25 | 11500 |
| " 7 | $20 \times 22$ | 4. 25 | 30 | 14400 |

## DALLMEYER'S "EXTRA" QUICK-ACTING PORTRAIT LENSES.

Possessing the greatest possible rapidity consistent with perfect definition. Especially constructed for Portraits of Children, but generally useful also for Vignettes, Cartes de Visite, Locket Portraits, etc.
No. 2 C. Portrait Lens, with rack and pinion movement; the lenses $23 / 4 \mathrm{in}$. diameter and
$4^{1 / 2} \mathrm{in}$. focal length from the back glass; for pictures on plates $4^{1 / 4}$ by $3^{1 / 4}$ and under. \$12900
This Lens produces pictures in one-half the time of No. I B (long), but the field of view is not so flat; hence, for Standing figures, a stop must be used.
A Miniature Lens. Ditto, ditto. The lenses $11 / 4 \mathrm{in}$. and $13 / 8 \mathrm{in}$. diameter respectively, and 2 in . focus from the back glass; for pictures on plates 2 in . by 2 in ., and, when used with stops, for $31 / 4 \mathrm{in}$. by $23 / 4 \mathrm{in}$.
A Medallion Lens. Diameter of combinations $3 / 4 \mathrm{in}$., back focus r in., in a rigid mount, without stops

## DALLMEYER'S PATENT PORTRAIT AND GROUP LENSES (D).

With the exception of No. 3 D , the Lenses are mounted in rigid settings, i.e., without rack and pinion movement.

| No. | Diam | Lenses. | Back Focus | Size of Group. | Size of View. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $3 \mathrm{D}^{*}$ | Patent, | $21 / 8$ | $101 / 2$ | $81 / 2 \times 61 / 2$ | 10 $\times 8$ | \$7800 |
| $4 \mathrm{D}^{*}$ | " | 27/8 | 13 | $10 \times 8$ | $12 \times 10$ | 111 oo |
| 5 D | " | $31 / 4$ | 16 | $12 \times 10$ | $15 \times 12$ | 14350 |
| 6 D | " | 4 | 191/2 | $15 \times 12$ | $18 \times 16$ | 21750 |
| 7 D | " | 5 | 24 | $18 \times 16$ | $22 \times 20$ | 394 00 |
| 8 D | " | 6 | 30 | $22 \times 20$ | $25 \times 21$ | 475 oo |

*Distance for a Cabinet Portrait with No. 3 D, 18 feet; with No. 4 D, 25 feet.
DALLMEYER'S NEW PATENT STEREOGRAPHIC LENS.
Especially constructed for Instantaneous Views, Small Portraits, Groups, Interiors, Landscapes, etc.

$$
\begin{aligned}
& \text { In sliding mount, pair . . pinion movement, pair . . . . . . . } 77000 \\
& \text { Ditto, ditto, with rack and pion }
\end{aligned}
$$

## DALLMEYER'S QUICK-ACTING STEREOSCOPIC LANDSCAPE LENSES.

No. I. $11 / 4 \mathrm{in}$. diameter, $41 / 2 \mathrm{in}$. back focus, in rigid mount, with rotating stops, pair $\$ 3300$
No. 2. $11 / 2$
37 00

## DALLMEYER'S QUICK-ACTING PORTRAIT LENSES.

Especially constructed for Carte de Visite Portraits.
No. I B. Purtrait Lens, consisting of two achromatic combinations, mounted in tube, with rack and pinion movement, the lenses 2 in . diameter, and $4 \frac{1 / 4}{} \mathrm{in}$. focal lenglh from the back glass, producirg pictures on plates $4^{1 / 4}$ by $3^{1 / 4} \mathrm{in}$. and under.
Distance between the subject ( 5 ft .8 in . high) and the lens, for a figure $23 / 4 \mathrm{in}$., from 12
to 13 feet. The Lenses can be had in pairs, or four, of exactly equal foci.
No. I B (Long). Diameter of Lenses $21 / 8 \mathrm{in}$., back focus $43 / 4 \mathrm{in}$., distance from 14 to 15 ft . for above standard.
This lens is constructed to meet the requirements of those photographers who desire to use a longer focus lens than No. I B, but who have not sufficient length of gallery for No. 2 B.

## DALLMEYER'S PATENT PORTRAIT LENSES (B).

Quick-Acting Lenses.

No. 2 B. Patent Lens, with rack and pinion movement. Diameter of Lenses $23 / 4 \mathrm{in}$., and back focus 6 in. Especially constructed for Carte de Visite Portraits. Distance between subject and lens for a standing figure, 18 ft .
No. 3 B. Ditto, ditto. Diameter of Lenses $31 / 2$ in., and back focus 8 in . Especially constructed for the New Cabinet Portraits. Distance between subject and lens for a standing figure, 18 ft .
No. 4 B. Ditto, ditto. Diameter of Lenses $41 / 2 \mathrm{in}$., and back focus 12 in., for pictures $81 / 2$ $\times 61 / 2 \mathrm{in}$. Distance for a Cabinet Portrait 25 ft .

## DALLMEYER'S RECTILINEAR STEREO LENSES.

Especially constructed for Architectural and Landscape Views in confined situations. Diameter of front combination, $5 / 8 \mathrm{in}$; back focus, $21 / 2 \mathrm{in}$. (equivalent focus, 3 in .). mounted in rigid setting, with rotating diaphragm plate, pair . .

## DALLMEYER'S NEW WIDE-ANGLE LANDSCAPE LENS. (Patent.)

The Lenses are mounted in "Rigid" Tubes or Settings, with " Rotating" Stops,


These Lenses embrace angles of pictures from 90 to 100 degrees
No.
1AA
1A
1
2
3
4

| Largest Dimension of Plate. | Diam. Front Combination. | Eack Focus. | Price. |
| :---: | :---: | :---: | :---: |
| $71 / 4 \times 41 / 2$ | $7 / 8$ in. | $31 / 2$ in. | \$3700 |
| $81 / 2 \times 61 / 2$ | 1 $1 / 4$ ' | 45/8" | 4500 |
| $12 \times 10$ | I $1 / 2$ " | $61 / 4 \times$ | 6150 |
| $15 \times 12$ | 2 " | $71 / 2{ }^{\prime \prime}$ | 86 co |
| $18 \times 16$ | $21 / 2$ " | II " | 11500 |
| $22 \times 20$ | 3 " | 14 | 16400 |

Remarks.
No. 1 A and No. 1 are made to screw into the same flange as the No. I Triple Achromatic.
*This Lens is also well adapted for Stereoscopic Views.

## IMITATION DALLMEYER STEREO LENSES.

Provided with Central Stops. Suitable for Portraits, Views and instantaneous work, in or out of doors. By removing the back lens, and simply using the front lens, a 6 inch focus is obtained. Back focus 4 inches.
Price per pair
. $\$ 1800$


## DALLMEYER'S PATENT PORTRAIT LENSES (A).

Of the Ordinary Intensity or Rapidity.


No. I A*. Patent Lens, with rack and pinion movement. Diameter of front and back combinations, $23 / 4$ and $25 / 8 \mathrm{in}$. respectively, and $61 / 2 \mathrm{in}$. back focus; for pictures $5 \times 4 \mathrm{in}$. . . . . . . $\$ \mathrm{I} 0650$
No. 2 A*. Ditto, ditto. Diameter of front and back combinations, $3^{1 / 2}$ and $31 / 4$ in. respectively; 10 in. back focus; for pictures $61 / 2 \times 43 / 4 \mathrm{in}$. . . . . 14800
No. 3 A*. Ditto, ditto. Diameter of Lenses 4 in., $_{\text {. }}$ and 12 in. back focus; for pictures $81 / 2 \times 61 / 2$ in. 22400
No. 4 A. Ditto, ditto. Diameter of Lenses $41 / 2 \mathrm{in}$., and $r_{4}$ in. back focus; for pictures $10 \times 8$ in. . . 31600 *These lenses are well adapted for the New Cabinet Portraits, according to length of gallery. Thus, No. I A requires a distance of 14 feet between subject and lens (not recommended if a longer focus lens can be used), No. $2 \mathrm{~A}, 20 \mathrm{ft}$., and No. $3 \mathrm{~A}, 24 \mathrm{ft}$.
No. 5 A. In Rigid mount. Diameter of Lenses 5 in., and 18 in. back focus; for pictures $15 \times 12$ and under .

41000
No. 6 A. Ditto, ditto. Diameter of Lenses 6 in., and 22 in. back focus; for pictures $20 \times 16$ in. and under

## WATERBURY LENSES.

|  | Diameter. <br> lnches. | Back-focus. <br> Inches. |  |
| :--- | :---: | :---: | ---: |
| A, Single, for $4 \times 5$ plate | $\mathbf{I}_{\frac{6}{16}}$ | 6 | $\$ 350$ |
| A, Matched pair, stereoscopic |  |  | 700 |
| B, Single, for $5 \times 8$ plate | $\mathbf{I} \frac{11}{1} \frac{1}{6}$ | 10 | 450 |
| BB, Single, for $61 / 2 \times 81 / 2$ plate | $\mathbf{I} \frac{4}{6} \frac{4}{6}$ | $103 / 4$ | 600 |
| C, Single, for $8 \times$ IO plate plate $21 / 2$ | 16 | 800 |  |

Elite Time and Instantaneous Shutter, with Pneumatic Release, for use with Waterbury Lenses, $\$ 3.00$ extra.


## MORRISON WIDE-ANGLE VIEW LENSES.

These Lenses are absolutely rectilinear; they embrace an angle of fully 90 degrees, and are the most rapid, and are universally conceded to be the best wide-angle lenses made.


BI Nos. I to 6 are all made in matched pairs for stereoscopic work. The shorter focused lenses are especially adapted for street and other views in confined situations. For general purposes, a pair of No. 5 Lenses will be found most useful.

## MORRISON COMBINATION WIDE-ANGLE LENSES.

The device is so simple that it will be readily understood from the following explanation. Put in Cells as follows:

| Front. | With | Back. | for 4-inch Back Focus. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $5$ | " | 4 |  |  |  |
| 5 | " | 5 |  | " |  |
| 6 | ، | 5 |  | ، | " |
| 6 | " | 8 |  | 6 |  |
| 8 | " | 8 |  | " |  |

Thus the operator combines five focal lengths in one Lens.
These Lenses, if purchased separately, would cost in the aggregate $\$ 130$, thus a saving of $\$ 55$ is effected.
No. I, price complete in morocco case $\$ 7500$
No. 2, combining four, five and six inches focal lengths 55 oo


## E. A. PORTRAIT LENSES. With Rack and Pinion.



## E. A. VIEW LENSES.

These are single combination lenses, used for landscape work only, but cover the plate very sharply. They have diaphragms in the front of the tube, and rack and pinion movement.

Sizes and Prices.



## PRISMS.

For making non-reversed ferrotypes, and for copying plans, etc., by photo-lithography. $21 / 2$ inches square, mounted in brass, each,

These can be fitted to any lens by giving the diameter of front hood of the lens.

## COMBINATION FOCUSING GLASS.



Handy and compact; serving the double purpose of a convenient drinking cup and a perfect focusing glass. A telescopic metallic cup, with a fine lens adjusted to the bottom, and packed in a neat metal case with screw cover. Every tourist photographer should have one.

Price
o 75

FRANCO FOCUSING GLASSES.
New Design, easily adjusted. Price each

## THE NEW DUPLEX FOCUSING GLASS.

Cheap and Good. Price
$\$ 100$


## COMPOUND FOCUSING GLASS.

For fine work the Compound Focusing Glass is the best. It has a double compound lens. The price is $\$ 250$.

## MAGNIFYERS.

Pocket Folding, nickel-plated, each . 25 cents

## DARLOT'S CONDENSING-LENSES.

Plano-convex, made of White Crown Glass, are short focus, and perfectly polished. We can safely recommend them as the best lenses ever made for solar work and enlarging on Bromide paper.

> Each.



## DARLOT'S CONDENSING-LENSES.

Plano-convex for Magic Lanterns and Stereopticons.


These can be mounted in brass for $\$ 4.50$ to $\$ 5$ per pair, and in tin for $\$ 1.50$ to $\$ 2$ per pair.


## GEM LENSES.

These are exactly the same in working order as the portrait lenses before mentioned, but have neither rack-work, hood, nor central stops. They come matched-the oneninth in sets of 4,6 or 9 each; the quarter size in sets of $2,4,6$ or 8 . I-9 size, 3 inches back focus, each, $\$ 225 \mid$ I-4 size, $43 / 4$ inch back focus, each, $\$ 375$

## BRASS PLATES, FOR GEM LENSES.

## With Holes Cut and Threaded.



PROSCH PHOTOGRAPHIC SHUTTERS.


LIST OF SIZES AND PRICES WITH ROTARY STOPS.

| Size, .: | 00 | 0 | OA. | I | 1 A | 2 | 2 A | 3 | 3 A | 4 | 5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aperture, | $3 / 4$ | $7 / 8$ | I | $\mathrm{I} 1 / 8$ | $11 / 4$ | $13 / 8$ | $11 / 2$ | $13 / 4$ | 2 | $21 / 4$ | $21 / 2$ |
| Price,. | $\$ 12.50$ | 13.00 | 13.50 | 14.00 | 15.00 | 15.50 | 16.00 | 16.00 | 18.00 | 20.00 | 22.00 |

Up to and including size 2 A are fitted with rotary stops. Fitted for use of ordinary stops (same as are sizes above 2 A ), $\$ 1.00$ less. When flange screw is on body of tube, 50 cents extra; but larger than size 3,75 cents.

Triplex Stereoscopic Shutters consist of two Shutters on one frame, moved in unison by one lever and operated by one release, and consequently give two identical exposures. Made in two sizes, corresponding to No. 00 and $o$ of regular Shutter. The lenses are placed $3 \frac{1}{4}$ inches from centers; any separation deviating from this costs $\$ 1.00$ more. Rotary stops are included.

Prices: Size No. 00, $\$ 20.00$; No. 0, $\$ 21.00$; flange collars, when required, 75 cents the pair.

THE THORNTON-PICKARD TIME SHUTTER.

Prices for Lens having Hood up to 2 in., each, $\$ 725$ " " " " $21 / 4$ " " 800 " " " $21 / 2$ " " 825 " " " " $23 / 4$ " " 875 " " " " 3 " " 950


## LOW "KAZOO" SHUTTER, No. I.



The Low "Kazoo" Shutter, No. I, is a handsomely finished nickel-plated shutter,
Can be instantly changed from time to instantaneous exposures by simply moving the small lever to one side.

Gives the correct exposure, and requires no setting after either time or instantaneous movement, as it sets itself after every expasure without opening the wings.

## LOW "KAZOO" SHUTTER No. 2.



This Low " Kazoo" No. 2 is designed to be placed on the inside of camera and attached to the front board.

It can be operated entirely from the outside of the camera and at any distance away.


To change from time to instantaneous exposures it is only necessary to push in or pull out a small brass pin, which passes through the front board and into the Shutter. It will balance open for any length of time while focusing.

## LOW VIEW SHUTTER, No. 8.

Price . . . . $\$ 4.00$ each.

The Low View Shutter No. 8 is designed to make only time exposures.

## LOW VIEW SHUTTER, No. 10.

Price . . . . $\$ 6.00$ each.
 $13 / 4$ " " $41 / 4$ ".

The Low Shutter No. 10 is the same as No. 8, with the addition of the instantaneous attachment.

## LOW SHUTTER, No. 3.



Price, $\$ 4.00$ each.


| $11 / 2 \mathrm{in}$. opening |  |  | by $27 / 8 \mathrm{in}$. wide |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 4$ | " | " | " $3^{1 / 8}$ |  |  |  |
| 2 | " | " | " $3^{1 / 2}$ |  |  |  |
| $21 / 2$ | " | " | " $43 / 8$ | " |  | ، |
| $31 / 4$ | " | " | " $53 / 8$ |  |  |  |
| $3{ }^{1 / 2}$ | " | " | " $61 / 4$ |  |  |  |
| 4 | " | " | " $71 / 2$ |  |  |  |

by $37 / 8 \mathrm{in}$. long

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

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

LOW SHUTTER, No. 5.

| I $1 / 2$ | in. opening, 3 | in. square | $\$ 4$ | 00 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $13 / 4$ | 6 | 6 | $31 / 2$ | 6 | 66 | 4 | 00 |
| 2 | 6 | 6 | 4 | 6 | 6 | 4 | 50 |
| $21 / 2$ | 6 | 6 | $43 / 4$ | 6 | 6 | 4 | 50 |
| 3 | 6 | 6 | $51 / 2$ | 6 | 6 | 5 | 00 |
| $31 / 2$ | 6 | 6 | $63 / 4$ | 6 | 6 | 5 | 50 |
| 4 | 6 | 6 | $73 / 4$ | 6 | 6 | 6 | 00 |
| $41 / 2$ | 6 | 6 | $81 / 4$ | 6 | 6 | 6 | 50 |
| 5 | 6 | 6 | 9 | 6 | 6 | 7 | 00 |

The Low Shutter No. 5 is a very simple, well made, and nicely finished shulter, having the special advantage of a very Large Opening in a Small Shutter.


LOW SHUTTER, No. 6.


|  |  |  | 3 |  | 1 a |  | 50 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $13 / 4$ | " | " | $31 / 2$ | 4 | " |  | 50 |
| 2 | " | " | 4 | " | '6 |  | O0 |
| $21 / 2$ | 6 | 6 | 43/4 | " | " |  | 00 |

The Low Shutter No. 6 is exactly the same as No 5, with the addition of an instantaneous attachment, which can only be applied to the four smallest sizes.

To change from time to instantaneous exposures, it is only necessary to push in, or pull out a small brass pin, which passes through the front-board into the shutter.

## DIAPHRAGM SHUTTER.

It is provided with safety device, so that in setting shutter the blades are not opened and can therefore make no exposure.

The advantages of this shutter are as follows:
There are no loose stops.
The variation in size of stop is made by turning the black disk which is supplied with a large index.

Absolute control of time exposure.
Large index giving correct indication of time from 3 seconds to $\frac{1}{10}{ }^{6}$ second.

Entire independence of speed regulation from the influence of temperature or humidity.

By turning a lever, it is set for either time or instantaneous exposure, and remains so set until changed.

The movement during exposure is almost absolutely free from concussion.

All parts which must be manipulated are placed at the front, easy of access.


* Opening of Diaphragm.

Stereoscopic attachment, both shutters working in unison, extra . . . . . . . . . \$600
To gracluate disk to correspond with diaphragms accompanying iens, extra . . . . . . I 00


## PACKARD SHUTTER.

No. 1.
This Shutter is designed for Studio work, but the small sizes up to $23 / 8$ inches are sufficiently rapid for any out-door work except moving objects.

Sizes.

| $11 / 2$ | inch | Opening | . | . | . | . |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | $3^{1 / 2}$ inches Outside

## PACKARD SHUTTER.

No. 2.
This is for "time" exposures, and designed to be used on the front hood in place of cap. It is similar to No. I, except the cylinder is enclosed in the wood back and out of sight, which gives it a neater appearance.

Sizes.



Price $\$ 400$


## PACKARD SHUTTER.

## No. 3 .

For "time" and "instantaneous" exposure. This is also to be used on the front hood of the lens, and we can say with confidence that since the late improvements have been added it is equal to any "instantaneous" shutter made.


## THE ELITE

Time or Instantaneous Shutter.
This economical shutter was especially designed for use with the Waterbury Lenses.

Price $\$ 350$


## R. O. CO.'S DROP SHUTTER.

It is made to fit all sizes of R. O. Co's Single View and Excelsior Lenses; also Nos. I and 2 Darlot Rapid Hemispherical, and will be made to fit any size up to $21 / 4 \mathrm{inch}$.

UNIVERSAL SHUTTER FOR STEREOSCOPIC LENSES.


Scovill Universal Sbutter.


Price
\$1.75
SCOVILL DROP SHUTTERS.
Price List.


When ordering these Shutters, exact diameter of hood of lens should be given, so that the proper circular opening may be cut out to exactly fit hood of lens.


Scovill Safety Shutter with Pneumatic Release.

## RUBBER BULBS AND TUBING (For Shutters.)

Single Neck Bulbs, extra quality, each
\$ 25
.30
Double " Rubber Tubing, per font . . .03
Attachments for bulbs, each
At
THE AMERICAN OPTICAL CO. BOSTON IMPERIAL CAMERAS.

Extra Quality.
The II x 14 Boston Imperial Camera is the same as an II $\times \geq 4$ Portrait Camera, with the addition of an $8 \times 10$ Carriage and an $8 \times 10$ Holder, and is used to make two imperials on an $8 \times$ 10 or $4-4$ plate, using one 4-4 lens; two cards on a $5 \times 8$ plate, using one $1-2$ size lens; two Jarge panel pictures, $6 \times 10$ inches in size, can also be made, and regular work from II x 14 to. 1-4 inclusive.


## ECLIPSE PORTRAIT CAMERAS.



Sizes and Prices of Eclipse Portrait Cameras.


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

## CLIMAX CAMERAS

## With Solid Beds.

These cameras are manufactured in the most substantial manner from the best of mahogany, and handsomely finished. They are supplied with Lewis's Patent Universal Solid Glass Corners. The Single Swing Cameras are not kept in stock, but made to order only. Prices, with the Patent "Benster" Plate Holders are also given below.

| No. | For Reversible Plate. | Single Swing. | Double Swing. | Double Swing, with Benster Plate Holder. |
| :---: | :---: | :---: | :---: | :---: |
| 9 | $41 / 4 \times 51 / 2$ |  | \$1500 |  |
| 10 | $61 / 2 \times 81 / 2$ |  | 2600 | - . |
| II | $8 \times 10$ | \$2700 | 3100 | \$36 co |
| 12 | $10 \times 12$ | 3250 | 3750 | 4250 |
| 13 | II $\times 14$ | 3900 | 4400 | 5000 |
| 14 | $14 \times 17$ | 4800 | 5400 | 6250 |
| 15 | $17 \times 20$ | 5650 | 6250 | 7200 |

## "PEERLESS" PORTRAIT CAIMERAS.

These Cameras are made of seasoned Mahogany, well polished. They have the Lever Focusimg Attachment. Above $10 \times 12$ size they have the Telescope Extension Platform, Double Swing-back.
These Cameras are either fitted with Bonamza Holder with Dry Plate Rail in addition to the Wet Plate Trough, or if so ordered, they may be fitted with plain Raibbeted Holders.


No.
Size.
With Double Swing Back.
$400 \quad 8 \times$ 1o with Plain Platform
$\$ 3000$
$40110 \times 12$. . . . . . . . . . 4200
402 II x 14 " Extension Platform . . . . . . . . . . 6000
$40314 \times 17$ " " ". . . . . . . . . 7000
$40417 \times 20$ " " " . . . . . . . . . . 8400
$40518 \times 22$ " " ". ......... 9000

When the above Cameras are fitted with the attachment and extra Smaller Holder, same as furnished with the Boston Imperial Cameras, the price is as follows :


CLIMAX PORTRAIT AND GEM CAMERA. (No. 43 C.)


The best every-day camera in the market. With sliding holder and swinging ground glass improved focus screw; extension bellows.. With rabbeted kits for dry plate and ferrotype work With a single 4-4 or extra 4-4 tube, it will make all regular work, reversible, from $\mathrm{I}-4$ size to $8 \times$ ro. also two cabinets on $8 \times 10$ plate, or two $5 \times 7$. size on two $5 \times 7$ plates. With a $\mathbf{I}-4$ or $\mathbf{I}-2$ size tube; copying and enlarging to $8 \times$ ro; with four $r-4$ Gem tubes set in brass plate, it makes eight large bontons or card size on $7 \times 10$; also four of the same size on $5 \times 7$, and eight small bon-tons on $5 \times 7^{\circ}$ Price: No. 43 C. All complete except tubres . . . . . . . . . . . . . . . . . . . . . $\$ 2250$


This is the best and cheapest Camera in the market for the money. It is made of first growth mahogany, has Carriage with sliding Bonanza Holder, Extra Rail, Rubber Bellows, etc.

Double Swing.
No. 512.-With Lever Focus Attachment (as per cut), . . . . . . $\$ 33$ oo
ACME STANDARD PORTRAIT CAMERAS.


The Acme Portrait Cameras have Rubber Bellows, Swing Ground Glass, and Reversible Holder.


Solid glass corner or rabbeted Dry Plate IIolcers supplied with these cameras.

## CLIMAX CAMERAS, FITTED WITH THE "BENSTER" PLATE HOLDERS.

These cameras are manufactured in the most substantial manner from the best of mahogany, and handsomely finished with all late improvements.


No. 14 B Climax Camera, with Telescopic Bed and Benster Holder.
CLIMAX PORTRAIT CAMERAS.
Double Swing Back, Tangent Screw motion and Telescopic Bed.


All the above are supplied with a lever altachment, by which the most minute adjustment of the focus may be instantly obtained.

No. 19 B. For $8 \times 10$ and under and two cabinets on $8 \times$ ro plate, or two C. de V. on smaller plate; length of bed, $301 / 2$ inches. Fitted with "Benster" Holder and carriage movement on Patent Rollers, and lever focusing attachment.
Double swing back . \$39 oo The same for $10 \times 12$ and under, length of bed, $3^{2}$ inches, double swing back 5500 No. 19 C. Same as above, in $8 \times$ io size, length of bed, $281 / 2$ inches, varnish finish, Dry Plate Bens-
ter holder, with cur-
tain slide . . . . 3000

CLIMAX IMPERIAL CAMERAS.


## $8 \times 10$ STANDARD IMPERIAL CAMERA.

SCOVILL. DOUBLE SWING BACK.
The above Camera has lever focus attachment, rubber bellows and carriage movement. Fitted with bonanza holder, with extra rail for dry plates . . . . . . . . . . . . . . . . $\$ 2500$

CLIMAX ROYAL CAMERA.

This camera has the sliding back or carriage for plate holder, and has a ground glass attached in place, where it is always at hand. When the operator has the plate holder ready, he places it in the carriage, instead of laying it on the floor or some other inconvenient place, while he gets his focus.

Fitted with the celebrated Benster plate holder, working $8 \times 10$ plates and smaller; two $5 \times 8$ negatives on an $8 \times 10$ plate; two $41 / 4 \times 61 / 2$ negatives on a $61 / 2 \times 81 / 2$ plate; two $4 \times 5$ negatives on a $5 \times 8$ plate, etc.

$8 \times$ ro size, complete . . . .

Prices:
$\$ 4375$ | $11 \times 14$ size, complete .
$\$ 7000$

Fitted with the "Benster" Plate Holder.


A new combination camera, with carriage movement, consisting of an $11 \times 14 \mathrm{dbl}$. swing-back camera, with telescopic bed, for portraiture from II $\times 14$ to $8 \times 10$ and and reversible.
Also with an $8 x$ to attachment for $8 \times$ Io to $\mathbf{I}-4$ reversible, as follows : making two cabinets on an $8 \times 10$, using one tube, and two cartes de viste on $41 / 4 \times 61 / 2$.
These will fill all the requirements of any studio.

Price, Complete:
II x 14 . . . . . . $\$ 8000$
$14 \times 17$. . . . . . 9500


## THE AMERICAN OPTICAL CO. ROYAL CAMERAS.

EXTRA QUALITY.
No.
40.- $8 \times$ Io Royal Camera, dbl. swing-back, $\$ 5000$ $41 .-11 \times 14 \quad 66 \quad$ " $4 \times 8500$ 42.-14 x 17 " " " 11000

Above the $8 \times$ Io size an extra ground glass is supplied for use in focusing when pictures of groups are being taken.

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

## O I C PORTRAIT CAMERAS.



Rubber bellows, improved wooden guide, solid bed, swinging ground glass aud reversible holder.


THE AMERICAN OPTICAL CO. IMPERIAL OR CABINET CAMERAS.
EXTRA QUALITY.


Two promenade or imperial cards on an $8 \times 10$ plate, using one 4-4 tube; any size single picture from $\mathbf{I}-4$ to 8 x 10; two cards on a $41 / 2 \times 61 / 2$ or $5 \times 8$ plate using a $\mathbf{x}-2$ size lens.


When ordering please specify whether Bonanza or Waterbury holder is preferred.

