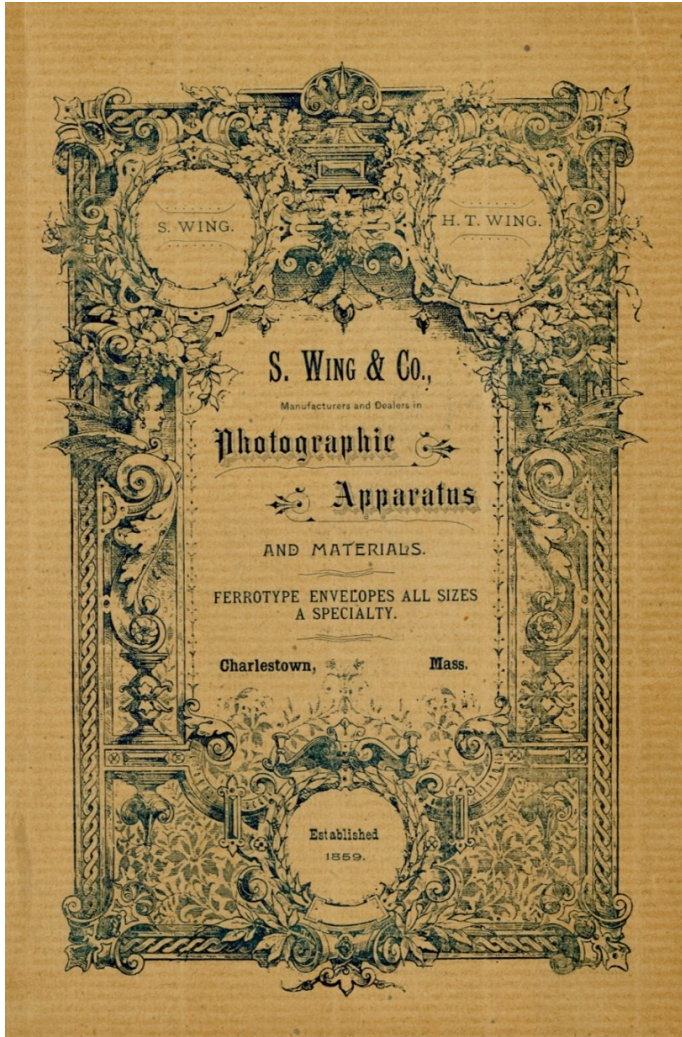


**Appendix A:** Brief Analysis of the Covers and Content of the S. Wing & Co. *Photographic Apparatus and Materials* catalogue, published by The Press of S. Wing & Co., Charlestown, Massachusetts, 1890.



**Figure 1**

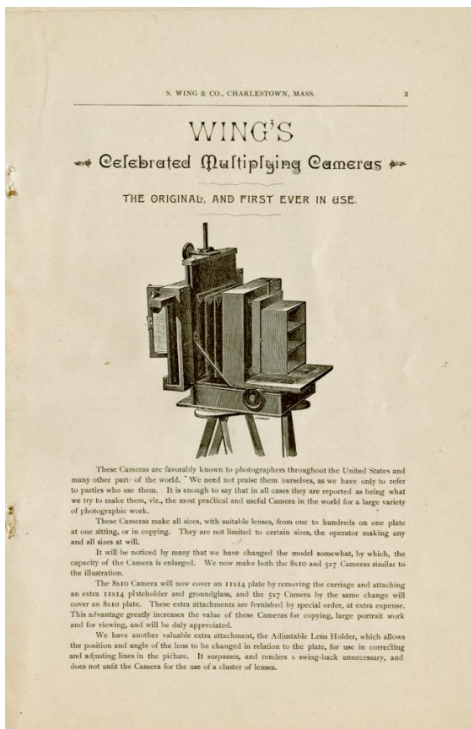
Aside from their beauty alone, both the covers and first pages of this 1890 catalogue offer several valuable pieces of information, beginning with official name of the company and its longtime location – “S. Wing & Co., Charlestown, Mass.”



Within the front cover's intricate Victorian style borders appear three ivy wreaths. "S. WING" and "H. T. WING" appear in the top border's two wreaths, confirming the names of the firm's principals – Simon and Harvey T. Wing. Although Harvey's contributions and involvement in the company were long-standing, this front cover suggests that by 1890 Simon saw his business as a partnership, not a venture that merely employed his son.

Although Simon's involvement in photography dates to the 1840s, the closest verification to an official beginning date for "The Company" appears in the cover's bottom border wreath: "Established 1859." There are no clear statements of its start date in any other records. The front cover also clarifies the firm's scope: "Manufacturers and Dealers in Photographic Apparatus and Materials. Ferrotypes envelopes all sizes a specialty."

The illustration on the back cover is a historian's dream come true. It shows in precise detail the Charlestown building that housed S. Wing's office and factory, including the large addition for their growing print business, c. 1887. This building also was home to Simon Wing and his family for many years. Following the publication page is introductory material titled "Wing's Celebrated Multiplying Cameras: the original and first ever in use."



These Cameras are favorably known to photographers throughout the United States and many other parts of the world. We need not praise them ourselves, as we have only to refer to parties who use them. It is enough to say that in all cases they are reported as being what we try to make them, viz., the most practical and useful Camera in the world for a large variety of photographic work.

These Cameras make all sizes, with suitable lenses, from one to hundreds on one plate at one sitting, or in copying. They are not limited to certain sizes, the operator making any and all sizes at will.

It will be noticed by many that we have changed the model somewhat, by which, the capacity of the Camera is enlarged. We now make both the 8x10 and 5x7 Cameras similar to the illustration.

The 8x10 Camera will now cover an 11x14 plate by removing the carriage and attaching an extra 11x14 plateholder and groundglass, and the 5x7 Camera by the same change will cover an 8x10 plate. These extra attachments are furnished by special order, at extra expense. This advantage greatly increases the value of these Cameras for copying, large portrait work and for viewing, and will be duly appreciated.

We have another valuable extra attachment, the Adjustable Lens Holder, which allows the position and angle of the lens to be changed in relation to the plate, for use in correcting and adjusting lines in the picture. It surpasses, and renders a swing-back unnecessary, and does not unfit the Camera for the use of a cluster of lenses.