## CLIMAX CINCINNATI GEM CAMERA.



For negatives or ferrotypes (admitting of picture $8 \times 10$ and under, two on $8 \times 10,7 \times 10$ or $5 \times 7$ with one lens) with carriage movement on l'atent Rollers, lever focusing attachment and fitted with the "Benster" holder with wooden slide.

$$
\begin{aligned}
& 43 \text { B. Without swing . . . . . . . . . . . . . . . . . . . } \$ 2700 \\
& 43 \text { B. Single swing } \\
& 3000 \\
& 43 \text { B. Double swing . . . . . . . . . . . . . . . . . . . } 3450
\end{aligned}
$$

When fitted with four 1-4 Gem Tubes on plate, it will admit of eight on $7 \times 10$, and four on $5 \times 7$

## CINCINNATI GEM CAMERAS.

## SCOVILL'S.

This Camera, by some called the Lakeside, makes with one tube one picture on either a $1-4, \mathrm{I}-2,4-4,8 \times 10,5 \times 7$ or $7 \times 10$ plate, and two on either a $5 \times 7,7 \times 10$ or $8 \times$ Io plate.

It makes, with four $1-4$ gem tubes on brass plate, four or eight pictures on a $5 \times 7$ or $7 \times 10$ plate.

The $7 \times 10$ and $5 \times 7$ are rabbeted kits. The kits for all other sizes are supplied with solid glass corners-Scovill's Improved. It has but one outside holder, in which all the kits reverse.


Unfitted with
either Bonanza
either Bonanza
or Solid Glass
Corner Holder.
Price.
540 Plain (without Carriage or Swing) . . . . . $\$ 2200$
541 Carriage Movement ........ 2500 \$32 oo
542 Single Swing . . . . . . . . . . . . . 2800 3500
543 Double Swing . . . . . . . . $3300 \quad 40$ oo
$\left.\begin{array}{l}544 \text { Cincinnati Imperial Carriage . . . . . . . } 2700 \\ 545 \text { Cincinnati Imperial Double Swing . . . . . } 3000\end{array}\right\}$ Bonanza Holder.
When ordering please state style of Holders wanted.

Unfitted with Water with Water-
bury Holder. y Holde.

## ATTACHMENTS FOR BACK OF ECLIPSE PORTRAIT CAMERAS.

(American Optical Co.'s make, Nos. 5 to 7 inclusive.)


Consisting of a carriage and plate holder to be attached to larger portrait cameras, by occupying the place of the ground glass or shield of the same for producing smaller pictures, without using the large shield belonging to the camera. Two carte de visite or cabinet portraits can be made with one lens. These attachments can be laid aside when large-sized pictures are to be taken, and replaced when imperial work is to be done, for which they are available, from the largest size specified down to the smallest imperial work.

In ordering these, it will be necessary to specify camera in use, and the outside size of the back, to guard against possibility of error.


## ATTACHMENTS FOR ANTHONY PORTRAIT CAMERAS.

In ordering please state what kind of camera is in use, and give the outside size at the back, to guard against error.
$8 \times$ Io and cabinet and C. de V.
attachment for $11 \times 14$. . $\$ 2200$ $8 \times 10$ and cabinet and C. de V.
attachment for $14 \times 17 .{ }^{2} \quad 2500$ $8 \times 10$ and cabinet and C. de V.
attachment for $17 \times 20$. . 3250


## $5 \times 7$ STANDARD VICTORIA CAMERAS.

515 Without Lenses . . . . . . ... $\$ 1350$ 516 With four $1 / 4$ Lenses on a brass plate

2700
The newest pattern of the standard quality of Victoria Cameras, which produces 9 and 18 pictures on a $5 \times 7$ plate, is called the No. 517 " Multiplying Victoria Camera."
Price, without Lenses . . . . . . . . 1525
When ordering the above Cameras, please state whether rabbeted or solid glass corner Hoider is desired.

Extra Holders \$5.63 each.

## THE AMERICAN OPTICAL CO. ADJUSTERS FOR CABINET WORK.

These are made to fasten in the same place as the back diaphragms, which must be displaced while the adjuster is used, and are designed for use with the new Scovill Patent Single Light-weight Holders. With each is a hinged ground glass.

Price of Adjuster with hinged ground glass and Carriage arranged for either $41 / 4 \times 61 / 2,5 \times 7$ or $5 \times 8$ Cabinet Negatives, according to choice, as follows:
Adjuster for $8 \times 10$ American Optical Co. Portrait



Extra Single Light-Weight Holders:
$41 / 4 \times 61 / 4$ Single Light-Weight Holders, per doz.



## CLIMAX ATTACHMENT

FOR CABINET SIZE DRY PLATE HOLDERS
Is an attachment for use with either single or double dry plate holders, which will be found especially desirable by those doing a large amount of cabinet work, who, by its use, are enabled to load any number of holders they may wish, and be ready for sittings as fast as they may appear.

Each carrier is fitted with one single dry plate holder, and additional holders will be furnished at prices quoted below.
The carrier is supplied with a swinging ground glass, and for use, is attached to the back of the camera, in same place as the ordinary ground glass and frame.

The dry plate holders which are supplied for this carrier are all of same outside dimensions, but are fitted to receive plates either $4 \frac{1}{4} \times 61 / 2,5 \times 7$ or $5 \times 8$, as desired.

In ordering, please specify which size plate is to be used.
SIZE OF CARRIER, OUTSIDE.
$123 / 4$ wide $\times 121 / 2$ high, for $8 \times 10$, No. 19C, 19B and No. II and Royal Climax Cameras, fitted as above
$133 / 4$ wide $\times 133 / 4$ high for 43 B Cameras fitted as above. . . . . . . . . . . . . . . . 800

$20 \mathrm{~T} / 2$ " $\times 2 \mathrm{I}$ " $14 \mathrm{~B}, 14 \times 17$ " " ................... 1100

Larger sizes to order.
Cabinet Single Dry Plate Holders, per dozen . . . . . . . . . . . . . . . . . . . . . 1440

## ROYAL ATTACHMENT FOR ANTHONY'S PORTRAIT CAMERAS.

Similar to Climax Attachment, as illustrated, except that in place of swinging ground glass, the ground glass and plate holder are both fitted into grooved carriage, in the same way as shown in Climax Royal Camera. The dry plate holders which are supplied with this carrier are all of same outside dimensions, but are fitted to receive plates either $41 / 4 \times 61 / 2,5 \times 7$ or $5 \times 8$, as desired. In ordering, please specify which size plate is to be used.

Size of carrier outside: To fit No. I3B, II X 14, is 17 inches wide by $173 / 4$ inches high. Price each, \$12.

To fit No. 14B, $14 \times 17$, is $201 / 2$ inches wide by 21 inches high. Price each, $\$ 14$.
Cabinet single dry plate holders extra. Per dozen, $\$ 14.40$


## FERROTYPE CAMERAS.

This cheap, strong camera, made of cherry or mahogany, will make four bon-tons on a $5 \times 7$ plate, with four $1 / 4$ lenses, or a full cabinet with a single lens.
Plain, without lenses
$\$ 1200$
Extra Holders, $\$ 3.75$ each.

PATENT NOVELETTE VIEW CAMERAS.



With the $4 \times 5$ size the "Zephyr" plate holders are used. Price, with one single Novel Dry Plate Holder.


## THE AMERICAN OPTICAL CO. VICTORIA CAMERA.

EXTRA QUALITY.


It works a $5 \times 7$ plate, and may be used to make two Victoria cards, using one tube, on a $5 \times 7$ plate; four cartes-de-visite, using four 1-4 tubes, on a $5 \times 7$ plate, and by reversing the four lenses it will make eight "bon tons," on a $5 \times 7$ plate. It also makes all regular sizes, from I-6 to $5 \times 7$, using one tube. Four I-4 lenses only accompany the camera when it is ordered fitted.
No. Price.
5I Victoria Card Camera, with four I-4 tubes
only . . . . . . . . . . 4400 Victoria Card Camera, without tubes . . 2400 52 New style, using two $1-4$ size tubes only (without tubes) . . . . . . . . 2400 New style, with two I-4 size tubes . . . 4400

FRONT FOCUS NOVELETTE CAMERA.


It is fitted with the Eclipse double dry plate holder, which is included in price of camera quoted below. Also one Telescopic Brass Bound Canvas Carrying Case.


## LEADER VIEW CAMERA.

The Leader View Camera is the most popular and lowest priced reversible back camera in the market. It has swing back and rack and pinion movement for focusing. The forward end of the bellows is attached to the movable front and slides with it thus avoiding all possibility of cutting off the rays of light. The box is finely polished and the metal parts are nickel plated, which gives the instrument a very handsome appearance.

PRICES AS FOLLOWS:


ALBION CAMERAS.


PRICE-LIST OF ALBION CAMERAS.
Each with Albion Tripod and Extra Fine Canvas Carrying Case.



## AMERICAN OPTICAL CO.'S STAR VIEW CAMERAS.

|  | For View. | Single <br> Swing-back. | Double Swing-back. |
| :---: | :---: | :---: | :---: |
| 110 | $4 \times 5$ | \$2500 | \$29 00 |
| III | $4^{1 / 4} \times 5.1 / 2$ | 2600 | 3000 |
| 112 | $41 / 4 \times 61 / 2$ | 3000 | 3400 |
| 113 | $5 \times 7$ | 3200 | 3500 |
| 114 | $5 \times 8$ | 3400 | $3^{8} 00$ |
| 115 | $61 / 2 \times 81 / 2$ | 3600 | 4000 |
| 116 | $8 \times 10$ | 4000 | 4400 |
| 117 | II $\times 14$ | 6000 | 6400 |

## REVOLVING-BACK CAMERAS.

(PATENTED.)


REDUCED PRICE-LIST.
Revolving-back Cameras, each incased in a Canvas bag, with handle, and above $14 \times 17$ size, with two handles.


These Cameras are fitted with Daisy Dry-plate Holders.
Please state, when ordering any size below $10 \times 12$, whether front or back focus is desired. Revolving-back Cameras, front focus, not made above $8 \times$ ı size.

Canvas cases to contain Camera with more than one Holder made to order at extra price.

## THE LANDSCAPE CAMERA.

This new camera is made of mahogany, polished, and has single-swing vertical shifting front, cam for focusing, patent side latch for folding platform, and side plate for reversing. It was designed for professional photographers who wish to carry about a very light, compact View Camera, which is cheap, and yet in every respect substantial and serviceable. Price, No. 570 $8 \times 10$ size, with one Scovill patent double dry plate-holder
$\$ 2500$



## ACME REVERSIBLE BACK, VIEW CAMERAS. <br> (patented.)

These Cameras are supplied with Cone bellows, patent reversible back, vertical shifting fronts and folding platforms-are very compact, light and portable.

| No. |  |  | Single Swing. | Double Swing back. |
| :---: | :---: | :---: | :---: | :---: |
| 560 | 61/2x | $81 / 2$ reversible | \$29 00 | \$33 00 |
| 561 | 8 x | 10 " | 3400 | 3800 |
| 562 | 10 x | 12 | 4000 | 450 |
| 563 | 11 x | 14 | 5000 | 550 |
| 654 | $14 \times$ | 17 | 6000 | 65 |
| 565 | 17 x | 20 | 7000 | 750 |

## VIEW CAMERAS.-(Extra Quality.)

THE MATCHLESS CONE VIEW CAMERA.
(Patented.)


Each with Canvas Carrying Case.


## THE VENUS REVERSIBLE BACK VIEW CAMERA.

It has the American Optical Company's cone bellows, reversible back view camera, double swingback, with the addition of a stereo attachment and a $5 \times 8$ kit. Its capacity is $1-4,1-2,4-5,5 \times 8$ and $8 \times 10$ pictures, reversible, with one tube and stereos, on $5 \times 8$ plate, with two tubes.

Reversible Back Venus Camera

## THE UNIVERSAL.

REVERSIBLE BACK.


PARTIALLY FOLDED.


FOLDED.

Price includes canvas carrying case, one perfection holder and combination tripod, but no lens. (With sizes above II and I4 we send English book holder.)


THE ANTHONY COMPACT CAMERA.


PRICES, WITH ZEPHYR HOLDER AND CARRYING CASE.
$5 \times 7$, single Swing
$5 \times 8,6$

$\$ 3500$
$5 \times 8$, 6 6 . . . . . . . $3000 \mid 8 \times 10$, 6 . . . . . . 4000

THE ROCHESTER VIEW CAMERA.


This is designed for a thorough business camera and can be recommended to both the professional and amateur photographer.

It has the reversible back with the latest adjustable spring-actuated ground glass screen, always in position and ready for use.

It has a front focus, rack and pinion movement.
With the reversible back you can change it so as to take a picture vertically or horizontally without changing the position of the box or altering the focus, and is so arranged that the slide can be drawn from the top, bottom or either side.

It has a rising and falling front with rachet movement, cone-shaped rubber bellows, which is attached to the front, allowing it to be raised or lowered with the lens.

The price includes canvas carrying case and one double plate-holder.


## THE IDEAL.

REVERSIBLE BACK.
Price includes one Perfection plateholder and canvas carrying case, but no lens or tripod.

With sizes above II $\times 14$, we send English book-holders.




## STANDARD COPYING CAMERAS




When ordering Copying Camera, please state style of Holder desired, also give length of cone, if that is needed.


THE SCOVILL ENLARGING, REDUCING AND COPYING CAMERAS.


When ordering, please specify number and sizes of kits, also style of Holder wanted.


Special sizes and styles made to order.


## WINDOW BOX FOR ENLARGING.

This box is the back end and bellows of the Eastman Enlarging Camera and it is intended for use in connection with another camera.
Window box complete with ground glass, bellows, and adjustable carrier for negatives $31 / 4 \times 4 \frac{1 / 4}{}$ to $8 \times 10$, price, $\$ 1250$

## EASTMAN'S DAYLIGHT ENLARGING CAMERAS.

Especially Designed for Use with Enlarging Easels and Bromide Paper.

$8 \times 10$ Camera with Adjustable Carriers for $8 \times$ io Negatives and under price complete, $\$ 2500$ $5 \times 8$

INDIA RUBBER BELLOWS. (Scovill's.)


## HYATT'S STAMP PORTRAIT APPARATUS.

With this wonderful little instrument the photographer is enabled to reproduce from a cabinet photograph 25 small pictures, the size of a postage stamp, on a $5 \times 7$ plate, by simply placing the
 picture to be copied on the easel behind the matt or border and exposing and developing the plate in the usual manner.

No focusing is required, as all the lenses are accurately adjusted and focused.

Every instrument thoroughly tested and guaranteed.

Patented July 12, 1887.
Stamp Photo, size for 25, on $5 \times 7$ plate, including 2 borders, . . . . . . . . . . $\$ 50$ oo
Minnette Photo, size for 8, on 5 x 8 plate, including 2 borders, . . . . . . . . . 4000
Perforators for perforating same under Stamp Patent (also issued July 12, 1887), . . 3500
Extra Borders or Designs, each,
I 00
Adhesive preparation for gumming the backs of above photos.
1 pint can,

| 45 | cents, | $1 / 2$ | gallon can, |
| :--- | :--- | :--- | :--- |
| 75 | " | " |  |

\$1 25
I quart "

## EASTMAN'S ENLARGING EASELS.

WITH SPOOL HOLDER.
Price Complete.
No. I-For spools up to and including II inches, (for $11 \times 14$ pictures), $\$ 75^{\circ}$ No. 2-For spools up to and including 16 inches, (for $16 \times 20$ pictures), io oo No. 3-For spools up to and including 22 inches, (for $22 \times 27$ pictures), 1250 No. 4-For spools up to and including 25 inches, (for $25 \times 30$ pictures), 1500 No. 5 -For spools up to and including 30 inches, (for $30 \times 40$ pictures), 2000

## Prices of Extra Spool Holders.

No. I will take spools for paper up to II inches wide, $\$ 200$ No. 2 will take spools for paper up to 16 inches wide, 250 No. 3 will take spools for paper up to 22 inches wide, 300 No. 4 will take spools for paper up to 25 inches wide, 400 No. 5 will take spools for paper up to 30 inches wide, 500

Kits for Enlarging Easels.

| Outside. | Inside. | Price. |
| :---: | :---: | :---: |
| $25 \times 30$ | $22 \times 27$ | \$I 50 |
| $22 \times 27$ | $20 \times 24$ | I 40 |
| $20 \times 24$ | $18 \times 22$ | 130 |
| $18 \times 22$ | $16 \times 20$ | I 20 |
| $16 \times 20$ | $14 \times 17$ | 100 |
| $14 \times 17$ | $11 \times 14$ | 80 |
| II XI 4 | $10 \times 12$ | 66 |
| $10 \times 12$ | $8 \times 10$ | 60 |

THE WALMSLEY PHOTO-MICROGRAPHIC CAMERA.


SCOVILL'S DIAPHRAGMS, BLOCKS, \&c.
Diaphragms. for lenses.



THE SCOVILL PHOTO-MICROSCOPIC OUTFIT.


- CONSISTING OF -

I Scovill Special Half Plate Camera.
1 Multum in Parvo Lantern, with Double Condenser.
I dozen $4 \frac{1}{4} \times 5 \frac{1}{2}$ size B Keystone Plates to make Negatives; also I dozen $31 / 4 \times 4 \frac{1}{4}$ size A Plates for Transparencies.

$$
\begin{aligned}
& \text { Price, Complete . . . . . . . . . . . . . } \$ 18 \text { oo } \\
& \text { The Camera, Alone . . . . . . . . . . } \\
& 900
\end{aligned}
$$

The Presumption is that you are provided with a microscope. If not, we recommend the purchase of one from a regular dealer in microscopical goods.

## MAGIC LANTERN ATTACHMENT TO COOPER'S ENLARGING LANTERN.

Consists of Frame, six Carriers and box

## EXTRA PARTS OF APPARATUS. (Anthony's.)

Including Slides for Holders and Front Boards, Ground Glass, Focus Screws, Tripod Screws and Bellows for Cameras.

|  | Wood Slides for Novel HolGers. | $\begin{aligned} & \text { Focus Screws for Novel } \\ & \text { Cameras. } \end{aligned}$ | Wood Slides for Benster Holders. | $\begin{aligned} & \text { Front Boards for Climax } \\ & \text { Portrait Cameras. } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & \text { Front Boards for Dry } \\ & \text { Plate Outfits. } \end{aligned}$ |  | $\begin{aligned} & \text { Polished Front Boards for Nou,- } \\ & \text { Stereo Novelette Cameras. } \end{aligned}$ | Straight Rubber Bellows for Dry Plate Outfits. |  |  |  | $\begin{gathered} \text { Focus Screws for Novelette } \\ \text { Cameras. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $31 / 4 \times 41 / 4$. | - . | - . | - . | . . |  | . |  | \$0 10 | \$0 15 |  |  |  | \$100 | \$1 50 | . . | - . | - . | \$0 25 |
| $4 \times 5$ | - |  |  |  |  |  |  |  |  | \$0 20 | \$0 25 | \$0 30 | 125 | 200 | \$2 25 | -• | . |  |
| $4^{1 / 4} \times 5^{1 / 2}$ |  |  |  | \$0 50 | (0 50 | , \$200 | \$300 |  |  |  |  |  |  |  |  | - |  |  |
| $41 / 4 \times 61 / 2$. |  | \$1 75 | -• |  |  |  |  |  | 25 | 20 | 30 | 30 | 135 | 250 | 275 | - • | \$r 75 | 25 |
| $5 \times 7$ | - . | . . | - |  |  | - . | . |  | 30 | 20 | 50 | 30 | I 50 | 300 | 325 |  | $\pm 75$ | 25 |
| $5 \times 8$ | - | 175 |  |  |  |  | - |  | 30 | 20 | 50 | 30 | 150 | 300 | 325 | \$0 20 | I 75 | 25 |
| $61 / 2 \times 81 / 2$ |  | $\pm 75$ | ) | 60 | 60 | 450 | 550 | 20 | 40 | 45 | 50 | 50 | 200 | 330 | 375 | 30 | 1 75 | 25 |
| $8 \times 10$ |  | 1 75 | \$0 70 | 80 |  | - 60 | 700 | 20 | 50 | 45 | 50 | 50 | 250 | 400 | 450 | 30 | I 75 | 25 |
| $10 \times 12$ | 8075 | 1 75 | I 25 | . 80 |  | 800 | 900 | 35 | 100 | - | , | 70 |  | 500 | 550 | - |  | 50 |
| If $\times 14$ | 115 | 200 | 1 60 | 80 | 60 | 11000 | II 00 | 45 | 130 | . | 60 | 70 | -• | 700 | 775 |  |  | 50 |
| $14 \times 17$ | 1 35 | 200 | 200 | 100 | 80 | 1200 | 1300 | 75 | 225 | - | 70 | 70 | -• | 10 00 | II 00 |  | - • | 50 |
| $17 \times 20$ | 1 60 | 200 | 250 | 125 | I 00 | 1500 | 1650 |  |  |  |  |  |  | - | - . |  | - • | - |
| $18 \times 22$ | 200 | 200 | 275 | I 25 | I 00 | 1800 | 2000 |  | - |  |  |  |  | - | - |  |  | - |
| $20 \times 24$ |  |  | 325 | 125 | I 00 | 2400 | 2700 |  | - |  |  |  |  | - |  | - | - | - $\cdot$ |
| $22 \times 27$ |  |  | 350 | I 25 | 100 | 3200 |  |  |  |  |  |  |  |  |  |  |  |  |
| $25 \times 30$ |  | $1$ |  | $\text { I } 25$ | I 00 | $4000$ |  |  | . | -• |  |  |  | -• | - | -• | -• | $\cdots \cdot$ |

HOLDER SLIDES. (Scovill's.)


FOR INDIA RUBBER SLIDES add 40 per cent. to above prices.

THE WATERBURY DRY-PLATE HOLDER IS THE BEST FOR THE STUDIO.


REVISED PRICE LIST OF WATERBURY STUDIO HOLDERS.


And 10 per cent. to above list when with Curtain Slide.
DOUBLE DRY PLATE HOLDERS. (Scovill's.)


Light Weight
Double film
Holders.
$\$ 110$
Scovill's Patent
Double Dry Plate Holder
Kits Extra.
Kits Extra.
\$I 10
$\begin{array}{cl}\$ \text { I } & 10 \\ \text { I } & 25\end{array}$ Double Daisy
Dry Plate Holder Dry Plate Holder. Kits Extra.
$\begin{array}{ll}\$ 1 & 75\end{array}$

Flammang's
Single Dry Plate Holder.
With Kits
\$1 50
$31 / 4 \times 4^{1 / 4}$
$4 \times 5$
$41 / 4 \times 51 / 2$
I 25
I 25
I 30
$\begin{array}{ll}1 & 40 \\ 1 & 70\end{array}$ 350 500 750
$\begin{array}{ll}170 & 4 \\ 200 & 600\end{array}$
$\begin{array}{ll}125 & 210\end{array}$ 210 I 85 $225 \quad 190$ 235 250 420 600

$$
500
$$ 800

1000

$$
7 \text { co }
$$

$$
850
$$

1250
1550

$$
1080
$$

$$
1300
$$

1800

$$
1500
$$

2150
2600

$$
1800
$$

$$
2500
$$

$$
325
$$

$$
\begin{aligned}
& 325 \\
& 4 \quad 30
\end{aligned}
$$

[^0]
## PRACTICAL DRY PLATE AND FILM HOLDER.

## MADE OF STIFF PAPER AND VERY LIGHT.

To use the improved Practical Plate Holder, it is necessary to have a frame attachment for whatever size of camera you propose to work them with.

In ordering please observe the following instructions:
First, lay your ground-glass frame on a piece of paper and outline the exact dimensions. Next, give correctly by an inside line the size of rabbets, so as to insure an exact fit. And finally state what size of holder you intend to use.

To warrant the good results of our holder, your frames should be ordered with holders.
PRICE LIST.


REGISTERING SLIDES. (Scovill's.)


THE "BENSTER" PLATE HOLDER.
WITH CURTAIN OR WOODEN SLIDE.


THE BENSTER HOLDER WITH WOODEN SLIDE is applied only to boxes for wet plate work, such as 43 B and copying cameras, and in these holders the plate rests on pure silver wire and there is a trough with large bottle beneath, into which all the silver waste readily finds its way.

The prices of Benster Holders for Portrait Cameras are as follows :
For $8 \times 10$ plate and under, $121 / 2$ inches wide, $135 / 8$ inches high . . . ..... . . . . . $\$ 1000$


Special sizes, to order, will cost 20 per cent. additional.

THE IMPROVED PATENT BONANZA PLATE HOLDER.


Please bear in mind that Bonanza Holders cannot be put on any camera that will not take a silver-saving bottle in the holder.

PRICE LIST BONANZA HOLDERS.


Bonanza Holder for Cincinnati Camera with Rabbet Kits, . . . . . . $\$ 1275$
"
Multiplying " . . . . . . . . . . . . . . 1275
Troughs for Bonanza Holders one-half of the price of the complete holder.

## SOLID GLASS CORNER PLATE HOLDERS-FOR WET PLATES.

Outside Holder Only.
For $31 / 4 \times 41 / 4$.
" $4 \times 5$
" $4 \frac{1}{4} \times 5 \frac{1}{2}$ and New York Gem Box,
41/ 6 . 500
$41 / 4 \times 61 / 2$. . . . . . 550
" $5 \times 7$ and Victoria Camera, 625
" $5 \times 8 \times$. . . . . . . . 650
" $20 \times 24$. . . . . . . . 2400
" $8 \mathrm{x} \mathrm{IO}^{1 / 2}$ and Cincinnati Box, $8 \frac{7}{50}$ $5 \times 8$ Solid Glass Corner Holder for Stereo. Camera, . . . . . . $\$ 600$

Rabbeted Outside Holders 10 per cent. less than Solid Glass Corner Holders below $10 \times 12$ size Larger sizes made to order.

## ANTHONY'S PATENT ZEPHYR DOUBLE DRY PLATE HOLDERS.



## ANTHONY'S PATENT ECLIPSE AND NOVELETTE DOUBLE DRY PLATE HOLDERS.



Outside Dimensions.

$11 / 8 \times 16 \times 19$

For Plates.

| 41/4 | x $61 / 2$ |  |  |  | . | . |  | . | . | . |  |  |  |  | each | \$2 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | $\times 7$ |  |  |  | . |  |  | . |  | . |  |  |  |  | " | 220 |
| 5 | x 8 |  |  | . | . |  |  |  |  | - |  |  |  |  | " | 220 |
| $61 / 2$ | x $81 / 2$ |  |  | . | . |  | . | . |  | . |  |  |  |  | ، | 330 |
| 8 | $\times 10$ |  |  | . | . |  |  | . |  | . |  |  |  |  | ، | 430 |
| 10 | x 12 |  |  |  | . |  |  |  |  |  |  |  |  |  | * | 600 |
| II | $\times 14$ |  |  |  |  |  |  | . |  |  |  |  |  |  |  | 700 |
| 14 | $\times 17$ |  |  |  | . |  |  |  |  |  |  |  |  |  | * | 1000 |

## BARNETT'S PATENT UNIVERSAL FILM CARRIER.



## ANTHONY'S FILM HOLDERS.

| $4 \times 5$ |  |
| :--- | :--- |
| $41 / 4$ | $\times 61 / 2$ |
| 5 | $\times 8$ |

- each \$I 50
$61 / 2 \times 81 / 2$
each \$3 30

II X I4. . . . . . . . . . . . . . . each $\$ 700$


## ANTHONY'S PATENT METAL FILM KITS.



DOUBLE DRY PLATE HOLDERS FOR R. O. CO.'S CAMERAS.