Figure 2

Identifiers: S. Wing & Company is identified on the cover as being “Manufacturers and Dealers,” and Simon and H. T. Wing are both named.

Description: The *Descriptive Catalogue of Photographic Apparatus and Materials Manufactured and for Sale by S. Wing & Co.* (an alternate title given on the first inside page) gathers together into thirty pages a wide selection of products and supplies available in 1890 for purchase from S. Wing & Company, located at 100 Cambridge Street, Charlestown, Massachusetts.

Purpose: Sales to existing and new customers. In addition to the many items for sale, the catalogue serves as an educational tool on the topics of S. Wing’s “Celebrated Multiplying Cameras” (pp. 3-4, including illustration) and “How We Make Stamp Photos” (pp. 9-10).

Audience: The Wings intended this catalogue to serve both photographic professionals and amateur photographers. On a couple occasions, “amateur” is specified in an item name. Conversely, several of the camera descriptions designate professional use and include detailed technical information.

Illustrations: In addition to the intricately illustrated front and back covers, a total of 17 illustrations appear on thirty pages (including inside covers). A number of those illustrations appear below.

Contents Breakdown: A total of 72 items are indexed. Chemicals, listed separately, total 45 types. This numbers 117 different items in the catalogue. In addition, if variations of itemized sizes and other features are included in the count, then perhaps as many as 500+ separately priced items appear in the catalogue.

Three tables below examined Cameras, General Categories, and Miscellaneous Items. (Note: italicized passages within the tables indicate verbatim quotes by the publisher.)

The Shipp’s Simon Wing and Family collection at the Wing Memorial History Center in East Sandwich, Massachusetts, holds two copies of this catalogue.

To view the illustrations in the tables below, click the Figure #; to return to the table, click the header on the illustration

**TABLE 1. CAMERAS**

Page	Type of Camera	Figure #	Description	Features, and Sales Pitches from catalog item descriptions	Price
Inside front cover	<b>THE LEADER FOR 1892</b>	<a href="#">Figure 3</a>	<p>Studio Camera for Tin work</p> <p>Polished Mahogany</p> <p>Plateholder can be set anywhere (not sliding)</p> <p>Xtras avail – kits</p> <p>S. Wing-originated: Rack &amp; Pinion front focus and swing back</p> <p>Excels in confined spaces</p> <p>Upper edge light-blocker on plateholder</p>	<p>1 lens makes 2 photos on 8 x 10 plate; 4 quarter lenses make 8 on 7 x 10; 4 quarter lenses make 4 or 8 on 5 x 7 plate; 9 ninth lenses make 18 on 7 x 10; 9 ninth lenses make 9 or 18 on 5 x 7.</p>	\$30
4-5	<b>MULTIPLYING CAMERAS</b>	<a href="#">Figure 4</a>	<p>For ferrotypes and all small photographs</p> <p>Extra bracing for strength when using multiple lenses</p> <p>Eliminates need for many cameras for different purposes</p>	<p><i>The Wing Multiplying Camera surpasses them all in amount and quality of work done, convenience, saving of time, room occupied, and at less original cost.</i></p>	
	8 x 10 Multiplying Camera w/o lens	<a href="#">Figure 4</a>	<p>Includes:</p> <p>Reversible kit-frames for 3 plate sizes</p> <p>2 blocks for single tubes</p> <p>Diaphragms for reg sizes w/1 lens; plateholder directions; copying extension</p> <p>Bellows accommodate 11 x 14 plate</p> <p>Special order attachments available \$10-20</p>	<p>8 x 10 plate makes 1, 8 x 10; 2 cabinets; 4, 4 x 5s; 18 minettes; 84 stamp photos, &amp;c.</p> <p>7 x 10 plate makes 1, 7 x 10; 2, 5 x 7s; 4 ferro and cabinets; 8 cards; 12 sixths; 16 half-cards; 18 ninths; 24 gem panels; 72 gems or stamp photos, &amp;c.</p> <p>5 x 7 plate makes 1 cabinet; 2 ferros or cabinets; 4 cards; 6 sixths; 8 half-cards; 9 ninths or minettes; 12 gem panels; 18 double gems; 36 stamp photos, &amp;c.</p>	\$55

Page	Type of Camera	Figure #	Description	Features, and Sales Pitches from catalog item descriptions	Price
	5 x 7 Multiplying Camera w/o lens	<a href="#">Figure 4</a> & <a href="#">Figure 5</a>	Includes: Reversible kit-frames for 2 plate sizes 2 blocks for single tubes Diaphragms for reg. sizes w/1 lens; plateholder directions Copying extension – can make all 8 x 10 Camera photos Bellows allows 8 x 10 plate 8 x 10 plateholder ground-glass, frame Special order attachments and kit-frame	5 x 7 plate or smaller makes everything that the 8 x 10 Camera will make.	\$35
	Extra 5 x 7 Multiplying Camera w/ 7 x 10 plateholder	<a href="#">Figure 5</a>	Uses 7 x 10 plateholder Kit-frames Can make 5 x 7 Camera photos for 7 x 10, 5 x 7, and 3½ plates 2 blocks for single tubes Diaphragms for reg. sizes w/1 lens Plateholder directions Copying extension		\$41
5	Second-hand multiplying cameras	<a href="#">Figure 5</a>	Bought back from customers Repaired w/ new or used parts May be a remodel	<i>They are often as good for business as when new.</i>	\$25-40

Page	Type of Camera	Figure #	Description	Features, and Sales Pitches from catalog item descriptions	Price
11	<b>LITTLE GIANT CAMERA No. 1</b>	<a href="#">Figure 6</a>	Walnut or cherry For 5 x 7 and smaller plates Kits reversible in plateholder Side movements only	Options: 4 Quarter Darlot Lenses fitted in brass plate, 9 Ninth Darlot Lenses fitted in brass plate, 4 Quarter Darlot Lenses fitted in 3 ply block w/ shutter, velvet lined shade, spring partition, 9 Ninth Darlot Lenses fitted in 3 ply block w/ shutter, velvet lined shade, spring partition, Extra plateholders with kits.	\$12 plus Options \$28 \$34.50 \$32 \$39 \$3
11	<b>LITTLE GIANT CAMERA No. 2</b>	<a href="#">Figure 6</a>	Same as No. 1 except 7 x 10 plate holder not reversible	Same Options as No. 1 except: Each option is \$2 over No. 1 options.	\$14
12	<b>THE CHARLESTOWN</b>	<a href="#">Figure 7</a>	Portrait Camera Polished Mahogany Plateholder can be set anywhere (not sliding) Xtras available: kits S. Wing-originated rack & pinion focus and swing back 11 x 14 and above have gears for easy-reach focus Reasonable price Single or double swing back	Front focus: <i>The Charlestown is perfect in this respect.</i> <i>If any photographer is looking for a higher priced camera, we will accept any amount above the list he is desirous of paying – anything to make it satisfactory to the purchaser. We are led to say the above by the remark made by a photographer after examining the Charlestown. "I don't see why this Camera is not exactly as good as at the higher priced boxes in the market."</i>	\$30-80

Page	Type of Camera	Figure #	Description	Features, and Sales Pitches from catalog item descriptions	Price
13	<b>ENLARGING &amp; COPYING CAMERAS</b>	<a href="#">Figure 8</a>	For Copying Houses, and Photo-Mechanical Purposes	<p>Adds a nest of kits in the front end, with springs for holding various sizes.</p> <p><i>For copying, enlarging, or reducing of negatives and transparencies they have no superior.</i></p>	\$35-80 Price Made to order
14	<b>VIEW CAMERAS</b>	<a href="#">Figure 9</a>	<p>5 x 8 and 4 x 5 sizes</p> <p>Square, shape allows quick reversal of plateholder frame</p> <p>2 Spirit Levels for leveling both ways</p> <p>Comes with 6 metallic plateholders</p> <p>Carrying case furnished</p>	<i>After long experience in using and making Photographic Apparatus, both for indoor and outdoor work, we have constructed a View Camera which we think combines all necessary qualities, together with our latest patented inventions, namely:--The Adjustable Lens Holder, and the Perfect Metallic Plateholder.</i>	
16	<b>AMATEURS' ENLARGING CAMERAS</b>	<a href="#">Figure 10</a>	<p>Comes with complete lens and directions</p> <p>Made in two sizes</p> <p>No. 1 enlarges 4 x 5 negative to 5 x 7</p> <p>No. 2 enlarges 3½ x 4½ to 6½ x 8½</p>	<i>These Cameras have a lens permanently set inside at a fixed focus, to enlarge from one size plate to one size transparency or bromide print.</i>	\$12-15
<b>Total: 9 types of cameras, plus the 3 types of multiplying cameras = 11 models of cameras</b>					

**TABLE 2. GENERAL CATEGORIES**

General Categories listed in catalogue	Highlights
<p>Acme Burnishers (2 sizes)  <a href="#">Figure 11</a></p>	<p>Made of Nickel</p> <p>For 11-, 15-, 21-, and 26-inch photos; also, a smaller 8 ¼-inch burnisher for 8 x 10-inch photos</p> <p>Professional or amateur use</p> <p>Quick flue heating, no soot or smoke; gas/oil options, fuel economy; precision thermometer</p> <p>Convex, extremely hard, quick-changing polishing tool</p> <p>Moisture-free, hollow construction</p> <p>Wheel-regulated pressure, uniform tension</p> <p>Milled or engraved feed roll</p>
Back Springs	For 5 x 7 and 8 x 10 cameras
Blocks	For single tubes
Bellows	For 5 x 7 and 8 x 10 cameras
Backgrounds & Accessories	<p>Ordering Criteria:</p> <p><i>Size wanted, and whether light strikes right or left of sitter, when in position for pictures, and if light, medium or dark shade is desired. Photographs on application but must be returned to us in 5 days.</i></p> <p>Exteriors -- 15cts / sq ft</p> <p>Interiors -- 25cts / sq ft</p> <p>Cloud, graded, and mottled grounds for vignettes – 8cts / sq ft</p> <p>Plain grounds for vignettes—6 cts / sq ft</p> <p>Children’s Series: Exteriors – 5 x 8 ft., 6 x 8 ft./ \$3-4; Interiors – 5 x 8 ft, 6 x 8 ft./ \$4-5</p> <p>Low Price Designs. <i>In execution strictly first class.</i> Options and prices roughly same as children’s series.</p> <p>Improved Oil-Thread Grass Matts, <i>Reduced Prices. These Matts are thick and stocky. Burlap backing.</i></p> <p>10 sizes ran from 2 x 6 ft./ 60cts. to 5 x 9 ft./\$3.50</p>
<p>Camera Stands, Tripods            Stand No. 3  <a href="#">Figure 12</a></p>	<p>3 models of camera stands + 4 models of tripods</p> <p>Stand No. 3 for use with 8 x 10 Multiplying Camera, and 11 x 14 Charlestown Camera. <i>Mr. Wing invented the first three cornered camera stand made in the United States.</i></p> <p>Stand No. 4 for use with 8 x 10 Little Giant and 5 x 7 Multiplying Cameras.</p>
Cameras	7 models of cameras + 2 variations
Copying Extensions	Velvet-lined 7- and 10-inches
Diaphragms	For 5 x 7 and 8 x 10 cameras