Perfection
$31 / 4 \times 4^{1 / 4}$
$4 \times 5$
$41 / 4 \times 61 / 2$
$\begin{array}{ll}5 & \times 7 \\ 5 & \times 8\end{array}$
$61 / 2 \times 81 / 2$
$8 \times 10$
$\times 10$
$\times 12$
$\times 12$
$\times 14$
x 17
$\times 20$
X 22

Perfection Holders Polished Mahogany Rubber Slides.

$$
\begin{array}{ll}
\$ I & 50 \\
I & 50
\end{array}
$$ $\begin{array}{rrrrr}\$ I & 25 & \$ I & 60 & \$ I \\ \text { I } & 25 & \text { I } & 60 & 50 \\ \text { I } & 40 & I & 50\end{array}$ Holders. Book Holders. $\begin{array}{ccr}\text { \$I } 25 & \text { \$I } 60 & \text { \$I } 50 \\ \text { I } 25 & \text { I } 60 & \text { I } 50\end{array}$ $\begin{array}{lll}\text { I } 40 & \text { I } 75 & \text { I } 90 \\ 90\end{array}$ $\begin{array}{lll}\text { I } 50 & \text { I } 85 & 200\end{array}$ I $60 \quad 200$ I $85 \quad 225$ $\begin{array}{ll}2 & 25 \\ 3 & 00\end{array}$ $300 \quad 285$ $450 \quad 450$ 6 0こ 750 1000

$\begin{array}{ll}10 & 00 \\ 1500\end{array}$

Facile Film Holders Polished Mahogany Rubber Slides.

$$
\$ \mathbf{I} 75
$$

175
175
200
215
225
275
275
325

EASTMAN'S ROLL HOLDERS, MODEL OF 1889.


EASTMAN'S DRY PLATE HOLDERS.


## PRICE LIST FOR FITTING ROLL HOLDERS TO CAMERAS.

Eastman's Cameras.


No charge when purchased with the Camera.
Scovill \& Adams Co.
"Model" "76" "Waterbury" or "Philadelphia."


> Blatr Camera Co. "Reversible
> Back."

Scovill \& Adams "Revolving Back" Camera requires extensive alterations to the back, which makes the cost of fitting from $\$ 4.00$ to $\$ 8.00$ each

Anthony Duplex and Novelette Cameras require an adapter, and the cost for fitting is from $\$ 6.00$ to $\$ 10.00$ each.

## INSIDE KITS.

Consist of thin wooden frames, made to fit in the Plate Holder, with rabbets for holding smaller plate. Any size opening. For wet or dry plates.



## SOLID GLASS CORNER KITS.

OUTSIDE MEASUREMENT IN INCHES.

| $31 / 4 \times 41 / 4$ |  |  | . |  |  |  |  |  |  |  |  |  | $10 \times 12$ |  | - | . | . | . | - | . |  | . |  |  | . \$1 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $4 \times 5$ | . | - | . | - | , |  |  |  |  |  | 64 |  | $11 \times 14$ |  | . | . | . | . | . | . |  | . |  |  | - I 30 |
| $4^{1 / 4} \times 5^{1 / 2}$ | . | . | . |  |  |  |  |  |  |  | 65 |  | $14 \times 17$ |  | - | . | . | . | . | - |  | - |  |  | - 180 |
| $41 / 4 \times 61 / 2$ | . | - | - | . | - |  | - |  |  |  | 67 |  | $17 \times 20$ | - | - | - | - | . | - | . |  | . |  |  | , 196 |
| $5 \times 7$ | - . | - | - | - | , |  |  |  |  |  | 68 |  | $18 \times 22$ |  | . | . | - | . | - | - |  |  |  |  | . 230 |
| $5 \times 8$ | - . | . | - |  |  |  |  |  |  |  | 74 |  | $20 \times 24$ |  | , | - | - |  | - | - |  | - |  |  | - 245 |
| $61 / 2 \times 81 / 2$ | . . | . |  | - |  |  |  |  |  |  | 84 |  | $25 \times 30$ | . |  | , | . | - | - | . |  | . |  |  | - 380 |



## THE BONANZA CAMERA STAND.

This stand was first introduced at the Cincinnati Convention and elicited general admiration. It has been in great demand since then.

The superior elevating crank and fitting arrangement used on the Gem City Stand have recently been put on the Bonanza, thus making it one of the best stands in the market for $8 \times$ ro cameras and under.

By means of an ingenious attachment it can be made instantly rigid on the floor.
Finished in Ash . . . . . . \$15 00

## THE GEM CITY CAMERA STAND

has stood the "test of time," and is now universally acknowledged the BEST CAMERA STAND ever introduced to the photographic trade. It is, without doubt, the most rigid and at the same time the easiest handled.
The best and cheapest for $8 \times$ ıo to $25 \times 30$ cameras.
No. $\mathbf{1}$, for 4-4 to $10 \times 12$ cameras, 30 -inch bed $\$ 2000$
No. 2, for $11 \times 14$ and $14 \times 17$ cameras, $40-$ inch bed 2000
No. 3 , for $17 \times 20$ and $18 \times 22$ cameras, 48 -inch bed 2500
No. 4, for $20 \times 24$ cameras,
60 -inch bed . . . . 3000
No. 5, for $25 \times 30$ cameras,
made to order only . 3500
Nos. 1 and 2 have one weight; Nos. 3,4 and 5 have two weights, and base to correspond to size of bed.

They have been greatly improved. No set screw is required, when properly balanced act automatically, and there is no danger of binding with even the heaviest camera.



ANTHONY'S GIANT CAMERA STAND.
For large size Cameras.


Is, as its name implies, strong and thoroughly reliable. It is constructed on the principle of $\operatorname{cog}$ wheels working in a spiral screw thread, which insures ease and accuracy of manipulation combined with great liffing capacity. The top of the stand is fitted with an extension which adapts it to use for the largest sized box with a minimum of floor space consumed. Every part of this stand is made of the best material and it is guaranteed to do all that is claimed for it. Its minimum height is 28 inches, which may be increased to $421 / 2$ inches and the top may be inclined forward.

Price,
$\$ 3200$

## IRON CENTER STAND.

This is now the favorite cheap stand.
Price, for $1-4,1-2,4-4$ and $8 \times 10, \$ 3.50$


## THE SEMI-CENTENNIAL CAMERA STAND.

Reasons why you should adopt it :
First-Because you can lower the Camera within 13 inches of the floor, this being lower than any other stand will admit of.

Second-Because it is the only Camera Stand using Rubber Wheels as castors, therefore it is perfectly noiseless.

Third-By the use of its coiled springs and a key you can make it counterbalance any weight of Camera from $8 \times 10$ to $12 \times 14$ inclusive.
Weight of Stand, packed ready for shipment, 95 ibs.
Price, boxed . . . . . . . . . . . . . . \$25 00

## LEVER ADJUSTMENT GALLERY STAND.



ELITE STUDIO STANDS.
PATENTED.


[^1]Highest point from platform to flour . . . . . . . . . . . . . . . . . 48 inches.
Lowest " 6 " 6 . . . . . . . . . . . . . . . . 32 "
Width of platform . . . . . . . . . . . . . . . . . . . . . . . . 22 "6
Length of platform without attachment
Price, with Rack for Plate Holder . . . . . . . . . . . . . . . . . . $\$ 3200$

No. 2 Size. 48 inches.
32 "6
26 "
52 "
70 ،
$\$ 3600$

## THE MAGIC CAMERA STANDS.

Simplicity, solidity, strength, convenience, rapidity and ease of adjustment, fine finish, low price.

It is made of ash, beautifully finished; is supplied with the windlass and pulley system of elevation, with the roller stop which holds and binds the center shaft at any height automatically, doing away with all set screws. It also has a new selfacting appliance for tilting the top, and is supplied with the best caster ever made, and with a convenient tray for holding the plate holder while focusing, etc. The camera can be let down 4 to 6 inches lower than with most other stands, while it raises as high as any.
Size suitable for camera $8 \times 10$, or smaller, reduced to \$I2.00.


This cut represents the No. 1. Magic, patented May 5, 1885

## MAGIC STAND. Continued.

New principles, new shape; the lighest, the strongest, the most durable; beautifully finished, easy to work; no heavy weights, no set screws, no noise, no weak points; perfectly rigid, perfectly reliable, quickly adjusted.

A coil spring bears the most of the weight in raising and lowering, and self-acting stops hold the center frame and bind it firmly at any height desired by the operetor, no set screw being required to make it rigid. It has also a new and superior device for tilting the top. Nos. 3 and 4 are substantially the same as shown by cut, except that the tilt of the top is held by two automatic supports instead of one. All the metal work is either nickel plated or ebonized.


This cut represents the No. 2 Magic, patented July 29, 8884 , and May 5. 1885.

Ni) 2, for cameras II x 14, each . . $\$ 1600$ No. 3, for cameras $14 \times 17$, each . . . $\$ 2000$ No. 4 , for cameras, $17 \times 20$ to $20 \times 24$, each . . . $\$ 2500$


THE KNICKERBOCKER STAND.
No. o, for 4-4 camera . . . . . . . . . . . $\$ 500$
" 1, " " .......... 625
" 2 , for $8 \times 10$ camera . . . . . . . . . . $\$ 900$
" 3, " $\delta \times 10$ " . . . . . . .. . 1050
" 4, " $8 \times$ 10 \% with Stoddard Top . . 1350


THE ACME CAMERA STAND.
No. I. I-2 and 4-4.
$\$ 800$
No. 2. With Plate Holder Pocket, $8 \times 10$ and ro $\times 12$. 1200


## THE PERFECT CAMERA STAND.

The "Perfect" Camera Stand has been manufactured for several years, and is, as it has been justly called, a "Perfect" Camera Stand, made of finely polished black walnut and best of metal castings. It has superior advantages for cameras up to $10 \times 12$ size. Price, with Plate Holder Pocket . . . . . . \$15 00


This is the most elegant Tripod ever introduced. It is adapted to and is firm enough to support without vibration any View Camera from $5 \times 7$ to $10 \times 12$ size inclusive
$\qquad$
No. 2. " "
No. 3. Spruce (very light) 600

## THE ADJUSTABLE TRIPOD.

No. 1 :
Price, each, $\$ 350$
| No. 2 . . . . . . . Price, each, $\$ 5$ oo
Adjustable Jointed Tripod, to fold and pack in a 22 -inch Valise . . . . . . . . . . . . . . $\$ 400$
" ". " " " " " with Canvas Bag and Handle . 475

## THE IMPROVED TAYLOR TRIPOD.

Price, with metal disc and non-detachable screw .
Adapted for Cameras from $1-4$ to $8 \times$ ro size.


## PEERLESS FOLDING TRIPODS.

No. I. Peerless Stereoscopic, double-jointed legs, 6 inch wooden

```
top . . . . . . . . . . . . . . . . . . . . . $2 85
```

No. 2. Peerless Stereoscopic, double-jointed legs, $\mathbf{1} 2$ inch wooden

No. 3. Peerless Five foot, hinged legs, 12 inch wooden top
570
No. 4. Peerless Five foot, " legs, II inch metal top . .
No. 5. Peerless Six foot, rigid legs, 12 inch wooden top . .
No. 6. Peerless Six foot, " legs, 15 inch wooden top . . 800


THE DAISY TRIPOD.
Length, when folded, $161 / 2$ inches. Weight, 2 lbs . Price, . . . . . . . . . $\$ 3.5$.

## THE CLIMAX TRIPOD.

As shown by the cut, this tripod folds in three joints, making it much more convenient to carry than the ordinary two-jointed folding tripod. It resembles the Triplex tripod in length, but is not telescopic. The legs may be left permanently in the top when folded, and the other ends being fastened by a strap, a leather handle on one of the legs forms a convenient method of carrying it.
Price,


## THE FAIRY TRIPOD.

When folded it is only 16 inches long and weighs but one lb . 15 oz .
Price, each . . . . . . . . . . . . . . . $\$ 350$
Fine Sole-leather Carrying Case, with shoulder straps for legs
of above tripod, each . . . . . . . . . . . . . $\$ 250$

## THE PHANTOM TRIPOD.

Is the newest and best tripod of its kind to be found. The legs are firmly attached to the top by means of turn screws, and are so set into it that they do not require to be detached when carrying the tripod.

The legs are telescopic-folding twice-and the whole tripod when folded occupies a space only $31 / 2 \times 31 / 2 \times 23^{1 / 2}$ inches.
Price,
$\$ 500$

## PATENT TRIPLEX TRIPOD.

This is the finest finished in market and perfectly ridgid, combining both the folding and telescopic, besides which it occupies little space, and for transportation can be packed with clothing in a large grip-sack. It is made of cherry throughout, and has the patent springs on under side of top, by which it is impossible for the legs to become unfastened accidentally. When the leg is fully extended, it is held automatically by a spring, saving necessity of using thumb-screw for clamping same.

## THE ROCHESTER COMPACT TRIPOD.

This tripod is made to fold and slide, and can be adjusted to any desired length.

It is made of best selected ash with all wearing parts of brass, thus giving it the utmost rigidness and strength.

When extended it is four feet ten inches long, while it is but twenty-three inches in length when closed.

The tripod-screw is arranged to always remain in the top.
No.
Size of Cameras.
Price.
$\begin{array}{ll}\text { I } 31 / 4 \times 41 / 4-4 \times 5 \text { or } 41 / 2 \times 61 / 2 \ldots . . . . . \$ 350 \\ 2 & 5 \times 7-5 \times 8 \text { or } 61 / 2 \times 81 / 2\end{array}$

4 II $\times 14$ or $14 \times 17$
500


## R. O. CO.'S TRIPODS.

## Standard Folding Tripod.

It is light, strong and rigid.
The tripod screw remains always in the iron top, ready for use and not liable to loss.
Price, for cameras from $4 \times 5$ to $61 / 2 \times 81 / 2, \ldots . \$ 200$

## R. O. CO.'S PERFECTION TRIPOD.

## DOUBLE SLIDING.

In design and finish this Tripod leaves nothing to be desired. It is thoroughly made, every point being as near perfection as possible.

The lower section slides within the second, which in turn is contained within the third, thus rendering the tripod quite compact when closed.
No. I-For cameras $31 / 4 \times 41 / 4$ to $4^{1 / 4} \times 61 / 2$, $\$ 50$ No.2- " $5 \times 7$ to $8 \times 10$, 600


## CARLTON'S SLIDING TRIPOD.

This is the simplest and best form of Sliding Tripod yet made. The legs are made in three pieces, same as the folding, which renders the tripod firmer when set up than where made of two pieces, which is the ordinary form.
No. 1-For $3^{1 / 4} \times 4^{1 / 4}$ to $4^{1 / 4} \times 6 \quad 61 / 2$ camera $\$ 250$ No. 2-For $5 \times 8$ and $61 / 2 \times 81 / 2$ " $\times 300$ No. 3-For $8 \quad \times 10$ " $10 \quad \mathrm{x} 12$ " 350
No. 4-For II X 14 " 14 X 47 "
No. 5-For $17 \times 20$ to $20 \times 24$ " $\times 50$


## R. O. CO.'S COMBINATION TRIPOD.

COMBINED SLIDING AND FOLDING.

This Tripod is one of the most convenient forms of Tripod ever introduced. It is jointed in three lengths, and when closed is but 22 inches long. The tripod top is of wood covered with cloth. As the lower section slides, the tripod has all the advantages of adjustment of the Sliding Tripod No. I-For $31 / 4 \times 4 \frac{1}{4}$ to $41 / 4 \times 61 / 2, \ldots . . \$ 30$ No. 2-For $5 \times 8$ and $61 / 2 \times 8 \frac{1}{2}, \ldots . .400$ No. 3-For $8 \times 10$ " $10 \times 12$, . . . 450 | No. 4-For II | $\times 14$ | " $14 \times 17$, | . | 5 | 50 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| No. |  |  |  |  |  |

## "YOU PRESS THE BUTTON, WE DO THE REST." KODAKS

No. I Kodak. For round pictures, $21 / 2 \mathrm{in}$. in diameter; capacity, 100 exposures without reloading; size, $31 / 4 \mathrm{x}$ $33 / 4 \times 6$ inches, or 73 cubic inches; weight, loaded, I lb. 8 oz .
Price of No. I Kodak, loaded with 100 exposures, including sole leather case, . . . . . . $\$ 2500$



## No. 2 KODAK.

For round pictures, $31 / 2$ in. diameter; capacity, 100 exposures without reloading; size, $4 \frac{1}{2} \times 5 \times 9$ in. or 202 cubic inches; weight loaded, 2 lbs., 12 oz.
Price No. 2 Kodak, loaded with 60 exposures, including sole leather carrying case e . . .
Note. -The price includes spool of 60 exposures, but the camera will take a spool of 100 exposures.

## No. 3 KODAK.

For square pictures, $31 / 4 \times 41 / 4$; capacity, 100 exposures without reloading; size, $41 / 4 \times 51 / 2 \times 111 / 2=2681 / 2$ cubic inches; weight loaded, 4 pounds.
Price of No. 3 Kodak, loaded with 60 exposures, including sole leather carrying case . . $\$ 40.00$

Note.-The price includes spool of 60 exposures only; the camera is capable of receiving spool of roo exposures.


## No. 3 KODAK, Junior.

For square pictures $31 / 4 \times 4 \frac{1}{4}$; capacity, 60 exposures without reloading; size $41 / 4 x$ $51 / 2 \times 9=210$ cubic inches; weight loaded, 3 pounds.
Price, No. 3 Kodak Junior, loaded
with 60 exposurses, including sole
leather carrying case . . . . . $\$ 40$ oo
This camera can be fitted with ground glass attachment for glass plates.

No. 3 Junior Glass Plate Kodak without roll holder for films.
With 3 double holders . . . . . . . \$40.00

## No. 4. KODAK.

For $4 \times 5$ square pictures; capacity, roo pictures without reloading, size, 5 x $63 / 8 \times 123 / 4=406$ cubic inches; weight loaded, $4^{1 / 2}$ pounds.
Price of No. 4 Kodak loaded with 48 exposures, including sole leather carrying case . . $\$ 5000$
Note.-The price includes spool of 48 exposures only, but the camera is capable of receiving a spool of 100 exposures.



## No. 4 KODAK, Junior.

For square pictures, $4 \times 5$; capacity, 48 exposures without reloading size, 5 x $61 / 2 \times 101 / 2=326$ cubic inches; weight loaded, $31 / 2$ pounds.

Price of No. 4 Kodak Junior loaded with 48 exposures, including sole leather carrying case, . . . . . . $\$ 5000$

This camera can be fitted with ground glass attachment for glass plates.

## No. 4 JUNIOR GLASS PLATE KODAK.

Without roll-holder for films, with 3 double holders, . . . . . . . . . . . . . . . . . . $\$ 4000$
Glass Plate Attachments for No. 3 Jr. and 4 Jr. Kodaks, . . . . . . . . . . . . . 500
Double Holders, each, . . . . . . . . . . . . . . . . . . . . . . . . . . . . I 00
Leather Carrying Case for 3 Holders and Attachment, . . . . . . . . . . . . . 200
" " 6 " 6 " 6 . 6 . . . . . . . . . 250
" " " " 6 " only, . . . . . . . . . . . . . . . . . . 1 . 50


## No. 4 FOLDING KODAK.

For square pictures, $4 \times 5 \mathrm{in}$.; capacity, 48 exposures without reloading; size (folded) $7 \times 5 \times$ $51 / 2=1921 / 2$ cubic inches; weight loaded, 3 lbs .9 oz .

The camera forms its own carrying case.

Price No. 4 Folding Kodak complete with shoulder strap, loaded with spool of 48 exposures, . . . . . . . . . \$55 oo

Pneumatic release for shutter, including rubber tube and bulb, $\$ 2.50$ extra.


This Cut describes buth Nu. 4 and 5 Folding.

## No. 5 FOLDING KODAK.

For $5 \times 7$ pictures; capacity, 54 exposures without reloading; size (folded) $61 / 4 \times 7 \times 9=393$ cubic inches; weight loaded, $51 / 4$ pounds.
Price No. 5 Folding Kodak complete with shoulder strap, loaded with spool of 32 exposures, . $\$ 6500$
Note. -The price includes spool of 32 exposures only, but the camera will take a spool for 54 exposures.

Pneumatic Release for Shutter, including rubber tube and bulb, $\$ 2.50$ extra.
Glass Plate Folding Kodaks with 3 Double Holders and carrying case, without Roll Holder, same price as above.

## GLASS PLATE ATTACHMENTS FOR FOLDING KODAKS.




## A ORDINARY KODAK.

For rectangular pictures, $23 / 4 \times 31 / 4$ inches; capacily, 24 exposures without reloading. Size of csmera, $31 / 2 \times 4$ $x \quad 71 / 4$ inches; weight, 17 ounces. Length of focus of lens, 4 inches. Handsomely finished in natural wood.
A Ordinary Kodak, loaded for
24 exposures, . . . . . . . $\$ 600$

## B ORDINARY KODAK.

For Rectangular pictures, $31 / 2 \times 4$ inches capacity, 24 exposures without reloading. Size of camera $41 / 2$ x $43 / 4 \times 91 / 2$ inches. Weight 1 pound $1_{3}$ ounces; length of focus of lens 6 inches. Handsomely finished in natural wood.
B Ordinary Kodak loaded
for 24 exposures ..... $\$ 1000$


## C ORDINARY KODAK.

For rectangular pictures $4 \times 5$ inches
 capacity, 24 pictures without reloading. Size of camera $5 \times 61 / 2 \times 111 / 4$ inches. Weight 3 pounds 7 ounces; length of focus of lens 7 inches. Fitted with focusing lever and index, 2 finders, revolving stobs and adjustable speed for shutter.
Handsomely finished in natural wood.
C Ordinary Kodak, loaded, for 24 exposures, . . . . . . . . \$15 00
C Ordinary Glass Plate Kodak, including I double dry plate holder . . . . . . . . . . . \$15 00
Roll Holder for above not loaded, 5 oo

## C SPECIAL KODAK.

For Glass Plates. This camera is similar in construction to the C ordinary except that it is coverep with leather and has a double combination lens. It is a splendid instrument, equal to any glass plate camera in the market.

[^2]

## A DAYLIGHT KODAK.

For rectangular pictures, $23 / 4 \times 31 / 4 \mathrm{in}$. capacity, 24 exposures without reloading. Size of camera $31 / 2 \times 4 \times 7^{1 / 4}$ in. Weight, 17 ounces; length of focus of lens, 4 in . Handsomely finished and covered with leather. This Kodak can be LOADED IN DAYLIGHT.
A Daylight Kodak, loaded for 24 ex-
posures,
$\$ 850$

## $B$ DAYLIGHT KODAK.

For rectangular pictures, $3 \mathrm{~T} / 2 \times 4 \mathrm{in}$.; capacity, 24 exposures without reloading. Size of camera, $4 \frac{1}{2} \times 4^{3 / 4} \times 91 / 2$ inches; weight, $\mathbf{I ~ l b} .13 \mathrm{cz}$. ; length of focus of lens, 6 inches. Handsomely finished and covered with leather.

This camera can be
LOADED IN DAYLIGHT.
B Daylight Kodak, loaded for 24
exposures,
$\$ 1500$


## C DAYLIGHT KODAK

For rectangular pictures, $4 \times 5$ inches; capacity, 24 exposures; size of camera, $5 \times 61 / 2 \times 11 \frac{1 / 4}{}$ inches ; weight, 3 lbs .7 oz .; length of focus of lens, 7 inches. Fitted with focusing lever and index, 2 finders, revolving stops and adjustable speed for shutter. Handsomely finished and covered with leather. This Kodak can be

LOADED IN DAYLIGHT
C Daylight Kodak, loaded for 24 ex-
posures, . . . . . . . . . \$25 00
GLASS DRY PLATE ATTACHMENTS.
CAN BE SUPPLIED ONLY FOR THE C KODAKS.
Glass Plate Attachment for Daylight style, $\$ 500 \mid$ Double Holders, each . . . . . . . . $\$ \mathrm{I}$ oo " " " " Ordinary, . . 4 oo

Leather Carrying Case,
LEATHER CARRYING CASES FOR KODAKS.
WITH SHOULDER STRAP.
A. B. C.

Black Sole Leather, . . . \$1 $20 \$ 160 \$ 20$ | Leatherette, . . . . . . \$0 60 \$ $\$ 80$ \$1 00

For time exposures, for A. B. or C., . . each, roc. | Extra Reels for ordinary Kodaks, . . each, 25 c .

CONDENSED KODAK PRICE LIST.


$\dagger$ This price is for full spools only.
$\ddagger$ In ordering spools, always state whether for Regular, Junior or Folding, to avoid mistakes in length of spools.
$z_{8}$ This price includes gold bevel maroon mounts.
Non orders for developing or printing less than one dozen, 25 cents extra will be charged to cover expense of packing, etc.

## A. B. C.

## SIZe NEGATIVE, $23 / 4 \times 31 /+\quad 3^{1 / 2} \times 4 \quad 4 \times 5$

"Daylight" style, covered with black leather, fitted for spools to reload in daylisht, . . . . . . . .

| $\$ 8$ | 50 | $\$ 1500$ | $\$ 2500$ |  |
| ---: | ---: | ---: | ---: | ---: |
| 6 | 00 | 10 | 00 | 1500 |

All the above Kodaks are loaded with spools for 24 exposures, and have automatic exposure counters.

A Daylight and A Ordinary Kodaks have single lenses with fixed stops.
$1 \mathbf{B r d i n a r y}$ and C Ordinary have single lenses and revolving stops.
B Daylight and C Daylight Kodaks have double lenses and revolving stops.

A and Kodaks have fixed universal focus. C Kodaks have focusing lever and index and adjustable speed for shutter.
Spools for 24 exposures, Daylight, . . . . . . . . . . . . . . . . . 75 I 10 I 60
Spools for 24 exposures, Ordinary, . . . . . . . . . . . . . . . . . 65 I 00 I 50
In ordering spools always give Camera letter and state whether Daylight or Ordinary patterns.

On orders for less than one dozen prints 25 cents extra will be charged.


## ACME AUTOMATIC KODAK COUNTER.

Patented Sept. 15, 1891.
No. 1.-All regular sizes of
Kodaks, . . . . . . . . . $\$ 200$
No. 2-All Junior Kodaks, . . 200

## DETECTIVE CAMERAS.-THE RATTLER.

This popular Hand Camera is not a toy, as some may have supposed on account of the remarkably low price at which it is sold ; but it is a good, practical working instrument, one that we can recommend as being superior in every respect to any Camera sold at double the price. It will make pictures $4 \times 5$, inclusive, size, either "snap shot " or on a tripod.

Anybody can learn to make pictures with The Rattler.
No. I, $4 \times 5$ Rattler . . . $\$ 500$. Extra Holders for Ratller : . . . each, \$1 00.


## THE "KNACK."-NEW ANTIQUE OAK CAMERA.

No. 1. $-4 \times 5$ The New Antique Oak Camera, . . . . . . . . . . . \$15 00 " 2.-Leather Covered, . . . . . 1750

Plate Holders, Extra, . each, I oo

## THE P. D. Q. CAMERA.

This equipment includes the camera, lens, shutter and three patent double holders, and the price, complete, covered in black grained leather, is only $\$ \mathbf{1 7 . 5 0}$. If finished in plain polished walnut, the price is only $\$ 15.00$.

Directions for use accompany each camera.


## FOLDING PREMIER.

Either plates, cut films, or a roll of films can be used, as the different holders are interchangeable. The change from plates to films can be made in five seconds.

When closed, the $4 \times 5$ Folding Premier is only $6 \frac{1}{4} \times 63 / 4 \times 7$ inches.


THE PREMIER.


With the Premier either glass plates or films can be used, or both, as the Plate-Holders and Roll Holder are interchangeable.

The Premier is made for holding both four and six Perfection Holders, the difference in length being $11 / 2$ inches.

The size of the $4 \times 5$ Premier is only $61 / 4 \times 63 / 4 \times 11$ inches, and weighs less than four pounds.


ROCHESTER $4 \times 5$ FOLDING CAMERAS.


It measures when closed $43 / 4 \times 51 / 2 \times 7$ inches, yet holds the lens, shutter and three double plateholders.

It is made of polished mahogany, trimmed with polished and lacquered brass and covered with fine grain leather. When closed no working parts are visible thus giving it the appearance of a small sample case as shown in above cut.

The Shutter can be set without exposing the plate, it is easily reguiated for speed and for time or instantaneous exposure.

The Ground Glass Screen is spring actuated, which leaves it always in position and when putting it in the holder the screen is moved back by the holder, which saves the necessity of drawing it back with the hand.

It can be placed on the tripod either verticle or horizontal.
It is fitted with a light weight Rochester holder, the smallest and lightest practicable holder yet placed in the market.
Price including lens, shutter and three double dry plate-holders.

ROCHESTER $5 \times 7$ FOLDING CAMERA.