General Categories listed in catalogue	Highlights
Ferrotypes envelopes	<p>Pearl, buff, and drab cards, with rose, lavender, and robin egg blue paper in various combinations in 9 sizes</p> <p>Maroon cards with gilt lines and scarlet paper in 5 styles with all openings available</p> <p>Self-sealing slips in pink, vermilion, blue, black, and maroon=faced cards, with adhesive paper backs</p>
Ferrotypes Plates	<p>All grades, best to cheapest; due to fluctuating prices apply for current price list</p> <p><i>We have had long experience in making Ferrotypes ...</i></p>
Gem and Card Ferro Albums	<p>No. 36 oval opening for 48 and 96 gem pictures</p> <p>No. 4 oval opening for 12 card ferrotype pictures</p> <p>\$2/dozen</p>
Ground-glass	<p>With or without frame</p> <p>14-, 10-, or 7-inch square</p>
Instructions	Stamp Photos – how to make them
Kit frames	
Adjustable Lens holder <a href="#">Figure 13</a>	<p>Ball and Socket Joint</p> <p>Adjustable – <i>Patented April 19, 1887. A useful attachment for cameras, invented by Mr. Wing, for shifting the position of lens over the front of camera.</i></p>
Lenses	<p>3 sizes Darlot lenses (9<sup>th</sup>, quarter, ½)</p> <p>2 and 4 quarter lens sets</p> <p>9 and 6 ninth lens sets</p> <p>2 half lens sets</p> <p>Catalogue includes lengthy description of how lenses, shutter and velvet lining are fitted</p> <p>Grundlach, Bausch &amp; Lomb, Gray, &amp;c lists available</p>
Machines	<p>Perforating</p> <p>Burnishers</p>
Photo sizes by name	Cabinets, 4 x 5s, Minettes, Stamp Photos, Cards, Ferro Cards, Sixths, Half-cards, Ninths, Gem Panels, Gems
Ornamental borders	Advice from S. Wing: <i>Success in photography largely depends on attention to the smallest details.</i>
Perforating machine	<p>For making Stamp Photos</p> <p>Pendulum foot press, perforates 8-inch line</p>
Plateholder <a href="#">Figure 14</a>	<p>For 5 different size cameras, with 5 kit options</p> <p><i>This Plateholder, invented by Mr. Wing, is a new departure in apparatus for using dry plates.</i></p>
Plates	<p>Brass for 4 quarter, 9 ninth or 4 ninth lenses</p> <p>8 x 10, 7 x 10, 5 x 7</p>
Preservers	Negative preservers of heavy manilla paper, printed on corner, prices in all sizes per 1000
Printing Frames	Zinc, includes heavy plate-glass; 3 sizes up to 16 x 20

General Categories listed in catalogue	Highlights
Printing Services	Name and address on ferro envelopes and slips, black or bronze ink <i>... done in our own factory and on our own presses, in the neatest style of the art. Special designs can be gotten up for printing on the back of mounts in color or bronze, at reasonable prices. A photo-engraving or wood cut of the finest view of your town, in a design with your name and address, would make the backs of the mounts you use very ornamental and pleasing.</i>
Slides	For 3 sizes of plateholders, 3-ply veneer or solid wood
Photo Stamp kits	Full kit requires: Multiplying Camera (5 x 7, extra 5 x 7, or 8 x 10) Any portrait or view Lens Ornamental and white borders Perforating machine; a burnisher is also recommended.
Stamps	Self-inking stamps in 5 sizes Common rubber stamps in 6+ styles
Printed Cards	Shapes include oval, arched, square, circular Vising cards Compliments-of cards Advertising cards

**TABLE 3. MISCELLANEOUS ITEMS**

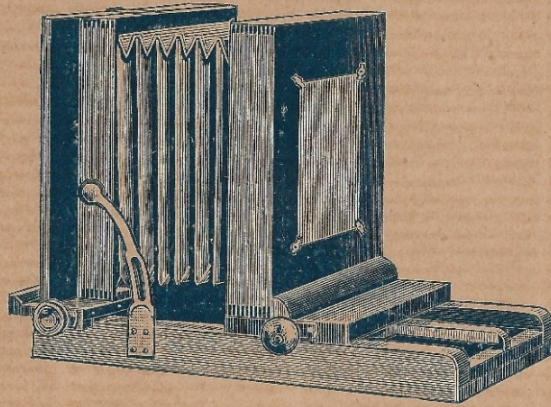
Miscellaneous listed in Catalogue	Options
Agate Iron Ware	Pans Kettle
Backboard	2 sizes plus 12-inch strip backing
Brushes	Camel Hair
Chemicals	45 types
Colors	Dry Water color
Cotton	Absorbent Soluble
Dry Plates	M.A. Seed, Harvard
Gelatin	French
Glass & Glassware	Baths Forms, Rods Funnel Graduates Plate Yellow

Miscellaneous listed in Catalogue	Options
Gold, Ribbon	Per pennyweight
Hard Rubberware	Baths Dippers Funnel Slide Trays
Head Rests	3 styles
Hydrometers	Each
Lockwood's Clips	Per dozen
Paper	Albumen, blotting, filtering, post office, litmus, sticking, stationery
Parlor Paste	Jars in 3 sizes
Printing Frames	6 sizes
Retouching Frames	Made to order
Retouching Pencils	Fabers, H.B.&F, soft, medium, hard
Scales	6-inch beam in case
Screw Eyes	Per gross
Shears	Heavy, 6-inch blade
Silvering Trays	2 sizes, whole and half sheet

Figure 3

# THE "LEADER"

FOR 1892.



## FRONT FOCUS, SIDE MOVEMENT, SWING BACK,

This Camera takes our regular size block and can be used with our sets of lenses for tin-type work.

With one lens it makes 2 on an 8 x 10 or any smaller plate for which you have a kit.

With 4 Quarter Lenses—8 on a 7 x 10, 4 or 8 on a 5 x 7.

With 9 Ninth Lenses—18 on a 7 x 10, 9 and 18 on a 5 x 7.

This Camera is thoroughly built of mahogany, well polished, and would ornament any studio. The ease, accuracy and rapidity of adjustment given by a rack and pinion front focus hardly needs pointing out. The Swing back is also governed by rack and pinion, a method original with us as well as the focus movement. The plateholder sets on anywhere across the back, not requiring to be slid in from one side, a desirable feature in confined positions. A strip across the back of the camera at the upper edge, setting over a rabbet on the plateholder, effectually stops the light from straying in at this most dangerous point.

**PRICE, 8 X 10, \$30.00**

Extra Plateholder, with reversible kits,

\$5.00



## Figure 4

We always have planned to make a Camera as near perfect and useful as possible, without regard to cost. They are worth all we ask for them, and should not be compared to cameras that are cheaply made for limited work.

There are many photographers who have a different camera for almost every size picture they make, which altogether, cost much more than our Multipliers, and will not do half the work. They have to be lifted off and on the camera stand continually, and there is generally much trouble in fitting the lenses from one camera to another.

The Wing Multiplying Camera surpasses them all in amount and quality of work done, convenience, saving of time, room occupied, and at less original cost.

These Cameras are manufactured with great care and at a large expense. We take pains to have the backs and fronts square and firm by bracing them at necessary points so that a cluster of lenses will all work in focus. Many photographers have found by experience that a swing-back camera is not desirable for using more than one lens.

We think it can be truthfully said that more money has been made and larger profits earned with the Wing Multipliers in making ferrotypes and all small size photographs, than with any other camera ever made.



### Prices of Wing's Multiplying Cameras.

**8x10 CAMERA, \$55.00.**  
(WITHOUT LENSES.)

We furnish with this camera—one 8x10 Plateholder with Kit-frames for 8x10, 7x10 and 5x7 plates; two Blocks for single tubes; Diaphragms for regular sizes made with one lens; Directions for moving the plateholder, and an Extension for copying. The Kits are reversible in the plateholder.

With suitable diaphragms and one lens, this Camera will make—

**On an 8x10 Plate**—1 8x10, 2 Cabinets, 4 4x5's, 18 Minettes, 84 Stamp Photos., &c.

**On a 7x10 Plate**—1 7x10, 2 5x7's, 4 Ferro. Cabinets, 8 Cards, 12 Sixths, 16 Half Cards, 18 Ninths, 24 Gem Panels, 72 Gems or Stamp Photos., &c.

**On a 5x7 Plate**—1 Cabinet or 5x7, 2 Ferro. Cabinets, 4 Cards, 6 Sixths, 8 Half Cards, 9 Ninths or Minettes, 12 Gem Panels, 18 Double Gems, 36 Stamp Photos., &c.

Numerous other sizes can be made on the above plates, all with one lens. For sizes made with 9th and 4th lenses, see list of lenses.

The Bellows of this Camera is large enough to allow an 11x14 plate to be fully exposed. By sliding the movable carriage up and off the Camera, an extra 11x14 Plateholder and Groundglass can be attached; one minute will make the change. The Plateholder is reversible on the Camera, and the Kit is reversible in the Plateholder.

Price of 11x14 Plateholder, 11x14 Kit-Frame, with Groundglass and Frame, \$10.00. We furnish these extra attachments by special order only. Adjustable Lens Holder for this Camera, \$10.00. Described on page 8.

**5x7 Camera, \$35.00.**  
(WITHOUT LENSES.)

We furnish with this Camera—one 5x7 Plateholder with Kit-frames for 5x7 and 3½x5 plates; two Blocks for single tubes; Diaphragms for regular sizes made with one lens; Directions for moving the plateholder, and an Extension for copying. The kits are reversible in the plateholder.



## Figure 5

S. WING & CO., CHARLESTOWN, MASS.

5

This Camera will make with suitable diaphragms and one lens, on a 5x7 plate or smaller, everything that the 8x10 Camera will make. For sizes made with 9th and 4th lenses, see list of lenses.

The Bellows of this Camera will allow an 8x10 plate to be fully exposed. By removing the carriage, an 8x10 Plateholder and Ground-glass can be attached. Price of 8x10 Plateholder, 8x10 Kit-frame, with Ground-glass and frame, \$8.00; furnished by special order only.

Adjustable Lens Holder for this Camera, \$8.00 See page 8.

### Extra 5x7 Camera with 7x10 Plateholder, \$41.00. (WITHOUT LENSES.)

We furnish with this Camera—one 7x10 Plateholder with Kit-frames for 7x10, 5x7 and 3 1-2x5 plates; two Blocks for single tubes; Diaphragms for regular sizes made with one lens; Directions for moving the plateholder, and an Extension for copying.

This Camera will make with suitable diaphragms and one lens, on a 5x7 plate or smaller, everything made by the regular 5x7 Camera.

The Plateholder takes a 7x10 plate lengthwise, not reversible.

The 5x7 and 3 1-2 Kits are reversible in the plateholder.

**On a 7x10 Plate can be made with One Lens**—1 7x10 lengthwise, 2 5x7's, 4 Ferro. Cabinets lengthwise, 8 Cards, 12 Sixths, 18 Ninths, 24 Gem Panels, 72 Gems or Stamp Photos, &c.

For sizes made with 9th and 4th lenses, see list of lenses.

This Camera, like the regular 5x7, will expose an 8x10 plate with an extra plateholder and ground-glass, which attaches in the same way. These extra attachments, \$8.00; furnished by special order only.

### Second-Hand Multiplying Cameras.

We occasionally have second-hand old style Multipliers of our own make, which we repair and sometimes remodel, parts being made new when necessary. They are often as good for business as when new. Prices from \$25.00 to \$40.00.

### Extra Parts for the Multiplying Cameras.

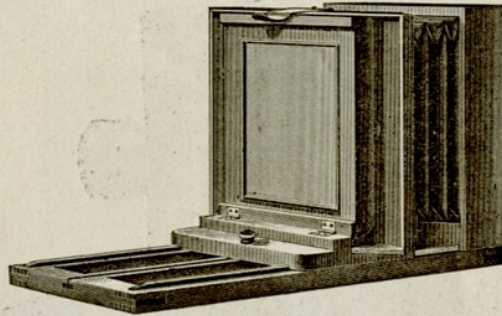
Blocks, for single tubes, . . . . .	\$ .25
Back Springs, for 8x10 Cameras, . . . . .	each, .40
“ “ “ 5x7 “ . . . . .	“ .25
Bellows, for 8x10 Cameras, . . . . .	3.50
“ “ 5x7 “ . . . . .	2.50
Copying Extensions, velvet lined, 7 inches long, . . . . .	2.00
“ “ “ 10 “ “ . . . . .	2.50
Diaphragms, with directions for moving, for 8x10 Camera, . . . . .	each, .25
“ “ “ “ “ “ 5x7 “ . . . . .	“ .15
Ground-glass, 14 inch square, (without frame,) . . . . .	1.50
“ “ 10 “ “ “ “ . . . . .	.75
“ “ 10 “ “ plate-glass, (without frame,) . . . . .	1.00
“ “ 7 “ “ “ “ “ . . . . .	.50

## Figure 6

S. WING & CO., CHARLESTOWN, MASS.

11

### The Little Giant Cameras.



#### The Little Giant Camera No. 1.

For 5x7 and smaller plates.