## THE AMATEUR.

This is the only firstclass hand camera ever placed in the market at a low price, being especially designed to meet the wants of the amateur who does not wish to invest much money in a hand camera.

It is constructed in the best possible manner with every working part as true and accurate as possible.

It is covered with fine
 grain leather which makes it as neat in apperance as any of higher price.

It has two perfect view-finders that show the image exactly as it will be on the plate after exposing it.
The shutter is so arranged that it can be regulated for fast or slow work and also for making time exposures. As the shutter works exceedingly quick it should not be set for quickest motion, except when photographing rapidly moving objects.

MADE OXLY IN SIZE $4 \times 5$.
Price of Camera complete with one holder, . . . . . . . . . . . . . . . . . . . . . \$12 00
Extra holders, each, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 100
Roll-holders loaded with 50 exposures, . . . . . . . . . . . . . . . . . . . . . . . 1200

THE $5 \times 7$ HENRY
CLAY CAMERA.


The points of superiority in this camera are, briefly, its compactness for the size plate it takes ( $5 \times 7$ inches), measuring when closed only 8 inches high, $91 / 2$ inches long, $53 / 4$ inches wide; its weight, about 5 pounds.
$5 \times 7$ Henry Clay Camera, with plain
Shutter, . . . . . . . . . \$50 00
$5 \times 7$ Henry Clay Camera, with pneu-
matic release Shutter, . . . 5500
Either of the above styles can be made tocontain a $5 \times 7$ roll holder for 24 or 48 exposures of transparent films. This makes necessary a case about two inches wider and onequarter inch higher. The additional cost, including roll holder, is $\$ 15.00$.

## HENRY CLAY STEREOSCOPIC CAMERA.

Price with a pair of Rapid Rectilinear Stereo. Lenses and Prosch Stereoscopic Shutter with pneumatic release, $\$ 75.00$.

Price with a pair of Rapid Rectilinear Stereo Lenses and Prosch Stereoscopic Shutter with pneumatic release, and with vertical sliding and single swing front, $\$ 80.00$.

Either of the above styles can be made to contain a $5 \times 7$ roll holder for 24 or 48 exposures of transparent films; this makes necessary a case about two inches wider and one-quarter inch higher. The additional cost in-


THE "TOM THUMB" CAMERA.


Price complete, Sensitive Plates, per doz., 30 cts.

$\$ 1000$
Extra Plate Holders (double), 90 cts. each.


## BOOK CAMERA.

The outfit consists of a camera and lens, with leaf shutter. One $4 \times 5$ double Film plate holder. One $4 \times 5$ single dry plate holder.
One canvas case with shoulder straps (the canvas case is only $101 / 2 \times 6 \times 7$, and will accommodate five extra plate holders). Price of Outfit, complete, $\$ 25.00$.

## THE MASCOT CAMERA.

WITH ROLL HOLDER AND DOUBLE PLATE HOLDER.
Price for $4 \times 5$ size Mascot camera, complete, $\$ 2500 \mid$ Without Roll holder, . . . . . . . . . $\$ 1500$
Leather covered, extra, . . . . . ... $200 \mid$ Double Dry Plate Holders, extra, . . . I co


## THE HETHERINGTON "PRIZE" MAGAZINE CAMERA.

There is no shutter to set, slide to draw, no door to be opened.

There are no Hinges, Springs or obtrusive fixtures.
Size is only eleven inches long, six inches wide, seven and one-half inches high.

The action is directly mechanical, under positive control, absolutely exact. Twelve consecutive exposures upon plates or films with but two movements.

## THE HETHERINGTON CAMERA (Continued.)

TURN DOWN THE PLATE-RELEASE THE SHUTTER.

A Darlot No. I lens that is guaranteed.
A focusing device that can be seen, felt and heard.

A shutter that is ever set.
Diaphragms that are operated from without.
Light, small, simple and complete.

A magazine in which the movement of the plate or film is directly and mechanically controlled at all times.
A locked box that is opened without a key.
Plates can be changed in complete darkness; no especial light necessary.

No working part extended beyond the surface of the box.
Size $4 \times 5$, Price, $\$ 45.00$
Carries one dozen Plates or Cut Films.

## THE KAMARET.

The Kamaret is the latest photographic wonder, being nearly one-third smaller than any other camera of equal capacity, viz.-100 $4 \times 5$ pictures without reloading. Size complete $51 / 2 \times 61 / 2 \times 83 / 4$ inches.

Price List.
Kamaret, fitted with double combination Rapid Recti-
linear Lens and loaded with transparent film for 50 exposures, with leather carrying case . . . . . . $\$ 4000$ Extra rolls of Transparent Film for 100 exposures . 600 " " " 50 " . 300 Attachment for plates, with one Feather Weight Holder 500


THE HAWK-EYE.

## Price List.

The Hawk-eye Camera, $4 \times 5$, hand finished, wood case. . \$1500 Covered with black grain leather
Improved Roll Holder with Automatic Tally (empty) . 700
Transparent Film for 50 exposures . . . . . . . . 300
Transparent Film for 100 exposures . . . . . . 600
Blair Rapid Detective lens 1200
Taylor \& Hobson English Lens with Iris Diaphragm 2500


THE IMPROVED WATERBURY DETECTIVE CAMERAS.

PRICE LIST.
$4 \times 5$ Waterbury Detective Camera, with 2
Double Holders . . . . . . . $\$ 2500$
$5 \times 7$ Waterbury Detective Camera, with 2 Double Holders

4000
$4 \times 5$ Extra double Plate and Film Holders, each . $5 \times 7$ Extra double Plate and Film Holders, each


## NEW MODEL STEREOSCOPIC CAMERA.

Price for $5 \times 8$ complete, including pair of No. I R. O. Co. View Lenses, matched, Carlton Sliding Tripod and one Perfection Holder Complete, without Lenses . . . . . . 1800 " " " orTripod . . . 1500


## THE TRIAD CAMERA.

FOR GLASS PLATES, CUT FILMS AÑD ROLl.-HOLDER
With Roll-Holder, 2 Double Dry Plate
Holders or 2 Double Holders for Cut Films, and with ground glass focusing screen. Price complete . . . . . . $\$ 3500$ Price without Roll Holder . . . . . . . 2500
Extra $4 \times 5$ Light Weight Holders, each . 125

## THE ROCHESTER HAND CAMERA.

MADE ONLY IN SIZE $4 \times 5$.
Prices including R. C. M. Co. Single Achromatic Lens, with rotary stop and one double plate-holder. \$I8 00
Fitted with R. C. M. Co.'s Rapid Symmetrical Lens,
Fitted with Gundlach's Rapid Rectigraphic Lens,

3400
Without lens, . . . 1600
Extra holders, each, I 00
Roll holder loaded with 50 exposures,



The No. I Equipment consists of :

I $4 \times 5$ Wonder Camera,

I Wonder Lens,
I Folding Tripod,
x Double Plate Holder,
r Package Ferrous Oxalate Developer,
2 Japanned Iron Trays,
I Package Hyposulphite Soda,
1 Ruby Lantern,

I Rubber Focus Cloth,
I Package Carbutt's $4 \times 5$ Dry Plates,
I Package Sensitized Paper,
I $4 \times 5$ Flat Printing Frame,
1 Jar Paste,
I Package Mounts, round corners, (Primrose),
I Set Toning Solution,
I Ounce Graduate,
I Manual.
Size of Picture, Price.
. $4 \times 5$. . . . . . . . . . . . . . $\$ 750$
$4^{1 / 4} \times 6 \frac{1}{2} \ldots . . . . . . . . . . .11000$

- $5 \times 7$

1200
FAVORITE APPARATUS OUTFITS.


FAVORITE OUTFIT A, PRICE $\$ 10.00$
Comprises A Favorite View Camera to produce $4 \times 5$ inch pictures, with vertical shifting front, single swing movement, rubber bellows and folding platform, with patent latch for making bed rigid instantaneously.

I Scovill Double Dry Plate Holder (Reversible), with patent Registering Slides.
r. Taylor Improved Folding Tripod.

I No. A. "Waterbury" Achromatic Lens, wilh revolving diaphras"m. I Carrying Case.
$5 \times 7$ Favorite Outfit, . . . . . . . . . . . . . . . . . . . . . Price, \$12.00

## FAVORITE OUTFIT B, PRICE $\$ 12.00$.

Comprises A Favorite View Camera to produce pictures $5 \times 8$ inches, with vertical shifting front, single swing movement, rubber bellows and folding platform, with patent latch for making bed rigid instantaneously.

I Scovill Double Dry Plate Holder (Reversible), with patent Registering Stides, and with Kits.
I Taylor improved Folding Tripod.
I No. B. "Waterbury" Achromatic Lens with revolving diaphragns. I Carrying Case.

## FAVORITE OUTFIT C, PRICE \$18.50.

Comprises: A Favorite View Camera, to produce $5 \times 8$ inch pictures, with vertical shifting front, single swing movement, rubber bellows and folding platform, with patent latch for making bed rigid instantaneously.

This Camera is constructed so as to make either a Picture on the full size of the plate ( $5 \times 8 \mathrm{in}$.) or by substituting the extra font (supplied with the outfit) and using the pair of lenses of shorter focus, it is admirably adapted for taking stereoscopic negatives. Included in this outfit are also

I Scovill Double Dry Plate Holder (Reversible), with patent Registering Slides, and with Kits.
I B "Waterbury" Achromatic Lens, with revolving diaphragms.
I Pair " Waterbury " Achromatic Matched Stereoscopic Lenses.
I Taylor Improved Folding Tripod. I Carrying Case.

## FAVORITE OUTFIT D, PRICE $\$ 15.00$.

Comprises: A Favorite View Camera, to produce pictures $61 / 2 \times 81 / 2$ inches, with vertical shifting front, single swing movenent, rubber bellows and folding platform, with patent latch for making bed rigid instantaneously; also

I Scovill Double Dry Plate Holder (Reversible), with patent Registering Slides, and with Kits.
I Taylor Improved Folding Tripod.
I No. BB "Waterbury" Achromatic Lens with Revolving Diaphragns. I Carrying Case.

## FAVORITE OUTFIT E, PRICE \$25.00.

Comprises: A Favorite View Camera to produce pictures $8 \times$ ro inches, with vertical shifting front, single swing movement, rubber bellows and folding platform, with patent latch for making bed rigid instantaneously ; also

I Scovill Double Dry Plate Holder (Reversible), with patent Registering Slides, and with Kits.
I Taylor Improved Folding Tripod.
I No. C"Waterbury" Achromatic Lens zuith Revolving Diapliragws. I Carrying Case.

## WATERBURY OUTFITS.

With double film holders, or with glass plate holders.

$4 \times 5$ Waterbury Outfits, complete

## CONSISTING OF

I Single Swing Camera, described above.
I Light Weight Double Dry Holder, with Patent Registering Slides.
I Wooden Carrying Case.
I Improved Taylor Tripod.
I No. A Waterbury Lens with Revolving Diaphragm.


## WATERBURY OUTFIFT (Continued.)

$5 \times 8$ Waterbury Outfits, complcte . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 1650$
CONSISTING OF
Single Swing Camera, described above.
1 Light Weight Double Dry Holder, with Patent Registering Slides.
I Wooden Carrying Case.
I Improved Taylor Tripod.
I No. B Waterbury Lens with Revolving Diaphragm.
$5 \times 8$ Waterbury Outfit, with Instantaneous Shutter
$61 / 2 \times 81 / 2$ Waterbury Outfits, complete

## CONSISTING OF

1 Single Swing Camera, described above.
I Light Weight Double Dry Holder, with Patent Registering Slides.
I Wooden Carrying Case.
Improved Taylor Tripod.
I No. BB Waterbury Lens with Revolving Diaphragm.

## NEW MODEL.

Price includes R. O. Co.'s Single View Lens, Standard Folding Tripod, Carrying Case, and one perfection Plate Holder, (except $8 \times 10$, where neither lens nor tripod are included).



## NEW MODEL IMPROVED.

Price including R. O. Co.'s Single View Lens, Carlton Sliding Tripod, Carrying Case and one perfection Plateholder (except $8 \times$ xo, where neither lens nor tripod are included).

| Size of View. | Single Swing | Double Swing |
| :---: | :---: | :---: |
| $31 / 4 \times 41 / 4$ | \$13 00 | \$15 00 |
| $4 \times 5$ | 1400. | 1600 |
| $41 / 4 \times 61 / 2$ | 1600 | 18 оо |
| $5 \times 7$ | 18 oo | 2000 |
| $5 \times 8$ | 18 оо | 2000 |
| $61 / 2 \times 81 / 2$ | 2200 | 24 00 |
| $8 \times 10$ | ${ }^{2} 2000$ | *22 00. |

[^3]
## O. N. A. EQUIPMENT.


O. N. A. equipments numbers 7 B and 8 B are similar to those previously described, except that they are fitted with a patent telescopic folding tripod.

## THE N. P. A. CAMERA.

This is a highly polished mahogany camera with patent swing-back, rising front, folding bed, patent clamp hooks (to make the bed rigid), extra front and stereoscopic partition. The metal work has the draw-file finish, similar to that on the finest mathematical instruments. By means of a plate on the side, this camera can be reversed on the tripod and used to make a vertical picture.

Prices, including camera as ahove, one patent double Zephyr dry plate holder and carrying case :




## THE VICTOR CAMERA.

This camera is made of highly polished mahogany, and the metal work has the draw-file finish, the same as that used on the finest mathematical instruments.

It is provided with rising front and single swing, and is adapted to front focus, having the double rack and pinion movement.
The ground glass is fitted with the patent spring-actuated movement, which keeps it always attached to the camera without being in the way of the operator. The camera may be used for making pictures, either vertically or horizontally, by means of a plate on the side. The price includes camera, one Eclipse double dry phte holder and canvas carrying case.



## CHAMPION EQUIPMENT.

The Camera included in this equipment is of mahogany, with fine varnish finish, and is provided with folding bed (made rigid by the use of patent clamps), rising front and swing-back, and is adapted to either vertical or horizontal pictures. In addition to the above camera. the equipment includes one patent Zephyr double dry plate holder, carrying case, fine single achromatic lens, and improved folding tripod.

| Size of View, | Price. | Ext. Double Zephyr Plate Holders, each | Ext. Double Eclipse Plate Holders,each | Size of View. | Price. | Ext. Double Zephyr Plate Holders, each | Ext. Double Eclipse Plate Holders,each |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $4 \times 5$ | \$10 00 | \$1 20 |  | $5 \times 8$ | \$12 co | \$1 35 | \$2 20 |
| $41 /+\times 61 / 2$ | 1200 | I 25 | \$2 20 | $61 / 2 \times 81 / 2$ | 1400 | 160 | 330 |
| $5 \times 7$ | 1200 | 125 | \$20 | $8 \times 10$ | 20 oo | 185 | 430 |



## CLIMAX DARK ROOM LANTERN.

PATENTED.
This is truly the best lantern for its price in the market. It has three large illuminating surfaces and reflector. The glass is of the correct non-actinic hue. It will be found exceedingly agreeable to the eye, while perfectly safe for ordinary dry plate development.

The Price is, $\$ 20$.


## POCKET RUBY LANTERN

Used when putting dry plates into the holders, and also when developing them.
Price, each, . . . . 60 cents.


## PERFECT DRY PLATE LANTERN.



Amateur photographers and, indeed, professionals have frequently expressed a desire for a compact, safe, and simply constructed lantern for dry plate work. Several have been placed in the market, but either their dimensions were too great, their cost too considerable, or their adaptabililty too inadequate for the purpose desired. It will be observed that in the Perfect Lantern all the parts are separable, and all are easily and quickly adjusted. It has no hinges or arm-holes to break, and every part of it is instantly and always accessible. Therefore it can be instantly extnguished; it will never crack the chimney; it requires little care to keep it clean; it is impossible to misunderstand it. Price, . . . . . . . . \$I 50

Extra ruby chimneys, 60 cents each.

## THE W. I. A. PETITE DRY-PLATE LANTERN.

Will be found quite superior to any lantern previously offered at a smaller price than the Scovill Peerless Lantern. It is much to be preferred above an oil consumer, on account of safety and cleanliness. The light emitted is abundant, and the ventilation is perfect. When not in use, the chimney of this petite lantern may be taken off and placed inside over the candle.
Price
No. r S. P. C. Wax Candle for the W. I. A. Petite Dry-Plate Lantern, each
No. 2 S. P. C. Wax Candle for the W. I. A. Petite Dry-Plate Lantern, per dozen, with Glass Cup


## PEERLESS DARK ROOM LANTERN.

"This is without question the best Lantern for the photographer's use yet introduced." Such is the report of experts who have had them in use for months. Why they were agreed in their conclusions:
Because the ventilation is perfect, and danger of overheating overcome.

Because it is constructed so that white light does not escape.

Because it gives ample light for the dark room.
Because the abundant light does not fog, but does show any spot or blemish in the plate.

- Because so much of the light may be thrown into the developing dish and be shaded from the eyes,

Because it may be used either with coal-oil or candle.

Because the flame may be so quickly controlled by unlatching the door or uncatching the bottom of the lantern. Price . . . . . . . . . . . . . . $\$ 250$

## HELIOS DARK ROOM LANTERN.

This is a new lantern for the dark room for those who desire more light than can be had from the ruby lamp. This lantern or lamp will be found to be all that can be desired. The draught is as perfect as can be. It has a glass $61 / 2 \times 81 / 4$ inches, with a burner capable of great volume of light when desired. It is intended to fill a want long expressed by many, for a good dark room lantern at a reasonable price.

Price, . . . . . . . . . . . $\$ 400$

## GAS BURNER WITH RUBY CHIMNEY.

FOR ATTACHMENT TO ANY ORDINARY GAS BRACKET.

By the annexed cut it will be seen that the patent argand burner has been somodified as to intercept the downward radiation of the light of the lamp; protection above is provided in the same manner as with the oil lamp. The chimneys of both gas and oil lamps, it should be particularly remembered, are not made of the ordinary ruby glass, but what is known in the trade as copper-flashed.

Price of the ruby gas burner and chimney, $\$ 2.50$.
Extra ruby chimneys, 30 cents each.
These burners are also manufactured on metal stands with a connection for rubber hose, by which they may be used at any distance from the gas bracket.

Price of stand extra, 50 cents.

## THE TISDELL CANDLE RUBY LIGHT.

The accompanying cut represents the Tisdell Candle Ruby Light for developing the most sensitive Gelatine Dry Plates. One-half of a common sperm candle is the fuel required, consequently there is no danger of an explosion; no breaking of ruby chimney from overheating; no oil to spill while traveling. It is without exception the most perfect and petite construction in the shape of a ruby developing lamp ever introduced in the photographic market. Its outside measurement when packed for transportation is only $63 / 4 \times 21 / 2$ inches, and its weight only 12 ounces.

Price, complete, $\$ 100$
Extra chimneys,
30


THE DUPLEX RUBY LIGHT.
This lantern has many advantages, inasmuch as the globe is hinged at the body of the lantern, giving free access to all parts for cleaning.

The lamp may be lifted out and in its place is a receptacle for a candle. It may be turned up or down from the outside without opening.

Price, . . . . . . . . . . . . . . . . . . . $\$ 200$
Extra globe, . . . . . . . .
80

The ventilation is perfect, and the volume of light is ample for the purpose of the ordinary amateur.

To light the Universal Lantern, the glass is raised in the slide. The light is controlled from the outside.
Price,
\$I OO


## IDEAL LANTERN.

There are three sides for light, each of which has a double glass, one sheet each, Orange and Ruby, which combination makes a perfectly safe light.

The front side is provided with a shield to protect the eyes, and also to reflect the light down toward the the developing tray. It also has a silvered reflector, thus increasing the volume of light.

If desired one side may be used for making transparencies or for printing with bromide paper, by using a sheet of ground glass in place of the Orange, and a tin slide or shield in place of the Ruby.

Price, . . . . . . . . . . . . . . . . . $\$ 300$


## ROCHESTER LAMP.

It is made on the lately improved plan of central draft, giving a volume of light never before obtained in this style of lamp.

It is regulated from the outside, allowing it to be turned up or down wi hout openirg the lantern.

It is fitted with both orange and ruby glass, and also provided with a shield to protect the eyes.

Price,


ALADDIN Bracket Lamp.

## THE "ALADDIN" DARK-ROOM LAMP.

For use with gas. Burning the patent Sodium Wick, which produces a non-actinic chemical flame. It gives a beautiful yellow light for dark-room use which is perfectly safe, without smoke or oclor; more brilliant than the ordinary ruby light, and both pleasant and restful to the eyes. The lamp is made in two styles; the Bracket Lamp, which may be slipped over any ordinary gas burner, and the Table Lamp, for which the gas connection is made by rubber tubing.
Price, including non-actinic amber chimney, extra brass tip, and box of chemical wicks, in wooden box, complete
Extra chemical wicks, sufficient for one thousand hours' lighting, per box

35
Extra non-actinic amber chimneys, each . . . . 30
In ordering please specify whether Bracket or Table


ALADDIN
Table Lann. Lamp is desired.

## EASTMAN'S ORANGE CANDLE LAMP.

For Photographic dark rooms. No smell! No Leakage! 25 cents by mail prepaid.

## THE CARLTON LANTERN.

The Carlton is made on an entirely new principle. The body of the lantern is double, the air for ventilation is taken in near the top and passes down to the burner, thus avoiding the necessity of having holes at the bottom; hence no white light can escape.
The ventilation is perfect. No smoke. No fume. Steady light and plenty of it.
The front is provided with orange and ruby glass, insuring a safe light for the development of the most sensitive plates.
Price, . . . . . . . . . . . ... . . . . . . \$2 00

BURNISHERS.

No Scratches! No Sweat! No Smoke! No Soot! No Lubricating! No Dirt! No discomfort* from Heat! Quick Heater! Elegantly finished!
 15 " . . . . 4000 20 " . . . . . 5000 25 " . . . . 6000

In ordering don't forget to specify whether Gas or Gasoline attachment is wanted.




Better than ever.7 hey are supplied with Gasoline Heaters (instead of oil) to parties who have no gas. These heaters are much cleaner, furhish stronger heat, and are in EVERY WAY MORE SATISFACTORY than the oil.
Sweating avoided.The improved construction practically does away with all condensation of moisture on the rolls. No SWEATING WHATEVER unless the rolls are very eold; even then not cnough to cause any annoyance.
ro-inch, . . . \$2500
15-inch, . . . 3500
In ordering state whether Gas or Gasoline heater is wanted.

No more annoying sweat on rolls! No more roasted operators.

Prices, with Gas or Gasoline heaters. Io-inch, . . . . . . . . . . . . . \$22 50 15-inch, . . . . . . . . . . . . 3000 When ordering mention style of heater wanted.


THE MODEL BURNISHER.

## GREATLY IMPROVED.

8 -inch size, with Oil or Gas Heater, each, . . . . . . . . . . . . . \$10 00 ro-inch size, with Oil or Gas Heater, each, . . . . . . . . . . . . . 1200

THE ULTIMUS BURNISHER.


Prices, including Oil or Gas Heater.
II inch, 15 inch .
$\$ 3000$
21 inch . . . . . . . . . . . . . . $\$ 3500$

ENTREKIN'S IMPROVED EUREKA BURNISHER.


Has the One wheel-end Adjustment, Turnback Roll and Movable Burnishing Tool.
8 inch Roll . . . . . . . . . . . $\$ 10$ oo 15 inch Roll . . . . . . . . . . . . $\$ 3500$ o

## ENTREKIN'S EUREKA BURNISHER.



This Burnisher can be heated with any kind of lamp-alcohol, coal oil, or gas.
Sizes and Prices.


ENTREKIN'S NEW VICTOR BURNISHER.


OLEUM ROTARY BURNISHER.
With Gas Heater.
Prices with Gas or Oil Heater:
Amateur, $\mathrm{S}_{1 / 2}^{2} \mathrm{in}$. . . . . . . . . $\$ 1500$
Professional, II in. . . . . . . . . 3300



## ENTREKIN'S ACCURATE ROTARY BURNISHER.



The Latest-Patened January it, 1887.
Prices include either the Oil Stove or Gas burner.
8-inch roll . . . . $\$ 15$ oo ro-inch roll . . . $\$ 25$ oo 15 -inch roll . . . . $\$ 3000$


Pat. Oct. 8, 1889. Oct. 21, 1890. Oct. 23, 8890. Patents for Europe and Canada and other patents pending.

## STATIONARY BURNISHERS.

Are on the same general principle as the Rotary machines.
Every machine warranted as represented.
Prices with Gas or Oil Heater :
Amateur. $81 / 2$ in. . . . . . $\$ 1500$
Professional, II in. . . : . . . . 3) 00


## ELECTRIC ROTARY BURNISHER.

This is the only Photograph Burnisher that ever has-or ever can be-heated by electricity, since the patents cover the ground very broadly.

Prices.

N. B.--In ordering state whether arc, incandescent or alternating current is to be used.


Pat. Oct. 8, 1889. Oct. 21, 18go. Oct. 23, 1890. Also patents fur Europe and Canada and others pending.


## ACME AMATEUR ROTARY BURNISHER.

(Patent applied for)
Will burnish an $8 \times$ Io and all sizes under.
Price, Oil, Gas or Alcohol Heater, . . ... . . . . . \$1500

## ACME ROTARY BURNISHERS.

|  |  | Prices. |
| :---: | :---: | :---: |
| II inch-Oil, Gas or Alcohol |  |  |
| Heater, |  | \$25 |
| 15 inch-Oil, Gas or Alcohol |  |  |
| Heater, |  | 35 |
| 21 inch-Oil, Gas or Alcohol |  |  |
| Hea |  | 55 |
| 26 inch-Oil, Gas or Alcohol |  |  |
| Heater, |  |  |



THE LATEST.-THE ACME EIGHTINCH.

Alcohol, Gas or Oil Heater, . . . . . . . \$10 00

## ACME STATIONARY BURNISHER.

The Only Flue Heating Burnisher ever made.
Price.
II inch-Oil, Gas or Alcohol Heater, . . . $\$ 2500$

| 15 | ( | " | " | " | " | .. | 35 | 00 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 21 | 6 | $"$ | $"$ | $"$ | $"$ | .. | 55 | 00 |
| 26 | " | " | " | " | " | .. | 65 | 00 |




For burnishing photographs.
Price, per cake,

## ANTHONY'S ENAMELINE.

For cieansing and enameling photographs.
Price, per bottle,

## HOT BOX OIL FOR PHOTO BURNISHERS.

This is a perfectly pure, high fire test Hydro-Carbon Oil, and is the very best article known for use on machinery journals which are artificially heated.

The importance of using a Good Oil on Burnisher journals should not be overlooked. Many of the difficulties experienced in working Burnishers satisfactorily are attributable to the fact that fish, animal, vegetable or thin "sewing machine" oils, are commonly used on the journals. All of these are entirely unsuitable; owing to the fact that the journals are arlificiaily heated when in use, and therefore, differ from most other machines, in vaporizing or drying up the oil used and gumming up the boxes. Only pure mineral oils of good body should be used. This we guarantee this article to be,


ACME ODORLESS
LAMP STOVE

Lightest Oil Stove, Safest and Best Ever Invented.
Price, . . . . . . . . . $\$ 1.75$
IVicks, . . . . . . . . 10 Cents.

## QUEEN KEROSINE OIL

 STOVE.Made in the latest improved pattern Each one has a water basin for keeping the tank cool that holds the oil.

No. o. I Burncr, I 1/2 in. wick, \$1 00

| $"$ | $\mathbf{1}$ | $\mathbf{1}$ | " | 3 | $"$ | $\mathbf{1}$ | 60 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $"$ | 2. | 2 | $"$ | 3 | $"$ | 2 | 25 |
| $"$ | $21 / 2$ | 2 | 6 | $31 / 2$ | $"$ | 2 | 50 |
| $"$ | 3. | 2 | $"$ | 4 | $"$ | 3 | 00 |



## FIRE SCREEN.

RATTAN AND REED.
NEW AND ELEGANT STYLE.
No. 8244.
Natural wood,
$\$ 550$
Stained, . . . . . . . 650
White and Gold. . ?
or bronzed.
750


## EASEL.

RATTAN AND REED.
No. 6793. 76 inches high.
A very handsome addition to any reception room.
Natural wood, . . . . . . $\$ 8$ oo
Stained, . . . . . . . . 900
Bronzed, . . . . . . . . II 0 o

## PHOTOGRAPHIC CHAIRS.

These are the most beautiful chairs ever introduced into Photographic Studios, light and strong. Can be used either in the reception room or under the skylight.