The kits are reversible in the plateholder.

This Camera is made of Walnut and Cherry; it has side movements only. It makes 1 and 2 on a 5x7 or any smaller plate, with one lens. With 4 Quarter Lenses it makes 4, 8 and 12 on a 5x7 plate. With 9 Ninth Lenses it makes 9 and 18 on a 5x7. With 2 Half Lenses 2 can be made on a 5x7, reversible, with one exposure.

#### PRICES.

Little Giant Camera No. 1,	\$12.00
With 4 Quarter Darlot Lenses fitted in brass plate,	28.00
With 9 Ninth " " " " " "	34.50
With 4 Quarter Darlot Lenses fitted in 3 ply block with shutter, velvet lined shade and spring partition,	32.00
With 9 Ninth Darlot Lenses, ditto,	39.00
With 2 Half " " " " " "	—
Extra Plateholder with kits,	3.00

#### The Little Giant Camera No. 2.

This Camera is the same as No. 1, except the plateholder, which takes a 7x10 plate, not reversible. It makes 2 on a 7x10 plate with one lens, or 8 with 4 Quarter Lenses, or 18 with 9 Ninth Lenses. In all other respects it is the same as Camera No. 1; carries the same plates, and does the same work.

#### PRICES.

Little Giant Camera No. 2,	\$14.00
With 4 Quarter Darlot Lenses fitted in brass plate,	30.00
With 9 Ninth " " " " " "	36.50
With 4 Quarter Darlot Lenses fitted in 3 ply block with shutter, velvet lined shade and spring partition,	34.00
With 9 Ninth Darlot Lenses, ditto,	41.00
With 2 Half " " " " " "	—
Extra Plateholder with kits,	4.00

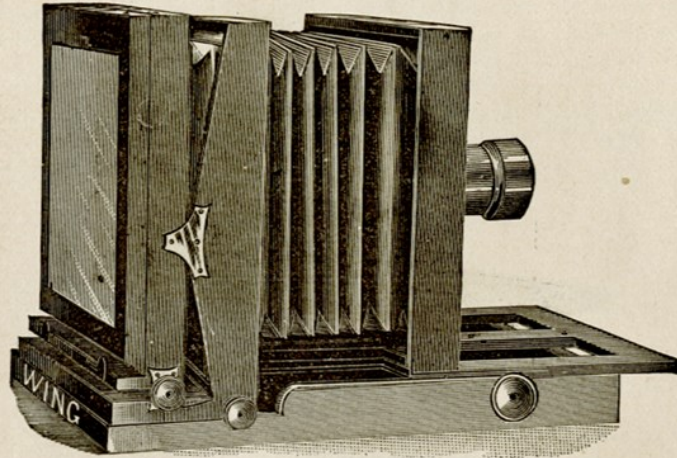


## Figure 7

12

S. WING & CO., CHARLESTOWN, MASS.

### The Charlestown.



A front focus portrait Camera, with single or double swing-back; made of mahogany and well polished. The front focus is a popular feature taken from our Multiplying Camera, which was the first so constructed. In cameras of back focus the method is awkward and troublesome. The Charlestown is perfect in this respect.

The swing-back and focus movement is governed by rack and pinion, and the swings are held solid by check nuts.

Sizes above 11x14 are fitted with gears to enable the focus wheel to be placed within easy reach.

#### PRICES.

Size.	Without Swing.	Single Swing.	Double Swing.
8x10	\$24.00	\$27.00	\$30.00
11x14	30.00	35.00	38.00
14x17	38.00	45.00	50.00
18x22	65.00	75.00	80.00

No doubt some parties think the Charlestown Camera must be cheap in quality because the price is below what they are accustomed to see for portrait cameras. It is natural for people to judge an article by the price, and many will not look at goods unless the price is about what they intend to pay. To suit such parties the price of the Charlestown should have been set at a higher figure, for the camera itself is as well constructed in every particular as any camera in the market. If any photographer is looking for a higher priced camera, we will accept any amount above the list he is desirous of paying—anything to make it satisfactory to the purchaser. We are led to say the above by the remark made by a photographer after examining the Charlestown. "I don't see why this Camera is not exactly as good as the higher priced boxes in the market."

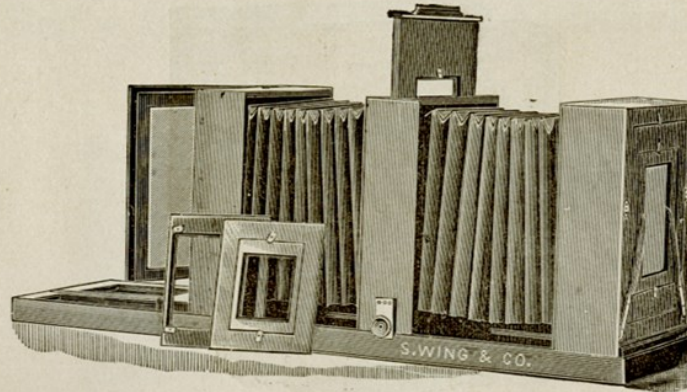


## Figure 8

S. WING & CO., CHARLESTOWN, MASS.

13

### Enlarging and Copying Cameras.



### For Copying-Houses, and Photo-Mechanical Purposes.

These Cameras are made the same as ordinary copying cameras, with the addition of a nest of kits in the front end, with springs for holding various sizes of negatives or transparencies for reversing, reducing, &c. For this purpose they are adapted for holding the lens inside; the lens board sliding in through an opening in the top.

When copying from a photograph or ferrotype the lens is attached in front; or the front kits may be removed and the lens held inside, the front of the Camera then serving to shade the lens—a convenient feature sometimes.

These Cameras are not made reversible, for it is an easy matter to reverse the picture to be copied.

They are rigidly and strongly built of fine materials. The ground-glass is of finely-ground plate glass. The plateholder is supplied with kits for ordinary sizes.

For copying, enlarging, or reducing of negatives and transparencies they have no superior.