CORNER CHAIRS.
No. 9014. Rattan and Reed
Natural wood, $\$ 8$ oo Stained, . . . $\$ 900$ White and gold, or bronzed, . . . $\$ 1050$.

WINDOW CHAIR.-(Not Upholstered.) E 8344. Rattan and Reed.
Natural wood, . . . . . . . . . . . . $\$ 900$
White and gold, . \$10 00 Bronzed, . . II oo




## THE QUEEN POSER.

## (Patented.)

This is the latest and will be found the most useful posing apparatus ever designed for the operating room, as it comprises in one piece of furniture the most desirable chair made for posing for bust pictures, together with an ornamental arm rest, or back, of a new and tasteful design, for figure posing of subjects of any size or age.

The back rest can be moved instantly, up or

(This cut represents the Queen Poser in Raw Silk, with adjustable Back Support in position.)
down, forward or backward, or given any desired angle, at will.
The seat revolves on an elevating screw, enabling the positionist to get any desired height of seat, as well as well as to turn his subjects at will, and thus does away with the necessity for asking them to "rise while he changes the position of the chair."
The semi-circular arm is new and rich in design, adjustable, and unsurpassed in usefulness.

Then comes the Baby Holder, the most useful article of the kind ever known. Place the baby in the Holder and adjust a part of its dress in the spring in the back, and it "can't get away." And the whole constitutes just what is essential in every well reg. ulated operating room.
(This cut represents the Complete Combination with Baby Holder in position.)

$$
\begin{array}{cc}
\text { With } & \text { With Back Support } \\
\text { Back Support only } & \text { and Circular Arm. }
\end{array}
$$

With Back Support, Circular Arm and Baby Holder with One Arm.


Unless otherwise ordered we always send with Back Support and Circular Arm.

CENTENNIAL POSING CHAIR.

This popular chair, is now made with strong wood frame in the back instead of the iron frame made by others, which is so easily bent out of shape, is stronger than any other make and retains its shape perfectly, and the upholstering and general finish we guarantee to be unsurpassed.

## Note the Prices.

Imitation Raw Silk Cover, with Fringe and Tassels, \$18 50 Drab Velveteen Cover with Fringe and Tassels . . 2250
Embossed or Plain Plush, with Fringe and Tassels. 2550


## SLIDING ARM POSITION CHAIR.

6 inch, terry, . . . . . . . . . . . . . $\$ 750$
6 inch, upholstered, . . . . . . . . . . . . 1200
These chairs are substantiaily made, and give general satisfaction. They will be found to compare favorably with any, either as to price or quality.

## THE BABY CHAIR.

An extra cushion is now made for the Child's Chair. This, placed in semicircle under the knees, insures the favorite pose of babyhood.

Velveteen, price . . . . . . . . . . . . . . . . $\$ 1300$
Plush,
2200


## SEAVEY'S ACCESSORY, No. 999.

## BICHLY CARVED ARM CHAIR.

German Renaissance Style. This massive chair is, so far as we know, the first and only chair of this character ever offered to the profession specially constructed for posing. The proportions are exactly right for the various standing, leaning and sitting poses, these having been carefully determined by using models when the chair was designed.

The chair is very richly ornamented with a new and durable composition. The frame is specially constructed by a chair frame maker, and it is, therefcre, an accessory that will last a lifetime. The back being high, frames the head of the sitter, and gives a very beautiful result in the picture. It counterfits a carved chair that would cost from $\$ 150.00$ to $\$ 200.00$.

It is meeting with a deservedly large sale in this country and Europe.

Price, . . . . . . . . . . . . . . . . . . . . . \$2o oo


## WHITE'S "NEW STYLE" CHAIR.

May be raised or lowered to suit tall or short sitters. Is provided with the celebrated sectional ball and slide rod joint, and arms, head rest and back rest are capable of movement in a great variety of directions.

Price.
With automatic floor adjustment, base supporting column, pedal screw footing, sectional ball slide rod, back adjustment, swivel back pad, and ball socket adjustable bead rest, upholstered in corduroy, \$27.00


## THE LITTLE GEM LOUNGE.

The desire often expressed by leading Photographers for something new, yet inexpensive and practicable, in the way of a Lounge for children, has led to the production of this design, which it is believed will meet all requirements. The seat is 19 inches above the floor, and 30 inches long.

> PRICE.

In imitation Raw Silk, with Plush Trimmings . . . . \$8 5 If desired, they will be made to order in full plush coverings at . . . . . . . . 1150


## FAVORITE CHILD'S LOUNGE.

Well made, with spring seat and upholstered in imitation raw silk. Wood-work finished in oil.

PRICE.
Ready for shipment, . . . . $\$ 650$


This holder is arranged with flat base-No LegS. A tilting arrangement under the seat, allows the adjustment of the seat to any angle desired. In the slot, in the back, is a spring clamp, into which the operator may force a portion of the child's dress or clothing, thereby holding the baby firmly in position without further assistance. A neat little head-rest is attached to back of seat, by an adjustable clamp, by which it can be placed in any position, or removed out of sight instantly. The head rest is upholstered, covered with cloth that will not be uncomfortable or objectionable to the most fastidious "Kid." Arms can be attached to either or both sides, by an adjustable clamp, which can be placed in any position, or removed at will. One great advantage of this holder is, that your baby pictures made with it will not all look alike. The Holder is out of sight, being covered with child's clothing. Thus it can be placed in any chair, on a table or anywhere, to suit the operator, hereby utilizing a variety of accessories for baby pictures, which cannot be done with any baby chair heretofore offered to the fraternity. REDUCED PRICES.
Without arm in imitation raw silk cover ..... each ..... $\$ 750$
Without arm in drab Velveteen cover, nickel plated trimmings ..... 900
Without arm in plain or crushed mohair plush ..... 1000
Arms, with attachments, either style ..... 1 oo

## WHITE'S POSING CHAIR.

Each article named in connection with this chair has a distinctive use, and all are the result of careful study and invention by one having long training and experience in the production and handling of refined mechanism and instruments requiring precision of action, freedom of movement and delicate adjustment.

Prices
boxed.
Posing Chair, complete. $\$ 4200$
If without Baby Holder 3400
If without head rest. 3400
If without head rest and
arms . . . . . . . . 2600
If without head rest and arms and Baby Holder. 1800


This appliance is for attachment to any Studio Chair by means of the plate, into which the supporting rod slides, and as shown by cut, has the ear-clips and ball and socket adjustment, and as shown by dotted lines, may be applied in almost any direction or angle. It will be found tis be a very valuable accessory. Price, ... \$8 oo

## WHITE'S BABY HOLDER.

This has all needed adjustments for contraction and enlargement to accommodate infants, from the smallest to those about three years of age.
It may be successfully employed in scenic effects, for nicely disposing infant among representations of nature. The Baby Holder is furnished with a telescopic standard support having an ornamental base: or, if preferred, with an arm bracket to connect it to the arm of a chair or other support; or with low down base.

Price.
With telescoping standard support, as illustrated . . . . . . . . \$12 oo


## WHITE'S POSING SUP. PORT No. I.

This Posing Support has the applied principle of the improved combination slide-rod, ball and socket joints. It is adapted to the smallest or tallest person, and for all adjustments or positions.

The ear-clips of the support have swiveling adjustment as well as lateral or spread movement combined at one fastening, affording facility for either horizontal or vertical positions of the carrying rod, placing the parts to conform to the pose without regard to instrument itself, or the liability of portions thereof appearing in view. A detachable back rest is provided which has all desirable facilities of adjustment, easily and quickly handled.

The adjustable joints are formed in the most perfect manner, especially adapted for giving accuracy and uniformity of movement, and the sliding rods are of steel of accurate gauge, and are plated with nickel. The stand is nicely japanned with blue and gold line ornamentation.

Price complete, boxed
. \$20 00

## WHITE'S POSING SUPPORT No. 2.

This cut shows another form of the Posing Support of somewhat lighter construction, and lacking the ball and socket joint at top of base, but which is instead provided with telescopic movement and handle for convenience in moving about the studio. See cut page 105.
Price, boxed
$\$ 1400$


## CENTENNIAL HEAD REST.

Plain and neat, with no chance for dust.

Price.
Large, . . . . . \$2 50
Small, . . . . . 225

## SUCCESS HEAD REST.

No. $6 \mathbf{I}$, extra finish.
Price.
Large, . . . . . \$3 25
Small, . . . . . 300
With Back Support, 75 cents extra.


## THE "S. \& A." HEAD RESTS.

These are well made of first quality cast iron. The column is secured firmly by means of a strong wrought iron bolt passing through the base. All the thumbscrews are made of cast brass, which is stronger and more ornamental for this purpose than iron.




## THE MAGIC HEAD SCREEN.

The unprecedented sales of this article since its introduction demonstrates it popularity and usefulness more effectively than any words of ours can do.
No operating room can now be considered fully equipped without a Head Screen, which makes it possible to soften high lights or deepen shadows, subdue light on white draperies, etc.

This screen can be adjusted instantly to any height or position. The rods are nickel plated, the joints have new, quick-acting cam locks, and the base is ornamented, japan finish.

It is the cheapest Head Screen in the market, yet equal to any in every essential feature. A trial will insure its perpetual use.

$$
\text { Price, each, . . . . . . . . . . . . . . . . . . . . . . . . . . . } \$ 475
$$

## WHITE'S PHOTOGRAPHIC HEAD SCREEN.

## style No. 3

This is a new Pattern, having ornamental foot base. The Standard is in one piece, $11 / 4$ inches diameter, 6 feet high, of hard wood, Ebonized or Cherry finish. It has the new Compound Clamping and Swiveling Joint, which affords adjustment to all positions in a secure and practical manner, by one fastening. By slightly releasing the Clamping Joint, the Shade Rod is free to slide or be turned to place the Shade at any angle around the supporting Standard. A greater release of the Clamping Joint permits adjustment of the Screens up or down on the Standard.

PRICES.
No. 3 Head Screen, as illustrated, with Oval Side Shade, $\$ 700$
If with Square Side Shace, .. . . . . . . . . . . . . 750
No. 3 Head Screen, without Side Shade, . . . . . . . 450


## WHITE'S PERFECTION

 HEAD SCREEN AND SIDE SHADE.style No. I.
No. 1, Head Screen, as illustrated with square side shade and ornamental base, . . . . \$10 oo
With Oval Side Shade, $95^{\circ}$
Without Side Shade, . 700

style No. 2.
No. 2 Head Screen, same as illustrated, including box, \$6 oo If with New Ornamental

Base, extra, . . . . . . 25

No. 2.
THE GREAT PARISIAN BAROMETER.
Come in out of the wet.
Figures of little Girls and Ballad Dancers with Fancy Dresses, Ђandsomely mounted on elegant cards.

The atmosphere changes the color of the dress long before a change in the weather.

Blue dress means Fair weather.
Violet " Changeable.
Rose " Rain.
An Ornament! A Novelty! An Elegant Present!
One of the above sent post paid to any address in the United States or Canada upon receipt of 30 cents.



## STAFFORD'S POWDER SPRAY.

Many Pholographers carry the use of powder no farther than the production of fancy effects in lighting, while the thoroughly skilled operator finds it absolutely necessary to the attainment of natural results in photographing certain colors of hair. This little device speaks for itself. It consists of a rubber ball into which an atomizer is fixed. Powder is placed in the ball, and is applied to the hair in a spray by squeezing the ball. It is always ready for use-can be kept under the bellows of your box. Its work is certain and beautiful, the powder falling on the hair like frost. You can produce in a moment of time, without any fuss, the brightest and softest highlights, or render a dead shadow a place of clear detail, and so delicately withal, that it need not appear to have been produced with powder, but rather a case of fine lighting. In fact it will, in the hand of an artist, do for the hair what the retouching pencil does for the face.

The painter with his pencil places the lights on his work to suit his fancy; so, also, may the wise operator by the aid of the retouching pencil and the Powder Spray.
Each Spray is supplied with a fine and delicately perfumed powder, ready for use, nicely boxed, and accompanied with full directions for working.

PRICE 75 CENTS EACH.
Stafford's Silver Spray Powder, put up in packages-a sufficient quantity to refill the ball three times $2_{2} 35$ cents per package.

## DRAPERIES.

We pay special attention to this department and can supply all styles, light and dark at very low prices. From $\$ 3.75$ to $\$ \mathbf{1 2 . 0 0}$.

## THE AMERICAN SONGSTER.

The best Baby Charmers ever offered to the rade.

The songsters are made of metal, nickelplated, painted in a variety, of bright colors in imitation of life. They sing as clear and liquid as song birds. Are substantially and handsomely made and finished, and not liable to get' out of order.

While the bird sings it moves its mouth (or bill) and tail in exact imitation of a living bird. In addition to its being a photographic novelty, it is highly useful in teaching birds to sing. It supersedes the bird organ, and when used near a bird, it will induce it to start up its very best notes immediately.

Each songster packed in a neat box, with directions.
Price,
\$0 75


ACCESSORIES AND BACK-GROUNDS.


Nos. 1125, 1126 and 1127 are plastic relief backgrounds $4 \times 4$ specially designed for head and bust work. They are shaded from right to left, and can be used either side up, thus affording great variety. Price, $\$ 5.00$.


No. 1079 is a new accessory extremely useful for sitting figures, adults or children. The jog piece at the end, as shown in engraving, is movable, and can be placed at either end or in front of the wall, as may be desired. The wall has top and ends which fold over for transportation or when not in use,

> Price
$\$ 12.00$.


## FRENCH GARDEN SEAT.

Has elaborately carved back and decorated mouldings, and is mounted on casters; pleases the most refined taste.

Price . ........... $\$ 1950$

No 6 ? 2
FREMCH GARDEN SEAT.

## CIRCULAR GARDEN SEAT.

Has arm at one end, the back is an open scroll, with a dragon and shield introduced; a light and graceful accessory for general purposes.

Price $\$ 1575$

No. 300. SEAVEY STILE.


Including.


CIRCULAR BALUSTRADE.
Very elaborate, is in the best taste, and suited to every variety of photographic use. Price $\$ 30.00$.

Two small manilla mats dyed green; three changes; 1st, wooden stile; 2d, by removing steps and adding diagonal brace, represents a gate; $3^{\mathrm{d}}$, removing gate and reversing end pieces, forms a fence. Price $\$ 12.25$.


## CALDWELL ACCESSORY No. 63. CIRCULAR BALUSTRADE.

This balustrade is not a new article; it is, however, extremely popular. It is made in three pieces and finished on all sides. The design is artistic and pleasing. The size is exactly right for the easy and graceful posing of the subject. The photographs show it so fully that an extended description is unnecessary.
Price, . . . . . . . . . . . . . . . \$18 oo



## No. 982 SEAVEYS ACCESSORY, ROBERTS BALCONY.

The Robert's Balcony is one of the most useful and beautiful accessories ever made. It is a combination article; by its use many other separate accessories can be entirely dispensed with. The Balcony consists of a base piece about eighteen inches high upon which is set an open balustrade composed of a post and two pieces, with turned and ornamented balusters. Upon the post is a very handsome column. In some photographs the column used is the Mendelsohn No. 982 which may be substituted for the regular column belonging to the balcony, without extra charge, if the customer prefers it. The base piece of the combination can be used as a seat. The balustrade portion can be used as an ordinary balustrade with or without the post. The three pieces forming the balcony may be set so as to form a corner: the post of the column may be used separately to join backgrounds, to support draperies, or used alone for either interiors or exteriors with perfect effect.

The Balcony complete is intended to appear in the picture as if it were at some elevation from the ground, the base portion giving this appearance of height. It can thus be used as a balcony upon the front of a house, the effect depending entirely upon the style of background that is used behind it. It can also be used with an exterior scene. As an aid to artistic picture making it is one of the most successful articles we have to offer. It is, moreover, entirely new and is the only article of the kind ever made. The entire accessory is covered with new plastic material, which gives an appearance of great solidity, and, also, delicacy of detail to the surface. The price- $\$ 30.00$-considering the number of pieces, the great variety of changes and combinations, is low. It met with a very large sale and attracted much attention at the recent convention.
Price, including 5 pieces, . . ... . . . . . . . . . . . . . . . . . . . . . . $\$ 30$ oo


## IMPROVED OIL THREAD GRASS MATS.

Machine Made.
Extra Full.
The only clean mat sold.
Reduced Prices.


No. 79 A.
This is one of the finest combinations of set pieces cut out in profile ever offered to the profession. Th designing, it was aimed to meet the practical requirements of the photographer. It occupies but little room when not in use. It is extremely light and easy to handle. A great variety of changes can be simply and quickly made. All the parts are interchangeable and can be used separately or torether. It can pe used with any exterior background, either for groups or single subjects, and is capital for posing children. Price complete, boxed, \$19 oo.

STONE WALL AND POST WITH VASE.


No. 80 A.
Set piece in profile, with adjustable top piece for wall. A new and handsome accessory. Price $\$ 13.00$, boxed.


## DAISY FRONT, 5 ft . wide.

These fronts are a good investment. They work up very pretty with adults or children. If there is a strong competition in your town you will find these Fronts to be a good advertisement. Get out some fine sample photos made with them, and you will find that it will draw trade. The ladies think them cute and want their children taken with them.

Price,
\$6 50
No. 607-Daisy Background to match. $5 \times 8$, $\$ 3.00 ; 6 \times 8, \$ 4.00$.

## BRYANT'S BALUSTRADES.

237. Balustrade, 32 in . high and $31 / 2 \mathrm{ft}$. long. The pedestal is round on one side and square on the other. The style and ornamenting is entirely different on opposite sides, making two distinct Balustrades in one. Will work well with subjects of any size, but is especially adapted for photographing children. Without Vase,
With 12 in. Vase and Bouquet, . . . . . . . . . . . . . . . . . . . . . . . 10 oo
6 in. Base separate, . . . . . .. . . . . . . . . . . . . . . . . . . . . . . 200
Boxing, . 50
238. Child Balustrade, 31 in . high at pedestal. The ornamentation on one side is entirely
different from that on the other. Balustrade alone, ........... 8 oo
Vase and Artificial Plant, . . . . . . . . . . . . . . . . . . . . . . . . . . 250
Extra 6 in. Base, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 200
Boxing, . . . . . . . . . . . . . 50
239. Balustrade, 5 ft . long. Large pedestal 37 in . high; small pedestal $3^{1} \mathrm{in}$. high. The pedestals are both square. The ornamenting is different on the two sides. Balustrade alone,
6 in. Base separate, . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 oo
Large Vase, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . I 50

## BRYANT'S BALUSTRADES (Continued.)

381. Short Balustrade, 37 in . high, loose ornament 9 in . high to set on pedestal. The ornamenting on each side is different, rich and very effective. Is a part of 389 Combination,
Boxing,
382. Circular Balustrade, composed of open work. The Pedestal is detached and can be used at either end of Balustrade or alone. Has a loose shell ornament on pedestal, . . ..... 1000
Boxing, ..... 75
383. Round Post Balustrade, $4 \mathrm{ft}$.7 in . long, 3 ft .5 in . high at pedestal; has small loose ornament 9 in . high to set on pedestal. The ornamenting on each side is different, ..... 1000
6 in . base, ..... 200
Boxing, ..... 75
65 i . Balustrade, 4 ft .6 in . long, pedestal 37 in . high. The shape and ornamentation on thetwo sides are entirely different, giving two Balustrades in one900
Separate Base, 6 in. high ..... 200
Crating, ..... 75
384. Circular Balustrade, 4 ft .6 in . long, pedestal 34 in . high, ..... 1300
Large Vase, ..... oo
Extra 6 in. Base, ..... 300
Crating, ..... 75

BABY-CHAIR ROCK AND GROUP-ROCK FOR CHILDREN.


Price;

BARGAIN SET OF TWELVE ROCKS.


Range in size from Rock about twice the size of a bushel basket to size of a quart measure. The two largest Rocks are worth price of the whole kit. Price, $\$ 8.00$.


## FIELD FRONTS.

Something that Photographers have long wanted.
These Fronts are made of imported natural dried grasses dyed in various colors, each Front inter. spersed with daisies, and having a narrow strip of improved oil thread grass mat attached to it, all attached firmly to a wooden backing. They are used to break up the lines where backgrounds meet the floor; to use in front of accessories; to conceal the head rest or a person's feet; for use with children -in fine, a little accessory to increase the realistic as pect of your foreground arrangements. These Fronts are sold at 30 cents per running foot. $\$ 3.00$ buys an assortment of ten running feet, in 5 ft ., 3 ft . and 2 ft . sections. $\$ 1.50$ buys 5 running feet, in 3 ft , and 2 ft . sections. Ten feet makes a good working assortment, especially when working it with groups. Five feet will answer, however, and gives you two nice sections of the fronts. Put up safely in light and neat shipping packages.

## ARMOR.

In calling the attention of the Photographic fraternity to the following examples of Armor decoration, we wish to state that nothing conveys to the educated observer the idea of artistic taste and feeling so profoundly as a properly arranged exhibition of these beautiful reproductions. They include some of the finest specimens of the most ornate styles of the sixteenth and seventeenth centuries, and not only improve the artistic effect of the studio, but to the photographer will serve a double purpose.

> No. I.

No. 2.


Complete, $\$ 10$ oo.
Nos. 4 and 5. Swords, each, . . . . . . $\$ 250$
No. 55. Roman Shield, . . . . . . . . 550

Complete, \$14 oo.
Nos. 4 and 5. Swords, each, . . . . . . $\$ 250$
No. 54. Breastplate, . . . . . . . . . 650
No. 47. Helmet,
300

No. 3 .
No. 4.

$\$ 1200$.
$\$ 1050$

These pieces are exact facsimiles of the originals, reproduced in papier mache with an accuracy in effect as to tieight, ase and melal which is simply marvelous; and the material of which they are made renders them practically indestructible.
$\begin{array}{lll}\text { No. } 5 . & \text { No. } 6 . & \text { No. } 7 .\end{array}$


In every studio in the country there is some spot-a dimly lighted corner, or a space between two strong windows where it is impossible to display pictures-which is a constant source of irritation to the artistic feeling, and in which a massive iron or antique silver "Armor Trophy" would be "a thing of beauty and a joy forever."?

## "WASTES," GOLD AND SILVER.

Photographers, save your gold and silver residues and send them to us for refining. Our charges are moderate, and our refiners experienced.

STUMP ROCK.


No. 83 A. accessories in one.

It is so constructed as to rest firmly on four different ends, each position showing the rock up effectively, and admitting of a good pose for standing or sitting subjects, either adults or children. A fine, practical, all-round accessory, light in weight, strongly made, easy to handle, and takes up but little room ; stands 36 to 38 inches high-just right for an easy arm rest for a standing subject.

IMPROVED BIGELOW REVOLVING BACKGROUND.


Perfectly Blended Fatted Oil Colors.
Bigelow Carriage,
$\$ 400$
Background and Wheel
$\$ 1000$

## PLACE'S GARDEN WALL COMBINATION.



This popular accessory is made with a substantial wood frame, covered with straw board, lined with cloth to increase its strength, and, after being painted, is cut out in profile, so that figures, backgrounds, etc., behind it show through the open work in the gates and other ornamental parts. It is both the lighest and most compact Accessory made, and is susceptible of an indefinite number of changes -in fact more effective changes can be made with it than with others costing two or three times as much. Arch is 82 inches high; low wall 29 inches: high wall, 48 inches: gate, 40 inches. Total weight, about thirty pounds. Cabinet photos, showing nine changes, 8 c . These are also furnished free with each accessory sold. Order early, as the capacity of the manufacturer is not sufficient to enable him to supply demands promptly. Satisfaction guaranteed.
Price boxed complete, each,

## BALUSTRADE.



No. 8 r A.
A magnificent accessory, strong, well made of light woods, with Papier Mache ornaments. In photographing children, the base board may be removed, thus reducing the height.

Price, boxed

CHINESE GOAT FUR RUGS.
Size $30 \times 64$, in gray or white,
$\$ 350$

## ELEGANT FELT RUGS.

Endless Variety.



Ifighly variegated in rich colors. Price 5 yard pieces, $\$ \mathbf{1} .25$. Plain Green, full leafed, $\$ \mathrm{I} .00$.


## COOLIDGE'S PHOTOCARICATURE FOREGROUNDS.

We wish to call attention to Coolidge's PhotoCaricature Foregrounds. By investing a small amount in them you will be enabled to give your customers a vast amount of enjoyment and add materially to your cash account.

In photographing caricatures, the card-board foregrounds are simply held up under the sitter's chin.

## Price List.

$\begin{array}{lll}\text { For Single Foreground, mailed secure on roller, } \$ 200 \\ \text { For Four } & " & 6 \\ \text { For }\end{array}$ For Ten " " " io oo

From amang one hundred and fifty designs we note the following, being some of the most popular ones for you to select from, although any practical design suggested by you will be furnished at regular price.
No.
1-A man riding a donkey, of course producing a very lively picture, entitled. "I am coming."
3-Man flying through the air on a goose, titled. "Out on a Fly."
6-Man riding in donkey cart, evidently having an enjoyable time. "Have a ride?"
7-Person fishing from bank of stream. Hook about to be taken by a monster fish.
9 -Represents a gentleman with bag and cane about to depart, entitled "Good-bye, Sweetheart."
II-A fat man. A good subject for a lean man to select.
13-"No one to love," Man with handkerchief in hand, weeping.
16-Girl promenading.
17-"When I joined the club." Fellow trying to ride a goat, good for all Order men.
18 -Holding the baby. Baby is crying and subject is walking the floor with it. Good for family men.
19-The bachelor. Man sewing on buttons. Good for a bachelor to send to a lady friend.
20-Man drinking a glass of lager. Taking among the teutons.
21-" Put me in my little bed." Person in night gown with candle in hand.
23-A modern swell. Very captivating.
25-The base-ball player. Taking among fellows fond of the sport.
27-"Coney Island." Man bathing.
3I-"I paddle my own canoe." Man in canoe.
38-"Only a chicken." Man or woman with chicken's body.
44-Correct style. Man with high collar mostly collar.
51 -"I'm engaged!" Lady with ring on finger.
54-The Bicyclist. Very popular.
56 -"I travel with the circus." Man riding on elephant.
63-"Fresh from Cork." (Irish.)
67 -"Will you love me when I'm old?" By placing on the subject an old hat and eye-glasses, an exceedingly humorous caricature is obtained.
68-My Dog Cart. Man drawn by diminutive dog.
69 -"Wait for me!" Agent running with bags.
99 - Down in Florida. Man riding crocodile.
IO5-A (hampion I'ugilist.
116-"Hot T/ay." Man with fan.
119-The Serenader. Fellow singing and playing banjo.
120 - A Man 'lobogganist.
$\mathbf{1 2 1 - Y}$ -

## EBONIZED SCREEN.

No. 162.
Five feet square, with ornamented woodwork. Three panels to fold, with painting in each panel. An elegant piece of furniture for the reception or operating room. Finely made and finished.
Price, boxed, . . . . . . . . . . . . . . $\$ 1400$

## PROFILE SET PIECE.

No. 127 A.
Both sides painted. With projecting shelf. One side represents fire place and panels, the other side a mirror and dado. Size, $41 / 2 \times 8$ feet.
Price, boxed, . . . . . . . . . . . . . . $\$ 16$ co


## READY MIXED PAINTS.

For renovating and repairing backgrounds and accessories. Will keep fresh indefinitely.
By following the directions the color of any portion of a background may be matched, and the defaced portion repaired with small brush. Also prepared paints for touching up backgrounds only. Price, per set, 75 cents.


## NEW SEAVEY BACKGROUND.

No. 1089 is a popular new background painted in very light tints and specially suitable for use with the light foregrounds and accessories. Price per square foot 25 cents.

## GERMAN GRADUATED GROUNDS.

Size $4 \times 6 \mathrm{ft}$. . . . . . . each, \$7. 50
" $6 \times 8 \mathrm{ft} . . . . . .{ }^{\circ}$. \$10 00
" $8 \times 8 \mathrm{ft}$. . . . . . . " \$12 50
Photos on Application.

## FELT VIGNETTE GROUNDS.

$3 \times 3$, gray or black, each . . . . . . \$ 80
$3 \times 6$, gray or blac", each
$\$ 150$

$6 \times 8$, * . . . . . . 400
$6 \times 10$
500

## VICTORIA PLAIN OIL BACKGROUNDS.

In two elegant colors. Special Importations.

| 8×12....\$7 75 | $8 \times 10$. . . \$6 50 | $8 \times 8 . . . \$ 525$ | $7 \times 8 . .$. |
| :---: | :---: | :---: | :---: |
| $6 \times 8 . . .400$ | $5 \times 8 . . .220$ | $4 \times 8 . . .280$ |  |

Smaller sizes at the rate of 12 cents per square foot.

## BACKGROUNDS

Made to order on short notice. Celebrated artists, Seavey, Hetherington, Bryant, Osborne, Packard, Davis and others. Special design books will be sent on request. Consult us before purchasing.

## THE JENKINS' PATENT BACKGROUND CARRIER.

FOR PHOTOGRAPHIC BACKGROUNDS, THEATRE CURTAINS AND DROP SCENES, ESPECIALLY ADAPTED FOR PHOTOGRAPHERS.


The roller consists of a horizontal tube seven inches in diameter, with grooves perfectly adjusted, having a carrying capacity of sixteen Backgrounds, fully independent, whether using one, six or sixteen.

The Backgrounds are folded about an inch and a half at the top, over a small steel rod, which is placed into the opposite or groove end, and immediately pushed into position, giving the ground a true vertical evenness of each end; every one is kept intact, and it is impossible to get wrinkled, or mar the effect of the Background.

All of your old grounds may be taken from individual rollers or frames and placed in our patent Background Carrier, which is a veritable boon to photographers.
'I he Jenkins' Patent Background Carriers are now being made in the standard size of [ $\delta$ ] feet, although special sizes as to length are manufactured to order.

Price, . . . . . . . . . . . $\$ 40$ oo Boxing, . . . . . . . . . . . . $\$ 200$

## EUREKA BACKGROUND CARRIER.

PRICE CF CARRIER WITHOUT FRAME.
PRICE OF CARRIER WITH FRAME, Complete.
For 8 foot grounds, . . . . . . . . $\$ 1250 \mid$ For 8 foot grounds, . . . . . . . . . $\$ \mathrm{Ir} 800$ " 10 6 6 . . . . . . . . 1450 " 10 " 6 . . . . . . . . 2000 Larger sizes to order and at corresponding prices.-Boxing, $\$ 1.00$

## CASWELL BACKGROUND HOLDER.



Full of Practical Economy.

ORIGINAL GERMAN ART BORDER NEGATIVES.
Cabinet size $5 \times 7$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ \mathrm{r} .00$ each.
W. P. BUCHANAN, Importer.


## ORIGINAL FRANCO ART BORDER NEGATIVES.



Cabinet size on transparent films. A selection of eight of the most elegant Parisian designs for 1893. Easy to print, beautiful results. Price, $\$$ 1.00 each. Post-paid to any address in the world.

## SPURR'S BORDER NEGATIVES.



New designs for fall and winter, 1892 and 1893
Boom your business. Fill up your show cases with fresh prints made with Border Negatives. Push right along, keep up with the times by introducing novelities. Your customers appreciate it and will reward you with liberal patronage.


PHOTOGRAPHIC TRAYS


CELLULOID TRAYS.

ECONOMY RUBBER TRAYS.




## AMBER GLASS TRAYS.

Amber, for $5 \times 8$ plates or under, . . . \$o 35 75

## EASTMAN'S DEVELOPING TRAYS.

These trays are made of wood and lined with rubber cloth without joint, cemented, and fastened on the outside with brass nails.
19 $\times 23$ for $18 \times 22$ paper, . . . . . . $\$ 350$
$21 \times 25$ " $20 \times 24$ ". 4 oo
$26 \times 32$ for $25 \times 30$ paper, $\qquad$ $\$ 500$
$23 \times 28$ " $22 \times 27$ " . . . . . 450


AGATE WARE TRAYS.


## WATERBURY TRAYS.



## PORCELAIN TRAYS.




## PAPIER MACHÉ TRAYS.

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


HARD RUBBER TRAYS.




For washing, silvering, etc. Made of kiln dried lumber, with canvas joints and acid proof lining. Price, $15 \times 19$, ( $1 / 2$ sheet), $\$ 3.50$; $19 \times 24$, (full sheet), $\$ 5.00$

HOLLOW GLASS TUBES FOR SILVERING PAPER.

One end flattened to prevent its turning.
These are much stronger than solid rods.


This cut shows the manner of adjusting it for use. 23 in . long, 3/4 in. diam. 19 in . long, $3 / 4 \mathrm{in}$. diam. . . . . each, 40 cents. 15 in. long, $1 / 2$ in. diam. . . . . each, 25 cents.

## GLASS STIRRING RODS.

8 in., each, . . \$0.10 12 in., each . . \$0.15 15 in., each . . \$0.20 18 in., each . . \$0 25

## SOLID GLASS BATHS.



LEWIS'S PATENT GLASS POT BATHS.


Without Box.


[^4]$8 \times 10$ " " " with box, 350

## BOXES FOR THE PROTECTION OF SOLID GLASS BATHS.

 Baths vary so much in pattern and thickness.


## HARD RUBBER FIXING BATHS.

For $3^{1 / 4} \times 4^{1 / 4}$, or lantern slide-plates, . . . . . $\$ \mathrm{I} 75$
"6 $4 \times 5$ plates, . . . . . . . . . . 200
" $41 / 4 \times 61 / 2$ " ...... . . . . . 215

" $5 \times \mathrm{x} 8$ " 6 ........... 250
" $61 / 2 \times 81 / 2$ " . . . . . . . . . . . 300
" 8 x 10 " . . . . . . . . . 350

## HARD RUBBER DIPPERS.

| No. | 4 | $1-2$. | $\$ 0$ | 40 |
| :---: | :--- | :--- | :--- | :--- |
| " | 5 | $4-4$ |  | 45 |
| " | 6 | $8 \times 10$ | 50 |  |

No. $61 / 2 \quad$ 10 x $12 . \$ 055$ $\begin{array}{llll}6 & 7 & \text { II } \times 14 . & 60 \\ 6 & 14 \times 18 . & 90\end{array}$

HYDROMETERS.
Single degree, in wooden case.


For 31/4 x 41/4 Plates, . . . . . . . . $\$ 160$
" $4 \times 5 \times$ and smaller sizes, 175


 Adjustable for $61 / 2 \times 81 / 2,5 \times 8,5 \times 7,4 \times 5,31 / 4 \times 41 / 4$ Plates. All sizes to be washed at once.


Will hold negatives of any size from $4 \times 5$ to $20 \times 24$ with a secure grip and without injury to the film. Owing to the depth and shape of the grooves there is no rocking and movement of the negatives. The ends are of blackened iron and form convenient handles for carrying, and also give strength and weight sufficient to counterbalance the weight of large negatives when in the rack.
Price, with thirty-six grooves, . . . $\$ \mathrm{I} 25$ Brackets for hanging rack on wall, 25 cents per pair-

## COE'S NEGATIVE WASHING RACK.

A convenient and campact Washing Rack for negatives which, when not in use, may be folded together to occupy extremely small space. It is made of metal, and is kept open by a metal button locking into a slot. Price, each $\$ 100$

## FOLDING NEGATIVE RACK.



Folding Negative Rack, for holding 24 plates while drying; when not in use it can be folded and hung on a nail. Price, 40 cents each.

Small size, similar to above, for twelve $21 / 2 \times 21 / 2$ lantern slide, or $4 \times 5$ negatives, 50 cents.

Same as larger one mentioned above, but with grooves formed of corrugated iron. Price, 50 cents each.

## NEGATIVE BOXES.

Manufactured from white wood, with hinged cover. A very superior article.

| For holding 24 Plates. | Regular with wit Hook | Light Tight with Lock. and Key. | For holding 24 Plates. | Regular with Hook | Light Tight with Lock and Key. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1-9 each | . \$0 60 | \$160 | $8 \times 10$ each | \$1 10 | \$2 10 |
| I-O | 60 | 160 | $10 \times 12$ " | 150 | 250 |
| $31 / 4 \times 41 / 4$ | 62 | 162 | For Holding 12 |  |  |
| $4 \times 5$ | 65 | 165 | $11 \times 14$ each | 250 | 350 |
| $4^{1 / 4} \times 5^{1 / 2}$ | 70 | 170 | $13 \times 16$ " | 275 | 375 |
| $41 /+\times 61 / 2$ | 75 | 175 | $14 \times 17$ | 300 | 4 00 |
| $4 \times 7$ | 75 | 1 75 | $16 \times 20$ " | - 350 | 450 |
| $4 \times 8$ | 75 | 175 | $17 \times 21$ " | - 450 | 550 |
| $5 \times 7$ | 85 | I 85 | $18 \times 22$ " | - 500 | 6 oo |
| 5. $\times 8$ | 90 | 190 | $20 \times 24$ | 550 | 650 |
| $61 / 2 \times 81 / 2$ " | 100 | 200 |  |  |  |

## LANTERN SLIDE BOXES.

No. 1. to hold 25 slides, $\$ 0.65$ No. 2. to hold 50 slides, $\$ \mathbf{1} .30 \quad$ No. 3. to hold 100 slides, $\$ 250$


This Negative Rack is made entirely of metal, and is fastened at thè joints with rivets, winich allow it to be opened or closed, to take any sized negative desired ; the joints are held in place after being opened to the proper size by set screws at either end. Price, each, $\$ \mathbf{I} .5^{\circ}$

## DRY PLATES.

We carry a full line of the following standard brands: Carbutt's A, B 16 and Eclipse 27, Orthochromatic 27; Seed's 23 and 26 x; Stanley's 35; Harvard No. 2; Eagle 40 and Orthocromatic; Cramer " Banner" and "Crown. All other kinds furnished on short notice.

| Size. | Regular Brands Carbutt's <br> Seed's, Eagle, Stanley's Cramer's Harvard. Per doz. | Cramer's Isochromatic. Per doz. | Price <br> Carbutt's Celluloid Films. Per doz. | List. <br> Carbutt's <br> Stripping. <br> Per doz. | Carbutt's <br> Plain Opal. Per duz. | Carbutt's Ground-glass Transparency. Per doz. | Carbutt's Ground Opal. <br> Per doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| * $21 / 2 \times 21 / 2$ | \$ 30 | . . . | . . | . . . | . . . | . . . | . . . |
| * $25 / 8 \times 25 / 8$ | 30 | - . - | - . | - • | . . . | - . | . . . |
| * $21 / 2 \times 4$ | 35 | - • | - . | - . - | - - | - . |  |
| $31 / 4 \times 41 / 4$ | 45 | \$ 55 | \$ 55 | -•• | \$ 55 | - - | \$ 60 |
| $4 \times 5$ | 65 | 80 | 80 | \$ 90 | 80 | \$ 70 | 85 |
| $4^{1 / 4} \times 5{ }^{1 / 2}$ | 75 | 90 | 90 | 100 | 100 | 95 | 1 15 |
| $41 / 4 \times 61 / 2$ | 90 | I 10 | 110 | 120 | I 20 | 115 | I 45 |
| * $43 / 4 \times 61 / 2$ | 100 | - . | I 20 | 125 |  |  | - . ${ }^{\text {r }}$ |
| $5 \times 7$ | 110 | I 40 | I 40 | I 45 | 150 | I 40 | 180 |
| * $5 \times 71 / 2$ | I 25 | . . | 150 | I 65 | . . . | . . . | . |
| $5 \times 8$ | I 25 | I 50 | I 55 | I 65 | $\begin{gathered} \text { I } 70 \\ \text { Per } 1 / 2^{2} \text { doz. } \end{gathered}$ | $\begin{gathered} \text { I } 60 \\ \text { Per } 1 / 2 \text { doz. } \end{gathered}$ | $\begin{array}{rl} 2 & 25 \\ \text { Per } 1 / 2 & \text { doz. } \end{array}$ |
| $61 / 2 \times 81 / 2$ | 1 65 | 2 CO | 210 | 220 | I 20 | I 15 |  |
| $8 \times 10$ | 240 | $=70$ | 300 | 320 | 175 | 165 | 215 |
| $10 \times 12$ | 380 | 450 | 475 | 505 | 265 | 250 | 325 |
| II $\times 14$ | 500 | 585 | 625 | 665 | 350 | 320 | 420 |
| $14 \times 17$ | 900 | 1080 | . . . | 1200 | 600 | 550 | 700 |
| $16 \times 20$ | 1250 | 1500 | . . . | 1665 | . . | . . . | . . |
| $17 \times 20$ | 1350 | 1560 | . . . | 1730 | - . . | - . . | . . . |
| I8 $\times 22$ | 1550 | 1850 | . | 2000 | . . | - . | - . |
| $20 \times 24$ | 1850 | 2200 | - . | 2450 | - • - | -•• | - . |
| * Carbutt's | only in stock |  |  |  |  |  |  |

## LANTERN SLIDE PLATES.

Carbutt's or Eastman's.
Size $31 / 4 \times 4$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . per doz, $\$ 35$
Carbutt's Circular Plates for Concealed Camera.
$5^{1 / 2}$ inch diameter, . . . . per dozen, $\$ \mathrm{I} .10$. $1 / 2$ inch diameter, . . . . per doz, $\$ \mathrm{I} 50$ DISCOINTS.
Carbutt's and Seed's, . . . in case lots, . . . . . $15 \%$ Less than case. . . . . . $10 \%$
Eagle, Stanley's and Harvard, " . . . . . $30 \%$. . . . . $25 \%$
(ramer's "Banner" . . . . " . . . . . 20 and $5 \%$. . . . . $20 \%$
Crown . . . . . . . 10 . $5 \%$...... . . . . . . .
COLOR SCREENS.
For use with Orthocromatic Plates.
$21 / 2$ inches square, . . . . . . . . each $\$ \mathrm{I}$ oo $31 / 2$ inches square, . . . . . . . . each $\$ \mathbf{I} 50$

## BLACK DIAMOND DRY FERRO PLATES.



Stock Solution, 6 oz. bottle.

## EASTMAN'S TRANSPARENT FILMS

|  |  | Size. |  | $24 \text { Expo- }$ sures. | 36 Exposures. | $\begin{aligned} & 48 \text { Expo- } \\ & \text { sures. } \end{aligned}$ |  |  |  | ze. |  |  | 24 Evpo. sures. | $\begin{aligned} & \text { 3) Expo- } \\ & \text { sures. } \end{aligned}$ | 48 Expo- sures. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31/4 |  | $31 / 4 \times 4^{1 / 4}$ | Exp., | \$I CO | \$I 50 | \$200 |  |  | , |  | $61 / 2$ | Exp., | \$2 25 | \$3 37 | \$4 50 |
| 4 | " | $4 \times 5$ |  | 150 | 225 | 300 |  |  | 5 | X | 8 |  | 3 CO | 450 | 6 00 |
| 41/4 | " | $41 / 4 \times 61 / 2$ | * | 200 | 300 | 400 | $61 / 2$ | " | 61/4 | x | 81/2 | / | 400 | 600 | 800 |
| $41 / 2$ | " | $41 / 2 \times 71 / 2$ | , | 270 | 400 | 540 | 8 | " | 8 | x | 10 | ' | 6 co | 9 CO | 1200 |

For prices of Kodak Films see page 71.
LUXOTYPE.

Opals.



## DRY PLATE SAFETY BOXES.

## R. O. C.

Transparency Plates.


Lantern Slides.
On imported Thin Crystal Glass.
$31 / 4 \times 4$. . . . . . . . . . . . \$0 55
Luxotype Combined Baths, 16 ox. bottles, 75
Luxotype Colorless Varnish, 6 oz. bottles, 45

## NEGATIVE PRESERVERS, BEST QUALITY.

These are made similar to the Negative Cox, but with all joints thoroughly broken, and are lined with black velvet, which prevents reflection.

They are nseful in the dark room, as the box of plates may be put in the safety box; saving wrapping and unwrapping them when filling the holders when in a hurry.

A lock and key can be furnished with each at 60 cents extra.


## PRICES OF OPAL GLASS.

SELECTED AND FINE GROUND ON ONE SIDE, REGULAR SIZES.


## FERROTYPE PLATES.

|  | Per Box of zoo. | Per doz |
| :---: | :---: | :---: |
| National Black, | \$6 50 | \$0 50 |
| Peerless | 8 о0 | 75 |

$10 \times 14$ inches.


## GOLD AND SILVER SAUCERS.

Gold Saucers, small, each . . . . . Io cents.
medium, each * . . 13 "
large, each . . . . . 20 "

| $* 6$ | medium, each . . . . 13 |
| :--- | :--- |
| $*$ |  |
| $*$ | large, each . . . . $20 *$ |

PRINTING FRAMES.
Manufactured of Cherry with brass springs, Paneled Backs and Tally.

Silver Saucers, medium, each . . . . . Io cents.
Silver Ink (French's), for spotting out ferrotypes, per cake 35 "


Flat Printing Frame.


Deep Printing Frame (open.)

*Larger or special sizes made to order at short notice, according to specification.
When made with Backs to open lengthways, ten per cent. is added to the foregoing prices for the respective sizes.

ADT'S PATENT PRINTING FRAME.
Prices.



## FELT PRINTING PADS.




## RUBBER PRINTING PADS.

$\frac{1}{32}$ of an inch in thickness.


## CALCINED FLOUR.

For retouching negatives.-This is a preparation for grinding negatives for retouching; with it it is impossible to scratcla a film, as there are no gritty particles in it.

Put up in tin boves with perforated tops, 25 cents.

## THE PHOTOSCRIPT.

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

Price, .
$\$ 375$

## COPELINS LIQUID OPAQUE.

Opaque is an indispensible article in every Well Regulated studio, yet some are only just beginning to realize its usefulness, and FEW have learned the great advantages in convenience, economy in time, as well as in material of using a GOoD article put up in Liquid Form. No one after having tried this article would ever again use the dry, or cake opaque. It saves time, money and annovance, flows perfectly free and smooth, and will not rub off dry (as some others do.) Can be applied to either side of the negative, and can be washed off with water if necessary.
Price per 2 oz . bottle,
$\$ 040$

## OPAQUE.

[^5]

## RETOUCHING PENCILS AND LEADS.



Each $\mathbf{r o}$ cents; per dozen . . \$1 00 Leads, $1 / 2$ dozen . . \$0 60 Holders and one Lead . . \$ 25
"Pearl" Metallic Retouching Leads, 15 cents each; \$I 50 per dozen.


SPURR'S SPOTTING OUT AND RETOUCHING COLORS.


Prepared especially for spotting out Aristo prints, being put in tubes in moist condition with albumen, applied with brush and water from a pallette, same as India Ink or Opaque. For spotting and building up weak negatives it has no equal. Put up in seven different colors from white to jet black. The operator can get any desired tint or color. Each set of seven colors in tubes and porcelain palette meatly boxed. Price $\$ 3.00$.


RETOUCHING GLASSES.
a $7 / 8 \mathrm{in} . . . . . . . \$ 65$
$21 / 8$


## THE NOVEL RETOUCHING DESK.

Suitable for any size negative under $25 \times 30$. It has a false top which can be pulled down to darken the space in front of the ground glass cut-out. The bed on which the negative is laid can be set at any inclination to suit the convenience of the artist. By means of the slide rest, the negative may be moved up or down to any desired position. These desks are all made of hard wood, perfectly constructed, nicely engraved and well finisbed. They are an ornament to any studio.
Price,
$\$ 1400$
The Novel Retouching Desk, same as above, with out stand or drawer, . . . . . . . . . . . \$9 oo


## IMPROVED RETOUCHING FRAME.

Improved Retouching Frame, for $8 \times$ ro and under, . . . . . . . . . . . . . . . $\$ 300$ Improved Retouching Frame, for $11 \times 14$ and under, . . . . . . . . . . : . . . 7 oo

## MOULTON'S IMPROVED RETOUCHING FRAMES.

For $8 \times$ io Negatives and under . . $\$ 300$
${ }^{6}$ II $\times 14$
400
Larger sizes to order.

$A$ is the hood. $B$, inclination notches. $O$, reflector. $D$, turn table. $E$, light panel. $F F$, springs;

## SPURR'S DIFFUSING SCREEN PLATES.



A great labor-saving and popular novelty, giving the photographs a beautiful soft steel engraving effect, which cannot be obtained in any other way, and reducing the retouching to a minimum. These plates can be used by any one, simply by placing them in front of the unexposed dry plate in the plate holder and making the exposure through the screen.

Try them! you will like the work, your customers will demand it, your trade will increase and you will save more than o:se half of your retouching. Every plate guaranteed perfect. Two styles of plates, lines diagonal and square.
Price, each, $5 \times 7$
Larger sizes to order.

## RETOCADOR.



Is an Electric Retouching Pencil, operated by a portable battery. It is extremely simple and may be worked easily by anyone having the least knowledge of ordinary retouching methods.

The pencil itself, in which is the motor, is attached by a fine spiral spring to the frame of the retouching stand, thus relieving the hand of all weight, and is operated just as an ordinary pencil would be, except that the desired effect is produced by the pencil automatically, instead of by movement of the hand. The lead, which may be either a Pearl metallic point or an A. W. Faber 5 H retouching point, is sharpened to a long, fine point, as shown in the cut, and the motion given it by applying the power, is a rapid revolving and at the same time oscillating one. The rapidity with which the point is moved over the negative regulating the grain of the stipple effect produced.
This pencil has been in practical working operation for nearly a year and has demonstrated that it is perfectly practicable and a vast improvement over handwork, an ordinary operator being able to retouch FROM 14 TO 20 CABINETS PER DAY.
Price, complete, including battery,

## KEYSTONE VIGNETTE BLOCKS.

$5 \times 7$ or $5 \times 8$ size, one kind or assorted, . . . . $\$ 150$
$61 / 2 \times 81 / 2$ size, . . . . . . . . . . . . . . 250
8x 10 size, . . . . . . . . . . . . . . . . 300


Light and Strong. Give beautiful vignettes. Three letters, A, B, C, are used to designate the kind of block with reference to its height; and each of these letters comes in different numbers, according to the style of opening.
A is a block twice as high as the top as at the bottom, and is used for medium-dark draperies. Five styles, 1, 2, 3, 4 and 5 .
$\mathbf{B}$ is a block $\mathbf{I}$ inch from the negative all along. Used for white draperies and full illuminate. Five styles, 1, 2, 3, 4 and 5 .

C is a very low block, for very small heads of ladies and busts which you may wish to Vignette short. Three styles, $\mathbf{1}, 2$ and 3 .


## VIGNETTE CLAMPS.

For Fastening Vignetters to printing Frames.
Schenck's, per doz.


## "PREMIER" WAXED VIGNETTERS.

Print nearly as quickly as bare glass, and have a softening effect on the retouching. Produce the same softness and delicacy of effect in the strongest summer sunshine, or shade of a winter's day. Durable. Impossible to produce a semi-vignette to the same perfection by any other means. These vignetters will last for years, and we confidently reccommend them as the best make in the market. Cabinet size assorted openings at $\$ \mathbf{1} .75$ per doz. Send 15 cents for sample.


Nineteen sizes are now made, suiting all dimensions of pictures from a small carte figure to Victorias, cabinets, whole size, etc. They are printed in black for ordinary negatives, yellow bronze for thin negatives and red bronze for still weaker ones.
In envelopes, containing one each, Nos. I to $\mathbf{I} 5 . \$ \mathbf{1} 00$ Nos. 1, 2, 3, 4 and 5, for cartes, per dozen, . . . 50
" $6,7,11,12$ and 13 , for large cartes and Victorias, per dozen, .

## THE UNIVERSAL VIGNETTER.

for vignetting the negative DURING EXPOSURE.
Produces white, black, gray, cloud and cameo vignettes, with any shade of color between, and makes possible the production of vignetted prints of uniform style, with no more trouble and expense than is required for plain prints. It is the best attachment yet made for this purpose. Price, $\$ 250$.

## WEYMOUTH'S VIGNETTE PAPERS.


" $8,9,10,14,15$ and $15 \frac{1}{2}$, for cabinets and 4-4 size,

75
" 16,17 and 18 , for cabinet and half-size, per dozen,

DOG VIGNETTING PAPER.
Very Fine.
Per doz, . . . . \$o 20 Per quire . . . . \$0 35 Per ream, . . . . \$6 00

## YELLOW VIGNETTING PAPER.



## LARGE ALBUMENIZED PAPER.

$35 \times 45$ Extra Brilliant Pensee, "B" brand,-Per doz. . . . . . . . . . . . . . . . . . $\$ 1200$

## QUAKER CITY MATT-SURFACE PAPER.

Specially prepared for us by John R. Clemons,
Easy to handle.
Gives finest results.
Price per ream,
$\$ 2400$
Price per dozen,
$\$ 75$
CLEMON'S MATT-SURFACE PAPER.


## GUM PAPER.

Shipley's, in narrow strips, per roll . . . . . \$0 60 Shipley's, in sheets, per doz. . . . . . \$0 20

## BLOTTING PADS.

19 x 24, Extra Quality, Pure Fibre, . . . . . . . . . . . . . . per doz. \$0 75; per ream, \$16 oo
BUFFALO NEW ENAMEL AND PLAIN ARGENTIC PAPER.
This paper is manufactured in three grades, viz: Enamel, Light and Heavy.

| Size: | Per Doz. | Size. | Per Doz. | Size. | Per Doz. | Size. | Per Doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $31 / 4 \times 41 / 4$ | . \$0 25 | $5 \times 71 / 2$ | \$0 70 | $11 \times 14$ | \$300 | $20 \times 24$ | \$ 900 |
| $4 \times 5$ | 40 | $5 \times 8$ | 75 | $12 \times 15$. | 335 | $22 \times 27$ | II 25 |
| $41 / 4 \times 51 / 2$ | 50 | $61 / 2 \times 81 / 2$ | 110 | $14 \times 17$ | 450 | $24 \times 30$ | I3 50 |
| $41 / 4 \times 61 / 2$ | 55 | $8 \times 10$ | I 50 | $16 \times 20$ | 600 | $25 \times 30$ | 1400 |
| $43 / 4 \times 61 / 2$ | 60 | $10 \times 12$ | 225 | $17 \times 20$ | 640 | $24 \times 36$ | 1600 |
| $5 \times 7$ | 65 | IO $\times 14$ | 265 | $18 \times 22$ | 750 | $30 \times 40$ | 2250 |
|  |  | Other sizes in proportion. |  |  |  | 25 per cent. discount. |  |

In Rolls of not less than 10 yards.


EUREKA BROMADE PAPER, No. 1, 2, 3.
Made in three grades.
No. 1, Thin Smooth.
No. 2, Heavy Smooth.
No. 3, Heavy Rough.
Other sizes in proportion. 15 per cent. discount.

## Cut Sheets

| Size. | Per doz. | Size. | Per doz. | Size. | Per doz. | Size. | Per doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $31 / 4 \times 41 / 4$ | \$0 15 | $5 \times 8$ | \$0 45 | $12 \times 15$ | \$200 | $24 \times 30$ | \$ 825 |
| $4 \times 5$ | 25 | $61 / 2 \times 81 / 2$ | 65 | $14 \times 17$ | 270 | $25 \times 30$ | 850 |
| $41 / 4 \times 51 / 2$ | 30 | $8 \times 10$ | 90 | $16 \times 20$ | 360 | $24 \times 36$ | 1000 |
| $41 / 4 \times 61 / 2$ | 33 | $10 \times 12$ | 135 | $17 \times 20$ | 385 | $30 \times 40$ | 1350 |
| $43 / 4 \times 61 / 2$ | 35 | $10 \quad x \quad 14$ | 160 | $18 \times 22$ | 450 | $40 \times 60$ | 2700 |
| $5 \times 7$ | 40 | II $\times 14$ | 180 | $20 \times 24$ | 550 | $40 \times 72$ | 3240 |
| $5 \times 71 / 2$ | 42 |  |  | $22 \times 27$ | 700 |  |  |

If ordered in packages of less than one dozen, an extra charge of 25 cents will be made for packing. in rolls or on patent spools for enlarging easels.

Not less than ten yards on a spool.