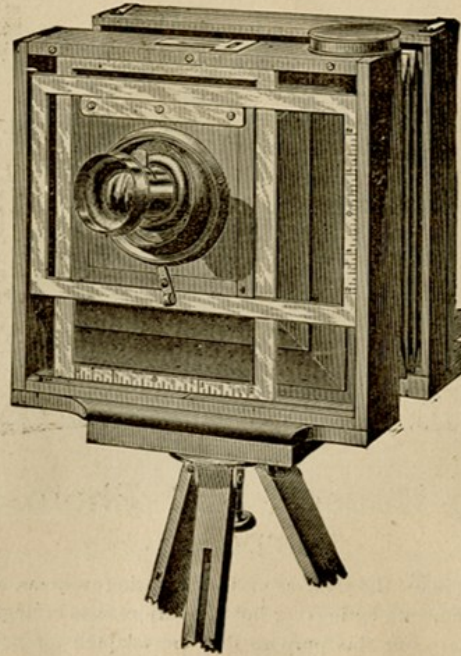
#### PRICES. MADE TO ORDER.

Size.	Length of Bed.	Price.
8x10	4 feet,	\$35.00
11x14	4½ "	45.00
14x17	5 "	55.00
17x20	6 "	65.00
20x24	6½ "	80.00

Prices for regular Copying Cameras, without fitting, for transparencies, on application.

## Figure 9

### View Cameras.



After long experience in using and making Photographic Apparatus, both for indoor and outdoor work, we have constructed a View Camera which we think combines all necessary qualities, together with our latest patented inventions, namely:—The Adjustable Lens Holder, and the Perfect Metallic Plateholder.

The Adjustable Lens Holder furnished with our View Cameras, will have the vertical movement together with the ball and socket, only. There will be no side motion. Parties desiring both movements should order it specially; the extra cost will be \$2.00

As the Adjustable Lens Holder is an improvement over a swing-back, the latter will not form a part of our cameras.

Each Camera will contain two Spirit Levels imbedded in the top, arranged for leveling both ways—a very valuable feature.

Our Cameras are made square which allows the plateholder frame to be quickly reversed; they are strong and durable as well as specimens of fine workmanship.

#### PRICES.

5x8 Wing View Camera, with 6 Patent Metallic Plateholders, and Carrying Case,	\$16.00
4x5 “ “ “ “ “ “ “ “ “ “ “ “	12.00

### Tripods.

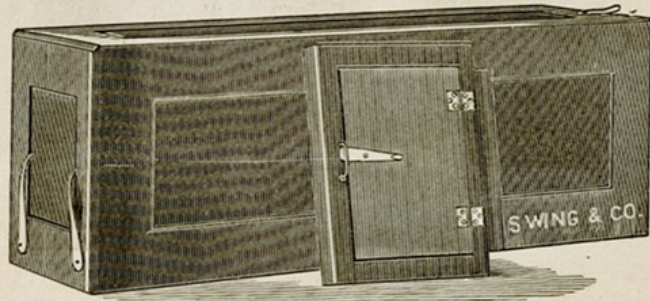
For Large Cameras. Folding ash legs, wood top,	\$3.75
“ “ “ “ “ “ with 3 ply top.	4.25
For 8x10 and 5x8 Cameras. Extension ash legs, metal top and bearings,	3.00
For 5x8 and 4x5 Cameras. Extension round birch legs, mahogany stained, nickel plated metal work, metal top and bearings,	2.50



Figure 10



## Amateurs' Enlarging Cameras.



These Cameras have a lens permanently set inside at a fixed focus, to enlarge from one size plate to one size transparency or bromide print. The negative is held by springs in the front end, and the sensitive plate or bromide paper is exposed in the plateholder attached to the back. No focusing is required. A carrier is included for films or paper. After a transparency is made, a plate can be exposed in contact to produce an enlarged negative from which to print any number of photographs. Directions with each camera.

### PRICES.

- |   |         |
|---|---------|
| Camera No. 1, with lens, complete,  | \$12.00 |
| Enlarges a 4x5 negative to about 5x7. Also enlarges a 2½ in. Kodak film to a 3½ in. circle. |         |
| Camera No. 2, with lens, complete,  | \$15.00 |
| Enlarges a 3½x4½ to about 6½x8½. Also enlarges a 2½ in. Kodak film to a 7 in. circle.       |         |

# Figure 11

## Ferrotypes Plates.

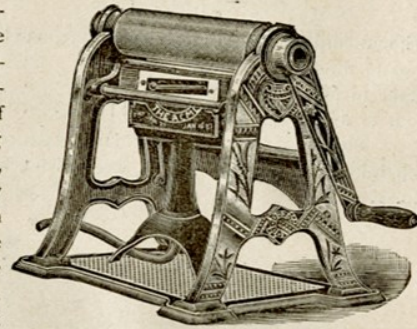
We furnish all grades from the best to the cheapest, and will guarantee our plates to be fully as good as can be found for the money. Our prices generally run from \$5.00 to \$10.00 per case of 200 10x14's; as prices are changeable we will send quotations on application.

We have had long experience in making Ferrotypes, and to parties dealing with us we will be glad to give any points we can, if desired.



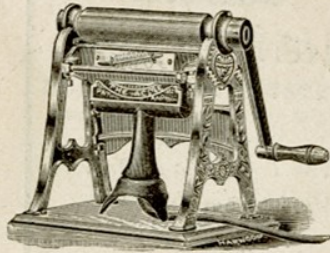
## The Acme Burnisher.

This Burnisher has many points of excellence among which are the following: Flue heating—Freedom from soot and smoke—Quick and uniform heat—Economy of fuel—A Thermometer indicates precise degree of heat best adapted to your work—Polishing tool has convex surface, of extreme hardness, the position of which can be changed quickly to present new surface—Hollow construction of feed roll, doing away with moisture while heating—Pressure regulated by a wheel at one point—Tension positive and alike at both ends—Milled or engraved feed roll, a great improvement over draw-filed rolls. The Acme is full nickeled and interchangeable in all its parts. Furnished for gas or oil at following prices:



The Acme Stationary Burnisher.