Per Yard.
Io inches wide. \$o 33
11 " 37
12 . 1240
14 inches wide. \$0 47
$\begin{array}{lll}6 & \text { ، } & 54 \\ 8 & 6 & 60\end{array}$

Per Yard.
20 inches wide,\$0 67
$\begin{array}{lll}22 & \text { " } & 74 \\ 24 & \text { " } & 8 I\end{array}$

Per Yard. 25 inches wide, $\$ 084$ 30 "6 $\begin{array}{llll}30 & \text { ، } & 00 \\ 31 & \text { I } 05\end{array}$


## EASTMAN'S PERMANENT AND ANTHONY'S RELIABLE BROMADE PAPER.

"A," "B" or "C." Standard or Extra Quick.
Cut Sheets.

| Size. | Per Doz. | Size. | Per Doz. | Size. | Per Doz. | Size. | Per Doz. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $31 / 4 \times 41 / 4$ | . \$0 25 | $5 \times 8$ | . \$0 75 | $14 \times 17$. | \$4 50 | $22 \times 27$ | \$II 25 |
| $4 \times 5$ | 40 | $61 / 2 \times 81 / 2$ | 1 10 | $16 \times 20$ | 600 | $24 \times 30$ | 1350 |
| $4^{1 / 4} \times 5^{1 / 2}$ | 50 | $8 \times 10$ | - 150 | $17 \times 20$. | 640 | $25 \times 30$ | - 14 co |
| $41 / 4 \times 61 / 2$ | 55 | $10 \times 12$ | - 225 | $18 \times 22$. | 750 | $24 \times 36$ | 1600 |
| $4 \times 7$ | 65 | II XI 4 | - 300 | $20 \times 24$. | 900 | $30 \times 40$ | 2250 |

Other sizes in proportion.
If ordered in packages of less than one dozen, an extra charge of 25 cents will be made for packing. IN ROLLS OR ON PATENT SPOOLS FOR ENLARGING EASELS.

| Per Yard. |  |  |  |  | Per Yard. |  |  | Per Yard. |  |  |  | Per Yard. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 I | " | 62 | 16 | " |  | 90 | 22 | " |  | 24 | 30 |  |  |  |  |
| 12 | " | 68 | 18 | " | I | 00 | 24 | " |  | 35 | 31 |  |  |  |  |

Not less than ten yards on a spool.
Discount Eastman's
25 per cent.
Discount Anthony's
40 per cint.

## STEINBACH ROLL PAPERS.

We are the largest importers of Steinbach Papers in the United States. A full stock always on hand of the three grades, viz. :-80 gram., (light); 100 gram., (medium); 120 gram., (heavy).


## PLATINOTYPE PAPER.

(We are the only importers of Platinotype Papers in the United States.)
Solar paper in endless roll, 54 inches wide. These papers are especially made for the Platinotype process.


## PLATINOTYPE I5 KILO PAPER.

Smooth surface, sized.
Size $18 \times 22$, per doz. . . . . . . . $\$ 125$

## POSITIF I5 KILO PAPER.

Smooth surface, unsized.
Size $18 \times 22$, per doz. ...... $\$ 080$
READY SENSITIZED PLATINOTYPE PAPER.


Note.-Paper should be kept in a preserving tube or ice-box until used. Under proper care the paper will keep from one to three months in summer, and three to six months in winter.

## LITMUS PAPER.

## Red or Blue.

Per sheet
\$0 O5
Per doz.

## EXTRA GLOSSY READY SENSITIZED ALBUMEN PAPER.



EASTMAN'S "SOLIO" PAPER.


## OMEGA PAPER.



FRENCH SATIN JUNIOR. BLUE PRINTING PAPER.
Fresh, Brilliant and easy to handle.
Almost equal in richness to silver prints. In packages of 25 sheets.


NEW YORK ARISTOTYPE PAPER.


Per 100 Cabinets, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$ 50
For proofing only.
"ARISTO" SECONDS.
For Proofing and Second work.
Per box ( 100 sheets, Cabinets ) . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 100$
The Seconds are from same emulsions as Firsts, just as good for proofing and plain printing.
"ARISTO" SOLUTIONS.
${ }^{66}$ B " (Gold.)
No. 1, . . . . . . . $\$ 50$ No. 2, . . . . . . . $\$ \mathrm{I} 00 \quad$ No. 3, . . . . . . $\$ 200$ SPOTTING OUT COLOR, "ARISTO" COLLODION VARNISH.
Package ( 3 shades) . . . . . $\$ 050$ Very Superior, per bottle 50
"ARISTO" TONING OUTFITS.
No. I Will tone 150 cabinets, . . . $\$ \mathrm{r} .00$ No. 3 Will tone 2000 cabinets, . . . . $\$ 3.85$ No. 2 " 1000 " . . . 2.00

## HARD RUBBER PLATES.

For Squeegeeing Prints upon.

$61 / 2 \times 81 / 2$ ". "..... ${ }^{30}$ CIRCULAR PRINT WASHER.
This is made of Zinc. with perforated bottom, cut funnel-shape to prevent any sediment of Hypo from rising in the trough. Under the bottom is a well, to which is fixed a siphon, to carry off the water.

They are made in three sizes as follows:
14 Inches Diameter, ......... Price each, \$400 24 " . . . . . . . . . . . . . II 00

They are cheaper than Trays or Sinks for washing prints and much more effectual in removing every trace of Hypo.

## THE PERFECTION TRIMMING BOARD.

This is made in three sizes as follows:
No. 1. For 4 sizes, from Petite to $4 \times \quad 5$ inclusive, Price . . . . . . . . . . . . . . . \$I 00

" 3. "II " " to 8 x IO " 6 ". . . . . . . . . . . . . . I 50


## PERFECT PRESERVING TUBES.

For keeping Sensitized Photographic papers. (Patent applied for.)
Compact; Reliable; Air-tight.
A No. I Holds $4 \times 5$ to $41 / 4 \times 61 / 2$ (Preservative extra.) . . . . . $\$ 090$


" 5 " 18 x 22 Gallery use. 6 ". . . . . . 300

## THE W. \& C. PERFECT PAPER PRESERVATIVE.

Will keep Sensitized Paper fresh and Bbilliant for months.
hot Thirteen Years in constant use in Europe. Paper can be silvered on dull, cloudy days, and used whenever needed. Proof Paper always fresh and ready for use.

Price of Perfect Preservative.
Tin box, size for Nos. I, 2, and 3 tubes, each, \$

## VELVET RUBBER SQUEEGEES

6 inch . . \$ 25<br>12 inch . . \$ 50

## THE SUCCESS PRINT MOUNTER.

The accompaning illustration describes it fully.
6 inch . . . $\$ \mathrm{I} 00$ I2 inch . . . . \$ 50


PRINT ROLLER AND SQUEEGEE.


## PHOTOGRAPHIC CARD PAPER, AND FRRROTYPE PLATE CUTTER.

PRICE, \$10.00
Photographers will find this a grand thing for cutting albumen paper, and it is also invaluable for cutting ferrotype plates.

The advantages of this cutter are: with 12 inch blades it will cut any size sheet. No other machine ever made will cut a sheet wider than the length of the blades.


All the parts are made to gauges, by which they are interchangeable, so that if any part is worn out, broken or lost, a duplicate can be ordered.

All the parts are made of the best material and a cutter capable of a range of work never before attempted in a small machine is offered at less than one-half the price of any other cutter with same ength of Llades.

## HARTER'S PAPER TRIMMER.



Trim your Paper before printing.
Price, including metallic forms, nickel plated and polished, for Card, Cabinet, Panel, Boudoir and
Imperial sizes.

## ACME PRINT TRIMMER



A great need supplied. A quick, accurate and durable Trimmer.
No more badly trimmed prints. The only trimmer that cuts a whole sheet of paper, all sides at once. Absolutely accurate. Never gets out of adjustment. Self sharpening. Simplest Trimmer ever made. Prints always the same size.

Prices.
No. $1-33 / 4 \times 53 / 8$ inches, 16 cabinets
to shett. . . . . . . . . . . . \$12 00 No. $2-37 / 8 \times 6$ inches, 12 cabinets to sheet,

1200
Panel Sizes, . . . . . . . . . . 1600 "Sunbeam" and Card Sizes, . . . 1200 Any Special Size to Order, $\$ 1.00$ extra.

## WHEEL PRINT TRIMMERS.



Plan of holding the Straight Cut Trimmer when in use. Price, 20 cents.


Plan of holding the Revolving Trimmer When in use. Price, 30 cents.

This Photograph Trimmer is substituted for the knife for trimming photographs, and does the work much more expeditiously and elegantly. They save time, save prints, and save money.

They do not cut but pinch off the waste paper, and leave the print with a neatly beveled edge, which facilitates adherance to the mount. Try one, and you will discard the knife and punch at once. For ovals and rounded corners they are worth their weight in gold.

## ROBINSON'S GUIDES.

Made of sheet iron. We furnish guides at ro cents per inch the longest way of the aperture.

## GLASS FORMS.

| Card size, each . . . . . . . . . . \$ | 30 | $4 \times 5$ size, each . . . . . . . . . . | 30 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Cabinet size, each . . . . . . . . | 40 | $5 \times 8$ | " . . . . . . . . . | 60 |

Any size or shape made to order.
WOOD'S PAPER CUTTER.


No forms or patterns necessary. No folding of paper. No ragged edges. Great saving of paper. No waste. Corners always square and edges true.

Warranted to work perfectly, and to be simple and easy to work.
Price, complete with knife,

## LOCKWOOD'S CLIPS.



3 in. long, $5 / 8$ open, $\$ 0.65$ per dozen.

$21 / 4 \mathrm{in}$. long, $\frac{5}{16}$ open, $\$ 0.60$ per dozen.

Smith Clips, per dozin,

## U. S. PHOTO CLIP.

THE LATEST AND CHEAPEST SERVICEABLE PHOTO CLIP IN THE MARKET.


This clip is exceeeingly strong, being made of hard wood, with heavy wire springs, and is provided with a hook. The quality of stock employed in its construction is of the best, and the price lower than for any other article of its kind.
Price, per gross, . . . . $\$ 250$
Price, per doz. . . . . . 25


## HIGGINS' PHOTO-MOUNTER.

## A New Adhesive, For mounting Photographs, \&c.

This is an entirely novel and superior Adhesive, specially prepared for mounting Photographs, Aristotypes, Blue Prints, Scrap Pictures, Engravings \&c. It is not a Flour or Starch Paste, but is rather a Vegetable Glue-being a new patented discovery in the chemistry of adhesives.
Prices, in Screw Capped Jars, 3-oz., 15c.; 6-oz., 25 c ; 14-oz., 50 C.
"DAISY" PERMANENT STARCH PASTE.



There has been for a long time a demand for a Starch Paste, that would neither mould, sour or discolor, yet put up in a convenient form ready for use. We now introduce such an article, under the name of the "Daisy" Permanent Starch Paste.


## CREAM PASTE.

FOR MOUNTING PHOTOGRAPHS.
This paste is prepared especially for photographic purposes, and contains nothing that will in any way injure the print. It will keep for a long time and will neither sour nor mould. 1/2 pint, . . . \$0 20 I quart . . . \$0 45

## Mitchell's "Anti-Cockling " Mounting Solution.

For mounting photographs without bending or warping the cards. It is specially valuable for mounting prints in albums and on thin mounts and papers. It will not stain or injure the print, or spoil or sour withage. Put up in metal capped bottles.
Small size, 30 cts. Large size, 50 cts. Pints, 75 cts. Quarts, $\$ 1.50$
. $1.5^{\circ}$

I quart " . . 55

## MORA STANDS.

| Per Dozen. <br> Straight Gold Edge, | Minette. | Petite. | Carre. | Card. | Cabinet. | Boudoir. | Paris <br> Panel. | $7^{1 / 2} \times 1 \times 13$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thinner Glass, 2nd quality |  |  |  | \$300 | \$500 | \$900 | \$1800 | \$22 50 |
| Serrated Edge, Heavy, | - | . . | - . | 4 co | 300 650 | 1075 | $20^{\circ} 00$ | 2500 |



## THE JAMES REVOLVING SHOW CASE.

It is a well known fact that nothing attracts the attention of passers by so quickly or secures their interest so effectually as objects in motion. Hence nothing equals a good revolving Show Case for your outside display. This we are now prepared to supply at a lower price than they have ever been offered heretofere.

The frame is oak, antique finish, covered with zinc top to make it water tight and fitted with double strength French glass, $20 \times 34$ inches in size. Each Case holds 55 Cabinet Photos.
Price complete, boxed,
$\$ 30 \quad 00$

## NEW REVOLVING SHOW CASE

That will be appreciated by all enterprising Photographers, as it displays different size Photos, is easily opened for changing the display, and takes up lut little room at the doorway.
Being only 10 inches wide, 48 inches high, and extends out from the building only 16 inches. It is handsomely made in Autique oak with nickel corners, and finished with spar varnish which is not effected by the weather. The top is zinc covered, and the whole case water-proof.

The revolving drum holds 30 cabinets and 5 small panels. The back space $14 \times 42$ inches, is covered with fine black cloth, and various size Photos can be displayed on it. The motor is wound from beneath and runs 12 to 15 hours. Photos in motion alvays attract attention.

We place the Photographer's name on each side of the base, and the No. of Street in front. We ship the case with the long bracket to fasten to building. $\$ 30.00$ boxed.

AUTOGRAPH SIGNATURES FOR PRINTING.


Including Electrotype, from $\$ \mathbf{1} .50$ to $\$ 2.50$. Estimates furnisherl.


## COLLIN'S CARD STOCK.

Special complete price list will be sent on application.
"Job lot" cards always on hand.
Write for samples and discounts.
Collin's Printing at Collins' Prices.

## PRICES FOR PRINTING.

When our own designs are used.


We do not solicit cheap Printing.

## VISTA MOUNTS.

Utilize your spoiled Negative Glass.
An absolute necessity to every photographer who desires to frame his photographs in good style at trifling expense

A Vista Mount consists of a piece of ornamental paper cut to the necessary size, and pierced with an opening of suitable size, a piece of cardboard for a back, and a ring and tag for suspending the picture. The glass must be supplied by the photographer himself, from his stock of spoiled negatives. Cabinet Box contains 12 paper covers, backs and rings, price, 50 cents.


## No. 4301.

## PATENT CELLULOID PHOTO FRAME.

Made with silk tassel, transparent celluloid to go over the picture, which protects it the same as glass; the colors are turquoise, blue, ivory, cream, nile green, yellow, pink and lilac. Price per doz., $\$ 4.00$


## JAPANESE ART TISSUES, CABINET SIZE.

## Copper Plate Designs.

Owing to the large demand for these tissues from Photographers all over the civilized world, wehave decided not only to supply the regular designs but print your name and address free of charge on every tissue. This will give a decidedly beautiful effect and give you free advertising as well.


## LETTER PRESS TISSUES CABINET SIZE.

Regular designs with your name and address.


## JAPANESE ART TISSUES.



The finest quality of Mikado Silk Taper for covering fronts of photngraphs, and preserving the burnish ar gloss. Eight charming designs printed in blue or (hocolate iuk.
Price per 1,000 . . . . . . . . . . . . . . . . . . $\$ 200$ Assorted designs.

## PLAIN WHITE JAPANESE TISSUES.

No derigns, Cabinet Size, . . . . . . . . . . . . . \$ 50

Japanese Arc Tissues. $\$ 2.00$ PER 1000.
JAPAN. ENGLAND. PHILADELPHIA.

## CABINET PHOTO ENCLOSURES.

Are invaluable for high class work, as each photograph may thus be enclosed separately and perfect protection of the print be insured. They are made in two grades,


Rose, per 1000
\$2 00

## SOMETHING NEW.

Lavette's l'atent Envelope for Mailing Photographs.
There is not one person in a hundred who has not mailed from one to a dozen photographs, AND NOT ONE KNOWS HOW TO DO IT properly. This envelope is the only PROPER, HANDY AND SECURE WAY TO MAIL Photographs. It is made of fine manilla paper, with a board on each side. Write your letter place photograph on top of it (as shown in cut) fold over back marked B, seal with gum flaps A A A. Then it goes as Ist class mail MATTER, among letters only, protected on both sides against stencil marks, breakage, etc. Postage 4c. the same as if sent separately. Patented $\mathbf{1 8 9 1}$. Price, per hundred, $\$ 1.00$.

## ENVELOPES FOR MAILING.



## WING'S FERROTYPE ENVELOPES.

Maroon Cards, Gilt Borders, Scarlet Flap.

Per 1000
$\$ 2000$
Io 0

ALBUMS FOR PHOTOGRAPHS.



## THE CLIMAX REMOVABLE LEAF ALBUM.



Handsomely bound in full plain cloth, with linen laces, containing 25 Collins' cards, eachSize of Cards. Size of Cards.

$7 \times 10$. . . . . . . . . . 150 . $14 \times 17$............... . . 535
$10 \times 12$. . . . . . . . . . . 225 . $16 \times 20$. . . . . . . . . . . 675
Bound in cloth, with leather back and corners, with gold rules and gold side stamp and with silk laces, containing 25 Collins' cards, each-

Size of Cards.

| $5 \times$ | 6 | . | . | . | . | . | . | . | $\$ 135$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $6 \times$ | 8 | . | . | . | . | . | . | . | 145 |
| $7 \times$ | 10 | . | . | . | . | . | . | . | 200 |

10 x 12 . . . . . . . . . . . . 275

Size of Cards.
$11 \times 14$ ..... $\$ 300$
$14 \times 17$ ..... 575
$16 \times 20$. ..... 725
extra leaves for climax removable leaf album.



THE KEYSTONE PHOTOGRAPHIC PRINTERS' BOOK.
A BOON TO PHOTOGRAPHERS.
It removes a source of constant worriment from every gallery using it. Enables the desk to keep constantly posted on the state of orders in the printer's hands. Each book will register 3200 negatives.

## HOWARD ALBUMS.

Full Cloth, Embossed, Gold Label, with A. M. Collins Mfg. Co.'s No. I Cards.
With 25 Collins Cards.


## HOWARD ALBUMS.

Morocco, Half Leather, Extra Gold Finish, with A. M. Collins Mfg. Co.'s Cards, Boxed.


## EXTRA CARDS COLLINS'S BEST FOR HOWARD ALBUMS, MOUNTED WITH LOOPS, READY FOR USE.



THE ECLIPSE ALBUMS.
Interchangeable Leaves. Spring Back.


Improved Spring Back with twenty-four Collins' C'ards.


The Eclipse Albums are handsomely finished in Morocco half leather bound, with gilt title, and enclosed in a neat box.

Nos. $21 / 2,31 / 2,4^{1 / 2}$ and 5 have round corners; Nos; $41 / 2$ and 5 are extra gold finish.
Full Leather Bound.
These books are full leather bound, seal grain, padded covers, and round corners. They are expressly made for the finest class of trade. Price list as follows :


Price list of extra leaves.
White and Gray. Best Quality. 1 dozen in a box.


## GEM ALBUMS.




Is the only Album that will allow you to bind your mounted photographs.
It is the only Album with an adjustable extension, thus allowing you to put in from twenty to forty mounts.

It opens perfectly flat and at the same time it is perfectly rigid in the back.

It is so constructed that you can take out or put in
one or more leaves easily and quickly without disturbing the balance.

## FOR MOUNTED PHOTOGRAPHS.

These books are furnished with 25 patent gummed stubs to which you can attach your already mounted and finished photographs.


## FOR UNMOUNTED PHOTOGRAPHS.

Each book is furnished with 25 No. I Mounts with perforated stubs attached, so it is only necessary to mount and finish your photograph before putting it into your book.


## HANDSOME CASES FOR HOLDING PHOTOGRAPHS.

## THREE SIZES, CABINETS, CARTES DE VISITE, PETITES.

If you wish to increase business, fit out your canvassers with these cases. More modern and desirable than photograph albums. Tourists and students use these to preserve photographs during absence from home. Photographers can display their finest specimens in these neat and attractive holders.

CABINET SIZE
Russet Imitation Alligator, . . . each, Grain Leather,
Morocco,
Genuine Seal,
FOR CARTES DE VISITE.
Russet Imitation Alligator,
FOR PETITES
Russet Imitation Alligator,

| Pict. | $\begin{gathered} 2 \\ \text { Picts. } \end{gathered}$ | $\begin{gathered} 3 \\ \text { Picts. } \end{gathered}$ | Picts. | $\stackrel{5}{\text { Picts. }}$ | Picts. | $\begin{gathered} 8 \\ \text { Picts. } \end{gathered}$ | $\begin{gathered} 10 \\ \text { Picts. } \end{gathered}$ | $\begin{gathered} 12 \\ \text { Picts. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$0 40 | \$0 45 | \$0 65 | \$0 80 | \$1 00 | \$1 25 | \$1 60 | \$200 | \$2 25 |
| 70 | 70 | 100 | I 35 | 1 75 | 200 |  |  |  |
|  | 100 | 150 | 200 | 225 | 275 |  |  |  |
| I 25 | I 25 | 200 | 250 | 300 | 375 |  |  |  |
|  | 30 | 50 | 60 | 75 | I 00 |  |  |  |
|  | 30 | 45 | 55 |  | 85 | 110 |  |  |

## RUBBER BANDS.

Eighteen gross, $11 / 2$ inch bands in a $1 / 4 \mathrm{lb}$. box. Put up nicely in $1 / 4 \mathrm{lb}$. boxes. Use them instead of twine. 2,592 bands in a $1 / 4 \mathrm{lb}$. box.

$$
\text { Per } 1 / 4 \text { lb. box, . . . . . . } \$ 100 \text { Per I oz. box, . . . . . . } \$ 0 \text { o } 30
$$



## THE "ALPHA" CABINET.

PURE RUBBER ELASTIC BANDS.
Choice assortment for Amateur Photographers, of Pure Rubber Bands-over 500, in eleven sizes, from one to three inches long, and from onc-sixteenth to one-half inch in width. It also contains an "Ink Shield" for the pen, which not only saves your fingers, but your desk, books and paper.

Price complete, each, $\$ \mathbf{I} .25$

## BUCHANAN'S DEVELOPING OUTFITS FOR MAKING NEGATIVES.

These outfits contain everything necessary for developing one dozen negatives, including trays, graduates, funnels, etc., that will last for years, and sufficient chemicals, for making several dozen additional negatives.

Comprises: I Tisdell ruby lamp; I doz. dry plates; I glossy rubber tray; I japanned tray; I pkg. developer; I lb. hypo.; I oz. bromide potass.; I lb. powd. alum; I drachm glass graduate; I 4 oz . glass graduate; $\mathbf{I}$ focusing cloth; $\mathbf{I}$ thimble plate lifter.
$4 \times 5$ Developing Outfit, complete, . . $\$ 385 \mid 61 / 2 \times 81 / 2$ Developing Outfits, complete, . . $\$ 545$ $5 \times 7$ or $5 \times 8$

47518 x 10

## BUCHANAN'S PRINTING OUTFITS.

These outfits include everything necessary for making and mounting two dozen prints from the negatives, and chemicals sufficient for several dozen more.

Comprises: 2 doz. ready sensitized albumen paper; I printing frame; I bottle pure chloride of gold; I pkg. Hale's toning powders; I glass tray; I hard rubber tray; 12 oz . glass graduate; $\mathbf{I}$ jar of paste; I I $1 / 2$-inch paste brush; 24 white card boards, No. I.

$4 \times 5$ Printing Outfit, complete, . . . $\$ 310 |$| $61 / 2$ | $\times 81 / 2$ |
| :---: | :---: |
| 6 | Printing Outfit, complete, . . . $\$ 4.80$ |
| 66 |  | $5 \times 7$ or $5 \times 8$ " " ". . $380 \mid 8 \times 10$ " ". . 580

## ACID SULPHITE OF SODA.

## FOR USE IN THE FIXING BATH.

Two ounces of this solution added to one quart of the ordinary hypo bath ( 1 to 4) reduces the time of fixing very considerably, and gives exceptionally clear and stainless negatives.

This material can also be used as a preservative of pyro, hydroquinone or eikonogen in developers, but not in those developers where all the ingredients are in one bottle. In other words it entirely replaces the use of ordinary sulphite of soda in the two solution developer. Pint bottle, \$0 40

## DRY-PLATE DEVELOPERS, READY FOR USE.



DROPPING TUBES.

## AMIDOL.



## EASTMAN'S DEVELOPER POWDERS.

Are especially recommended for developing transparent films.
They are put up like sedlitz powders and require only the addition of the requisite quantity of water. Thus the advantages of a freshly mixed developer can always be secured.
Each powder sufficient for 4 ounces of developer. Price per package of one dozen, \$0 50 .

## RODINAL.



PURE PARA-AMIDOPHENOL HYDROCHLORATE.
Price, in $1 / 2$ ounce bottles, . . . . . . $\$ 075$ Price in $81 / 2$ ounce bottles, . . . . . . $\$ 11$ oo H. T. A. DEVELOPER FOR FERROTYPES.

Per $1 / 2$ gallon package, . . . .. . . . $\$ 0$ o8
Per I gallon package, . . . . . . . . \$0 15
PELETONE (Pyro Tablets.)
Per bottle of 100 2-grain Tablets, . . . . . . . . . . . . . . . . . . . . . . . . . . \$0 50
HALL'S INTENSIFIER.
For strengthening weak negatives, per bottle,75

## RUSSEL NEGATIVE CLASPS.

By using the Russell Negative Clasp and Drying Support, there is no need of wetting or staining the fingers in the developer, or of touching a plate until after it has been developed, varnished and dried. Adaptable for all sizes, from $31 / 4 \times 4^{1 / 4}$ to $8 \times$ 1o inclusive. Price, $\$ 015$.


## EFFICIENT PLATE HOLDER.



This Plate Tifter is nearly like an ordinary open end Thimble with a Fointed piece of Metal soldered securely to it as shown in the illustration.

Where a number of plates are developed in one dish, this Plate Lifter is not only a convenience, but quite a necessity.
Price $\$ 015$.

## ADJUSTABLE DEVELOPING FORK.

As seen by the cut, this is for holding the Dry Plate during developing and washing. It entirely prevents soiling of hands, and by its aid the plate is easily examined and returned to solution, saving necessity of ridges and elevations on bottom of tray to prevent capillary attraction. They are made in two sizes, nickel plated.
No. 1 for plates $31 / 4 \times 41 /+$ to $5 \times 8$
$\$ 060$
No. 2 " $4 \times 5$ 10 $8 \times 10$
90
Can be sent by mail.


## THE SKELETON NON-ADJUSTABLE DEVELOPING FORK.

These resemble the adjustable forks in shape, but are rigid. They are made of nickel wire.

$$
\text { For } 4 \times 5 \text { or } 4 \times 8 \text { plates, . . . . . . . . . . . . . . } \$ 030
$$



## ARTIST'S CUFFS.

(For photographers' use), to prevent soiling the sleeves and cuffs while developing negatives.
Price, per pair, . . . . . . . . . . . . . . . . . . \$0 60
"ALPHA" FINGER-TIES.
These goods are made of pure gum rubber, and being very thin and pli-ble do not draw the fingers, while they protect them entirely from the stains of various photographic solutions.

This very useful article comes in a nest of three finger-tips of assorted sizes, put up in a neat paper box, \$0 15 .

## HALE'S TONING POWDERS.



The contents of one package, dissolved in 15 to 20 oz . of water, mixed with $\mathbf{I}$ to 2 grains of chloride of gold, makes the best toning bath known.
1/4 lb. box, containirg
12 powders . . . $\$ 30$
1/2 lb. box, containing
24 powders ... 50
$x \mathrm{lb}$. box, containing
48 powders . . 75

## ALBUTONE.

for toning and fixing in one bath prints on albumen papler.
This solution is prepared for immediate use, and works equally well with freshly silvered or ready sensitized paper, producing rich, warm tones. The prints require only to be washed after toning and the solution may be used repeatedly.
Price per half pint bottle
$\$ 040$
FRENCH AZOTATE.
For toning Albumen Prints. Price per bottle . . . . . . . . . . . . . . . . . . . . . . \$0 25
OMEGA TONING SOLUTION.
for toning omega, aristo and albumen paper. gives any tone and clear prints. Price, 10 oz . bottle . . . . . . . . . $\$ 030$ Price, 16 oz . bottle . . . . . . . . . $\$ 000$

## SOLIO TONING AND FIXING SOLUTION.

Concentrated toning and fixing solution sufficient for toning I20 cabinets giving any tone and clear whites. Price per bottle \$0 50

## DERMALINE.

A most elegant and pleasant preparation for softening the skin and protecting it from the effects of the weather, the action of chemicals, etc. For coryza, if rubbed into the nostrils, it will at once allay the inflamation and stop the discharge. For burns, chapped hands, bites of insects, old sores and scabs. No greasiness accompanies its use, nor will the hands, after being thoroughly rubbed with it and dried, soil the clothing. The white powder is easily removed by a brush. Very useful as an emollient after shaving. To photographers it is invaluable, as it protects the hands from the chemicals. To be applied with considerable friction after washing, or at any time when the skin is clean and thoroughly dry. Price per bottle

## TONIFIXIR PATRONE.

Cartridges containing the materials for a combined toning and fixing solution indry form. For use, they require only to be dissolved in water. They are put up in boxes of 10 cartridges, or may be had singly and in either of two sizes, as follows: No. r cartridge makes $31 / 2$ ounces in solution; No. 2 cartridge makes 8 ounces.

No. I. Per box of 10 . . . . \$1 80.


## PATENT TRANSPARENCY FRAMES.

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


## ETCHED GLASS MATTS FOR TRANSPARENCY FRAMES.

$61 / 2 \times 81 / 2$, per doz. . . $\$ 3$ oo $8 \times 10$, per doz. . . $\$ 480$ II $\times 14$, per doz. . . $\$ 750$

## GROUND GLASS.

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


## COVER GLASS FOR LANTERN SLIDES.

$3^{1 / 4} \times 4$, Finest quality French, per doz. . $\$ 030$
31/4 x 4, Finest quality French, per gross. $\$ 300$ 3 $1 / 4 \times 4$, Finest quality French, per $1000 . \$ 1800$

## MATS FOR LANTERN SLIDES.

REGULAR SIZE.
Black, with gilt lines, per 100 . . . $\$ \mathrm{I}$ oo Black, with gilt lines, per 1000 . . . $\$ 750$
GUMMED BINDERS FOR LANTERN SLIDES.


## RUBY AND ORANGE FABRIC.

A very desirable article for lighting dark rooms. Price, per square yard, either shade, . . \$0 60 RUBY, GREEN AND ORANGE GLASS.

For Dark Rooms. Special Selected Colors,


CARBUTT'S RUBY PAPER.



Flat Camel's-Hair Dusters.


Flat Paste Brushes.

## Rubber Bound Paste Brushes.




PHOTOMETER FOR TIMING EXPOSURE.

This instrument consists of a black, cloth-covered tube, in one end of which is an aperture, into which slides a graduated scale, through which the light is allowed to pass via the tube, which is placed on the ground glass in the same way that a focusing glass would be used.

Corresponding to each graduation in the scale is marked a number, which gives the relati e time of exposure required for pictures of differing intensity of lighting.

It will prove of great value to those who are constansly overtiming or undertiming their plates.

Price

\$I 00


The Double Level will be appreciated by landscape and tourist photographers. It is quite compact and may be attached to the body of hand cameras, but if a Tripod camera is used it should be attached to the swingback, and may be used with cameras of all sizes. Price, \$0 40

## THE DOUBLE LEVEL



THE WATKINS EXPOSURE METER.

## PRICE.

With one exposure ribbon and book of tables . . . . \$7 50
Extra exposure ribbons, each . . . . . . . . . . 25
Copy of exposure notes . . . . . . . . . . . . . 50
This instrument works splendidly for very difficult sudjects. and all daylight camera expusures, and is a thorough, practical success.

A special instrument, with an extra calculating ring $F$, is now supplied. This instrument is invaluable for copying and enlarging, as it takes into consideration the focus, whilst at the same time it can be used for any ordinary purpose without reference to this addition. Price, complete, $\$ 8.50$.

By far the cheapest and only reliable meter ever invented.

The Ballard Actinometer, $\$ 400$.

Decouden's Photometer, $\$ 300$.

## FOCUSING GLASSES.

Scovill, . . . . . . . . . . \$0 75
Combination, . . . . . . 75

FOCUSING CLOTHS.
Rubber, each . . . . . . . . . . . $\$ 0$ 50 Rubber, Double . . . . . . . . . . \$0 75

## MAGIC FINDERS.

Unequaled for Landscape Photography.



Waterbury Finders, each . . . . . . \$300
Anthony $6 \quad$. . . . . . . I 50
Peerless View Finders, each . . . . . \$1 50
Franco " " " . . . . . I 50

## COMBINED FUNNEL AND FILTER.

In this combination of funnel and filter, the bulb retains the filtering cotton in such a manner as to obviate the difficulty experiened in the ordinary funnel from the cotton being compressed too tightly. A glance at the cut will readily explain its advantages.

The sizes and prices are as follows :
Pints, each . . . . \$0
Quarts, each . . .
40 $\frac{1 / 2}{}$ gallon, each . . . . $\$ 085$

## THE PATENT FLUTED FUNNEL AND FILTER.



$\begin{array}{ccc}1 / 2 & \text { pint } \\ \text { I } & \text { " } \\ \text { I quart }\end{array}$

## GLASS FUNNELS.

| 2 quarts . . . . . . . . . . $\$ 0$ | 25 |  |
| :--- | :--- | :--- | :--- |
| 1 gallon . . . . . . . | . | 50 |
| 2 gallons . . . . . . . . . . | 80 |  |

## HARD RUBBER FUNNELS.

No. o. $1 / 4$ pint
".
1.
$1 / 2$
$\$ 040$
50

No. 2. I pint \$0 55 60

FILTERING PAPERS.


FILTERING COTTON.
W. P. B. Special Absorbent, per lb. . . \$o 60 W. P. B. Special Absorbent, per $1 / 4 \mathrm{lb}$. . . \$0 20

$$
\text { " } 1 / 2 \text { " . . } 35
$$

## GRADUATES.



## GUN COTTON.


( In 16 oz. lots, 10 per cent. discount.)


## CROSS'S FILTERING AND POURING BOTTLE.

This vial is thought to supply a real want. By using it the photographer. in a measure, becomes master of the situation. Oftentimes collodion requires modifica-tion-it may be too thick or too thin, too old or too new, or the photographer may be desirous of combining two or more varieties, to meet a present requirement, and in all similar exigencies he has nothing to do but to fill the vial and go to work, for the process of the filtration is constantly progressing. It is equally useful for varnishes.

The bottle is of the ordinary form, but of somewhat larger size; inside of this a graduated glass tube is inserted, from the top of which the collodion or varnish flows, and at the base one or more thicknesses of canton flannel serve for a filter, that will last for months. The funnel-shaped orifice ( $d$ ) receives the excess from the plate, and renders waste unnecessary. The cap cover both flowing and receiving orifices, and is easily removed. Many persons have expressed their approbation of its convenience, Price, $\$ 3$ oo.

## COLLODION FILTERS.

12 ounce, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$2 00

## EFFECTIVE COLLODION BOTTLE.

Another marked improvement in the plain collodion vial will be seen in the illustration. Il itherto these articles have not been provided with a good pouring lip, and have had no means for preventiug the flowing of any possible sediment outward with the collodion or varnish. The curvature in the base retards the passage of that sediment, while the lip is so constructed that the liquid returns to the bottle, and does not drip outwardly. The lip is also so shallow that the neck can be effectually corked. The neck, too, is widened, to more readily admit the return of the solution to the bottle. The size now made holds eight ounces.

Price, each, . . . . . . . . . . . . \$o $x_{5}$

## LARGE WIDE-MOUTH BOTTLES.

## I gallon, . . . . . . . . . . \$0 30 z gallon, . . . . . . . <br> COLLODION.




GLASS MORTARS AND PESTLES.


BERLIN EVAPORATING DISHES.

3 gallons,
2 ""
1 quarts,
3 qu
3 pints,
2 "
24 ounces,
16 "


Nests, containing 9 different smaller sizes, $\$ 279$ Discount io per cent.

## AGATE EVAPORATING DISHES.



## ACID DISHES.

$11 / 2$ gallon for $61 / 2 \times 81 / 2$ plates, each . $\$ 175$
7 gallons for $14 \times 17$ plates, each
$\$ 700$
$21 / 2$ " $8 \times 10$
275
Either flat or upright. Any size made to order at $\$ \mathrm{I}$ oo per gallon.

## VARNISH.



Ros yline Enamel, 4 oz. bottle, 40 cents, 8 oz . bottle, 75 cents.

## PERFECT VARNISH CAN AND FILTER.

The funnel which acts as a filter, running nearly to the bottom of the can, is constantly in the varnish, and does not get dry. The funnel and filter screw into the can.
Price, each
$\$ 050$


## PEERLESS VARNISH POT AND FILTER.

A tin pot as shown in the cut below, with a Filter and Funnel in top, rubber stopper in spout.


FLASH LIGHT PHOTOGRAPHY.


Price List of the Scovill Magnesium Cartridges: In silver paper wrappers.

2. Medium, " " These cartridges cannot be sent by mail.


# THE STANDARD FLASH LAMP. 

This lamp gives a continuous or intermitting flash, and having an Argand flame box insures the complete consumption of powder with minimum smoke. It is for amateur or professional use.

Two or more of these lamps can be flashed instantaneously from different points. Price $\$ 450$.

## PINE'S MAGNESIUM FLASH LAMP.



Price of lamp as per cut, complete, with one dozen capsules packed in pasteboard box, with directions,

Extra loaded capsules per dozen, . . . . . . . . . . . . . . . . . . . . . . . . . 40


This lamp gives a continuous or intermitting light of intense power and brilliancy, and is for lighting theatres or large halls.

Price, . . . . . $\$ 75^{\circ}$

BRIDGE'S PHOTOGRAPHIC FLASH-LIGHT DIFFUSER.

With all professional and amateur photoggraphers has been: How to produce-by flash-light-a picture embodying all the character and merit of a day picture, without the glaring lights and deep shadows produced by the use of cvery flash-light yet employed. That problem finds its answer fully in Bridges' Patent FlashLight Diffuser, which gives effects equalling those by daylight and brings out pictures which, for outline, effect and general character, are unsurpassed by daylight action and influence. Price $\$ 350$.


## CYRUS PROSCH'S STORAGE FLASH LAMP.

This magnesium flash lamp differs from all others in that it produces a broad vertical sheet illuminant flame, in size about $6 \times 6$ inches.

The powder being projected upward into the combustion flame, in a thin, broad sheet, it is most thoroughly consumed, thereby producing an intense light, and also greatly lessening the smoke nuisance; and besides the sheet flame is a much more effective illuminant than is produced by any other flash lamp, with the same quality of pure magnesium.

The powder is stored (see cut) in the cylindrical chamber which is filled from top by removing cap, and by means of an air blast from the lungs, air bulb, or other source-several lamps may be connected with a reservoir of compressed air-the column of powder is undermined and driven through the fan shaped projector into the-wood, or pure alcoholcombustion flame.

Repeated short flashes or a continuous one (until storage chamber is emptied, may be made, the force
 and duration air blast regulating the flash. The powder feeds entirely automatically, and if finely powdered and dry, will never fail to feed properly.

A sheet tin, cardboard, or other suitable reflector, is attachable to base of lamp, by clamping nut on tube nozzle. Dotted line on cut show were provision is made for sliding lamp on a one-quarter inch stand-rod and securing it in place by binding screw. An extinguishing cap is provided, also five feet of three-sixteenth rubber tube.

The lamp is thoroughly well made of brass and is nickel plated. Price, $\$ 500$.
Extra Magazine, . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . \$0 25
HEMPERLEY'S MAGAZINE FLASH LAMP.


Self loading, for use with pure magnesium powder only. Price complete, . . . . . . . . . $\$ 300$

## BLITZ PULVER.

A self exploding flash powder, put up in boxes of one charge each. Price per box, $\$ 060$. N. B. Never load a magazine flash lamp with Blitz Pulver, light with taper only.


The above is a fac-simile of a white wood box, handsomely finished, cut $O$. G. shape, size $6 \times 4$ inches, containing twelve I ounce bottles of assorted colors, with instruction sheet (and brush), giving directions for use, and so simple that almost any one can color Photographs, Engravings, etc., thereby producing a most life-like and splendid effect. Price, $\$ 150$ per box.

## EGYPTIAN CHEMICAL COLORS.

Triple strength. Manufactured expressly for painting photographs, views, etc.; also used in connection with the Egyptian Transparent Compound for producing the Egyptian Crystal Photograph, said to be the most life-like picture in the world.


Box No. I contains 13 one ounce (white glass) bottles of colors and one six ounce bottle compound for mounting photographs on flat or convex glass after they are colored. This is a box with nickel-plated lock and hinges, highly polished, and will cover five thousand imperial size photographs. Price, $\$ 6.00$
Box No. 2 contains 9 half-ounce bottles of colors. Polished wood box, . . . . . . . . . . $\$ 250$
Box No. 3 contains $\dot{9}$ quarter-ounce bottles of colors. Polished wood box, . . . . . . . . . I 50 .Single bottles, 30 cents each.

Egyptian Transparency Compound, per bottle. . . .

## LIQUID WATEN COLORS, ETC.

Chinese, per box of 12 . . . . . . . . . . . . . . . . . . . . . . $\$ 120$
Anderson's (dry), fitted, per box of 14 . . . . . . . . . . . . . . . . . 175
75
Anderson's (dry), fitted, per box of $\mathbf{1 4} 4$. . . . . . . . . . . . . . . . . . . . . 175
Moist, fitted in tin, 72
Cake Water Colors, per cake or box, to order, . . . . . . . . . . . . . . . . . . 20c. to 900


## THE NEW ACME WATER COLORS.

GRAPHOSCOPES AND STEROESCOPES COMBINED.

## French.

Just the thing you should have on the centre-table to amuse your customers.


## THE POCKET STEREOSCOPE.

The above Stereoscope is made of solid metal, handsomely nickel silvered and finished, has a very fine grou'd crystal lens. The photographs are originally taken from nature, and can be adjusted to suit the eye by sliding back or forth as the occasion may rcquire, until the proper focus is obtained; when every detail of the buildings or scenes will be wonderfully enlarged and fully brought to view.


Views of Niagara, Yosemite Valley in California, Utah, Michigan, Colorado, White Mountains, Yellowstone Park, Mauch Chunk, Catskills, \&c., the principal views of all cities of America. Switzerland with its mountains and Alpine inhabitants, Italy's excavation of Pompeii, Germany's Rhine and its beautiful surroundings. The original and charming views of Paris, London, Berlin, Vienna, St. Petersburg, Constantinople, Rome, Venice, Spain and hundred of others.

The various views of the Chicago Exhibition buildings appear through the Stereoscope most beautifully and realistic; even the miniature details are brought out wonderfully large, and yet the entire Stereoscope and views can easily be carried in the vest pocket.

The "Stereoscope" with 12 choice assorted views, enclosed in a strong and handsome box, 4 inches long, $13 / 4$ inch width and $3 / 4$ inch high, all for the small sum of 50 cents per dozen.

The "Photographs" are $11 / 2$ inch square, sharp and clearly defined and as stated taken from the originals. Extra Photos are put up in $11 / 2$ inch square boxes of one dozen assorted photos in box, price, 25 cents per box -5 boxes ( 60 photos) $\$ 100-12$ boxes ( 144 photos). $\$ 2$ co.

## STEREOSCOPES.

No. 30. Rosewood Sliding, per doz. . . $\$ 2400$ No. 35. Olive " " . . 24 oo
No. 1. Walnut, per cloz. . . . . . . . $\$ 275$
No. 3.
"
No. 4.

## THE PARIS SCIOPTICON.

No. I Paris Sciopticon, complete with Double Slide Carrier, . . . \$25 co

No. 2 Paris Sciopticon, complete with Double Slide Carrier, . . . 45 oo<br>with Double Slide Carrier, . . . 4500

For parlor or small hall exhibitions, chemical and optical experiments, etc., the Paris Lantern affords, at a moderate price, the greatest number of advantages, and from its simplicity and non-liability to get out of order, gives, even in inexperienced hands, results superior to all others.

The No. I Paris Sciopticon when packed for carrying, in its own Russia iron case, measures $15 \times 10 \times 6$ inches, and weighs 12 pounds; the case serving as a convenient stand when the lantern is in use.

The Case and Body of the Lantern are of Russia iron, and neat and compact in form. That part of the body which surrounds the lamp is double, the outer cover being ornamentally perforated so as to allow a constant current of air to circulate and keep down the temperature.

The lamp is of the triple-wick variety, and so constructed that the three flames combine and by the draught of a ten-inch chimney give a brilliant flame.

The Condenser is four inches in diameter, neatly mounted in brass, thoroughly ventilated, and arranged with screw flange so that the lenses may be separated and cleaned when required.

The Cone, which carries the objectives, and the mount of that lens are nickel-plated. The objective is a double achromotic lens of one and a half inch clear aperture and five-inch focus, so that at a distance of twelve feet from the screen it gives a brilliant picture on disc six feet in diameter. The focus is roughly obtained by sliding the front, carrying both cone and lens; and fine adjustment by a rack and pinion on the objective.

The No. 2 Paris Sciopticon measures, when packed in case for carrying, $188 / 2 \times 12 \times 8 \frac{1}{4}$, and weighs 19 pounds. The objective is a double achromatic lens of $11 / 2$ inches clear aperture and $51 / 2$ inches focus, so that at a distance of about 12 feet from the screen it shows a brilliant picture on disc eight feet in diameter. The lamp has five wicks and is correspondingly more powerful than the lamp with the No. I Sciopticon.

## PHOTOGRAPHIC GELATINE.

The various brands of Gelatine mentioned below we can supply at the following prices :
Cox's, per dozen, ..... 00
Coignet, gold brand, per lb., ..... 10
Magdebourg, per package, ..... 00
Nelson's No. I Photo Gelatine, shred, in $1 / 2 \mathrm{lb}$. parcels, per lb., ..... 38
$66 \quad 6 \quad 2 \quad 6 \quad 6 \quad 6 \quad$ in $1 / 2 \mathrm{lb}$. 6 ..... oo
" " 3 " ". sheets, in I lb ..... 65
" X Amber " " loose, in cases, 112 lbs.
20
20
" Special X Patent Opaque, loose, per lb., ..... 50
Heinrich's Celebrated Gelatine, per lb, ..... 25
Drescher's, per lb., ..... 25
Swiss, per lb. package, ..... 25

## ARMY PRESCRIPTION SCALE.



On polished walnut box; scale can be taken apart and packed away in drawer of box ; a wellfinished and reliable scale, made in a mechanical way; well adapted for physicians' offices; a full set of weights are included.

| No. |  | Beam. | Weights. | Price. |
| :---: | :---: | :---: | :---: | :---: |
| O, | 8 | inch. | 2 drachms to $1 / 2$ grain. | \$600 |
| 1. | 7 | 6 | " | 500 |
| 2, | 53/4 | , | " | 350 |

DISPENSING SCALE. (NEW.)


Handsomely finished scale for rough prescription work; has $33 / 4$ inch nickel-plated movable pans; a side-beam in front of scale with a sliding weight; this beam is divided into 120 divisions, each division representing one grain; an extra row of metric divisions is placed on bottom edge of beam, each representing one decigram. Platform or shelf is attached to base of scale, in which are fitted a set of solid brass Troy weights, 2 oz . and down. Scale sensible to $1 / 2$ a grain.

| No. | Diam. of Pans. | Capacity. | Price. | No. | Diam. of Pans. | Capacity. | Price. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6. | $33 / 4 \mathrm{in}$. | 4 oz. | $\$ 800$ | 7, | 6 in. | 1 lb. | $\$ 900$ |

Length of Base, ro in. Size of Scoop, $7 \times 3 \times 1 / 2$ in.
This scale is adapted for weighing any kind of chemicals is small, light and ornamental. Brass Scoop and Weight Plate. Provided with a set of Solid Brass Weights, 4 oz . and down, which are neatly fitted separately in a platform attached to the base of scale.

| No. | Size of Scoop. | Capacity. | Price. |
| :---: | :---: | :---: | :---: |
| 5, | $7 \times 3 \times 2 \mathrm{in}$. | 8 oz. | $\$ 600$ |

## LABORATORY SCALE. (NEW.)



Scale specially suitable for Laboratoty and Pharmaceutical work; has six-inch nickel pans, which are movable. Scale will carry one pound in each pan; is sensible to a $1 / 2$ grain; has a full set of weights, running from 8 oz . Troy and down to I grain; these are neatly fitted in a projecting shelf attached to the base of scale. Metric weights furnished in place of Troy when so desired.


## TROY BLOCK WEIGHTS.

## $\begin{array}{llll}5 \mathrm{oz} & \text { to } & 1 / 2 & \text { grain, . } \\ 10 & \text { " } & \text { " } & \text {. } \\ 20 & 6 & " & \text {. } \\ 30 & \text { " } & \text { " } & \text {. }\end{array}$

TROY CUP WEIGHTS. FIG. I38.



It has a 9-inch nickel-plated beam, neatly mounted on a japanned iron standard. The front end of the beam weighs from 1 to 30 grains, the other end weighing from onehalf to eight drams, or one ounce, and is very accurate. The pan is movable and has no side bar to interfere. We guarantee them in every respect. Price, $\$ 500$.

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8-inch beam for grains, scruples, drams and ounces, . . I 50
6 " for drams and grains, . . . . . . . . . 75
5 " " " . . . . . . . 60

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CHEMICALS.

Full weight guaranteed.


| Per | lb. |
| :---: | :---: |
| "6. | 2 * |
| " | 5 " |
| \% | I' |
| " | 1/2" |
| * | 1 oz . |

\$0 18
18
30
65

| Cadmium | Bromide, |
| :---: | :---: |
| " | " |
| $"$ | Iodide. |
| $"$ | " |
| $"$ | $"$ |
| 6 | $"$ |


| Per 1/2 lb. | \$1 50 |
| :---: | :---: |
| I " | 275 |
| ${ }^{6} \mathrm{I}$ oz. | 45 |
| " $1 / 4 \mathrm{lb}$. | 160 |
| '1/2" |  |
| I " |  |

Chloroform, . . . . . . " |  | I oz. | 15 |
| ---: | :--- | ---: | ---: |



| " ${ }^{\text {c }}$ box |
| :---: |

Dextrine, bulk, . . . . . . " I lb. 12

| Ether, Conc. Sulphuric, . . . " I" |  |
| :---: | :---: |
|  |  |


| Eikonogen, . . . . ... . . "r 1 oz. 37 |  |  |
| :---: | :---: | :---: |
|  |  |  |


Gold, pure ribbon, . . . . . " dwt. I I5
" 6 Chloride, C. S. Per 15 gr. bot. 50 I doz. I 5 gr. bot. 550 1 gr. bot. 55 I doz. I gr. bot. 575

| Gold and Sodium, . " 15 gr. bot. | 30 |  |  |
| :---: | :---: | :---: | :---: | :---: |
| "، | ". | I doz. I 5 gr. bot. 3 | 15 |

Gum Arabic, Selected,bulk, . Per I lh. 95
" Sandarac, " " . . " 1 " 50
"Shellac, Bleached" . . " I " 50

Hydroxylamine, . . . . " I "bot. I 25
Iodine Crystal Resub. " I " " 40
$\begin{array}{cccc}\text { Iron, Photo Sulphate, bulk, Per I lb. } \\ 6_{6} \text { and Ammonia D. S., bulk, " } & \text { I " } & \text { I } 5\end{array}$
Kaolin bulk, . . . . . . . . " I " 10
Lead, Acetate, . . . . . . . " I oz, bot. 12
$\begin{array}{cccccccccccc}\text { " } & \text { " } & . & . & . & . & . & \text { I } & \text { lb. } & \text { " } & 45 \\ \text { " } & \text { Chloride, } & . & . & . & . & . & . & \text { " } & \text { r } & \text { oz. } & \text { " } \\ \text { " } & \text { " } & \text {. } & \text {. } & . & . & . & . & \text { I } & \text { Ib. } & \text { " } 1 & 00\end{array}$
$\begin{array}{ccccccccccc}\text { " } & \text { Nitrate, } & \text {. } & \text {. } & . & . & . & . & \text { " } & 1 & \text { oz. }\end{array}$ " 12

| " |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lithium Bromide, . . . . . . . " | I | oz. | 45 |
| B |  |  |  |

" Iodide, . . . . . . " I " 65
Litmus paper, per sheet . . . 05
Magnesium Powder, xx German, " I "bot. 50



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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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I have the honor to be
your obedient servant, RICHARD M. BARTLEMAN,
Secretary of Legation of the $U$. S.

Newport, R. I., July 14, 1892 The Harvard Dry Plate Co., 25 Main St., Cambridge, Mass.
Gentlemen:--The dozen $10 x 12$ Harvard plates sent me some time ago for trial turned out to be the best plates I have used so far this year; much better than any of the other six (6) makes that I have tried.

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(For Printing Prices see Page 154 )


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They add greatly to the effectiveness of both Portraits and Landscapes, in Platinotype.
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|  | Size of Prints. | Size of Tint. | Size of Card | Price per Doz. | Price per 100. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. | $4 \times 5$ | $43 / 4 \times 53 / 4$ | $8 \times 10$ | \$0 60 | \$400 |
| B | Cabinet | $45 / 8 \times 65 / 8$ | $10 \times 12$ | 75 | 500 |
| C | $5 \times 7$ | $5 \frac{7}{16} \times 7 \frac{7}{16}$ | II $\times 14$ | 85 | 550 |
| D | $5 \times 8$ | $51 / 2 \times 81 / 2$ | $11 \times 14$ | 85 | 550 |
| E | $61 / 2 \times 81 / 2$ | $7 \times 9$ | $12 \times 14$ | 100 | 700 |
| F | $8 \times 10$ | $81 / 4 \times 10^{1 / 4}$ | $121 / 2 \times 15$ | 120 | 825 |
| G. | $71 / 2 \times 13$ | $8 \times 131 / 2$ | $14 \times 20$ | 250 | 1800 |
| H | $10 \times 12$ | $10^{1 / 4} \times 121 / 4$ | $16 \times 20$ | 300 | 2060 |
| I | II $\times 14$ | II $1 / 4 \times 143 / 4$ | $18 \times 22$ | 350 | 2600 |

## EMBOSSING IMPRINT

-     - PLATINOTYPE CARDS

$$
\text { Cards } 10 \times 12-121 / 2 \times 15
$$

> In lols of

| 100 <br> or less | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 2.25$ | 1.75 | 1.50 | 1.25 | 1.10 | 1.00 | .90 | .80 | .75 | .70 |
|  |  |  |  | Cards $14 \times 20$ | $-18 \times 22$. |  |  |  |  |


| In lots of100 <br> or less | 200 | 300 | 400 | 500 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\$ 4.75$ | 3.00 | 2.50 | 2.00 | 1.70 |

In the first order there will be a charge of $\$ 6.00$ net for engraving die, from which electrotypes cannot be furnished- All dies to remain the property of the manufacturers.

We strongly advise the use of a steel stamp for marking the name on the cards. One Stamp will answer for all the different size cards.

The cost of a steel stamp will be 75 cents per letter.

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## To Users of Photograph Cards

THE surface of a card, which is all you see, tells nothing as to its composition; yet, what lies under the surface, beyond your ken, may be of such a character as to impair the value of the picture mounted upon it. Hence the wisdom in purchasing all your

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of Manufacturers who, through long years of experience, have established a reputadion for skill, ability and integrity. The oldest house in the Photographic Card business is

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Specine $91-B$ and all cards, the product of this 32310 may be relied upon as being always just as represented, having behind them the guarantee of a reputation which is the growth of nearly one half a Century.



[^0]:    *Not made because of the weight of holder and of double thick glass.

[^1]:    "ELITE" STUDIO STANDS.
    No. x Size.

[^2]:    C Special glass Plate Kodak, includlng I double dry plate holder,
    $\$ 2500$
    Roll holder for above, not loaded,

[^3]:    *Not including lens or tripod.

[^4]:    $8 \times$ ro Lewis's Patent Glass Pot Bath, without box,
    $\$ 250$

[^5]:    Gihon's, per cake,
    Weber's Liquid, per bottle, . . . . . . . . . . . . . 50