11 inch,	.	.	.	.	.	.	.	.	.	\$25.00
15 "	.	.	.	.	.	.	.	.	.	35.00
21 "	.	.	.	.	.	.	.	.	.	55.00
26 "	.	.	.	.	.	.	.	.	.	65.00



## The 8 1-4 inch Acme.

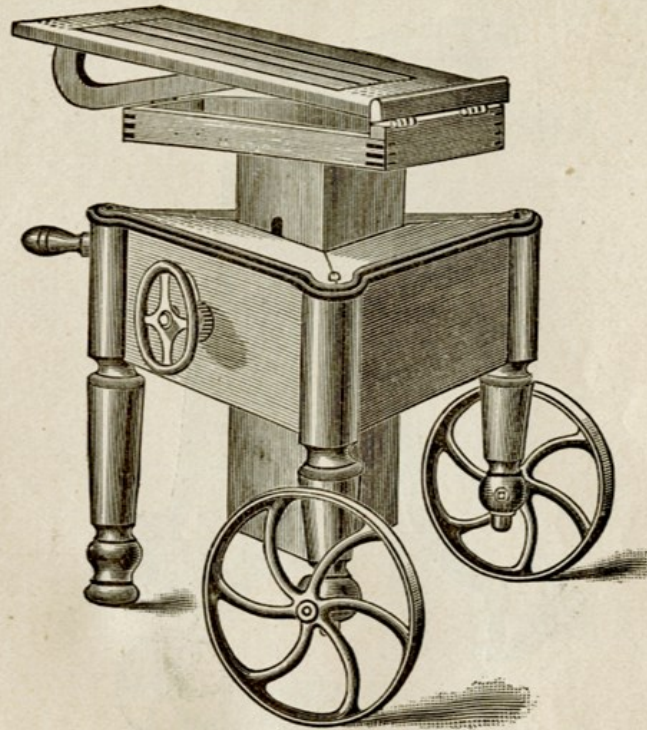
A practical small machine for professional and amateur use. Burnishes 8x10 and all under sizes. Heated with gas or oil, and in three to five minutes. Thermometer attached. Upper roll milled or engraved, and hollow. Flue heating. No soot or dirt.

Price, for gas or oil, . . . . . \$15.00



**Figure 12**

# Wing's Camera Stand No. 3.



Height 20 inches at lowest point.

Raises to 42 inches by wheel at side, which winds a strap on the shaft. The set screw holds it firm at any point.

The wheels are of iron, one foot in diameter, and run smooth and easily on any floor or carpet. The pillar is now made to prevent swelling and shrinking; is nicely fitted and never binds. This Stand is steady, strong and durable, and for business is not rivalled by any other stand.

We recommend this Stand, with 17x23 in. top, for our 8x10 Multiplying Camera, and with 17x32 in. top for the 11x14 Charlestown Camera.

We have manufactured them for years, and the large number in daily use together with the praises of the leading photographers, leave little to be said in their favor.

Mr. S. Wing invented the first three cornered camera stand made in the United States. This Stand is of his design.

### PRICES.

With Top 17x23, single wedge, . . . . .	\$20.00
“ “ 17x32 double wedge, . . . . .	25.00

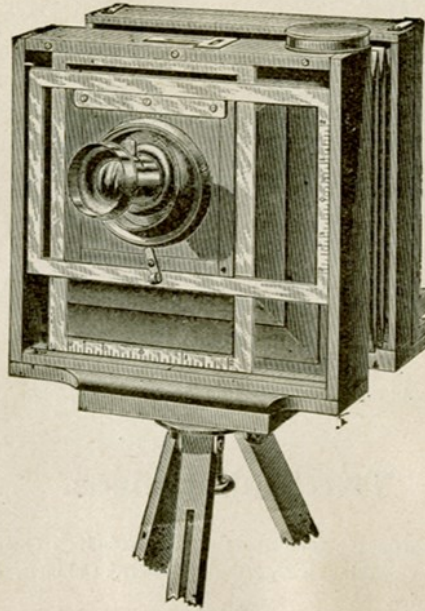
## Figure 13

8

S. WING & CO., CHARLESTOWN, MASS.

### Adjustable Lens Holder.

PATENTED APRIL 19, 1887.



THE CUT SHOWS LENS HOLDER APPLIED TO VIEW CAMERA.

This is a useful attachment for cameras, invented by Mr. S. Wing, for shifting the position of the lens over the front of the camera, thus allowing the view or object to be adjusted to the best portion, or centre of the plate, while the plate remains perpendicular. The lens is attached to a ball and socket joint, which is a part of the Lens Holder; this allows the lens to be pointed in any direction like the human eye, the plate still being perpendicular.

This invention attains with greater facility, the results of a swing-back camera, and allows the back of the camera to be made upright, rigid and permanent, which is necessary in all cameras that may be used sometimes with a cluster of lenses.

We make cameras both for indoor and outdoor work without the swing-back, and by attaching the Adjustable Lens Holder we get a camera practical for various kinds of work, many of which are not attainable with a swing-back.

In photographing a high building from the ground, we level our camera by the levels we have ready attached, thus bringing the plate perpendicular; we then look on the object glass, get a focus, and slide and roll the lens up until we see the image adjusted as we want it on the plate. The lens should be made to point towards the centre of the picture, to insure the image being made in the centre of the field of the lens; a fine focus may now be obtained and the exposure made.

The Adjustable Lens Holder

#### Fitted to the Wing Multiplying Cameras,

slides down in place of the front board. The camera can then be used, if desired, for making as fine a view as can be made with any view camera specially constructed.



## Figure 14

S. WING & CO., CHARLESTOWN, MASS.

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# WING'S

## Perfect • Metallic • Dry • Plateholder.

PATENTED APRIL 19, 1887.

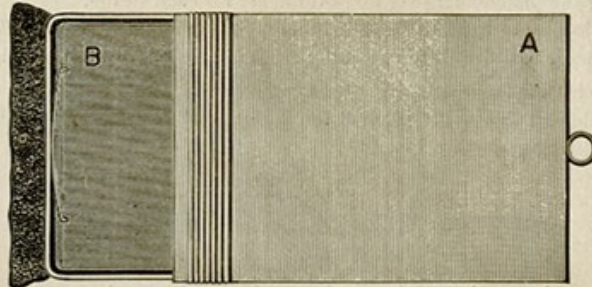


FIG. 1.

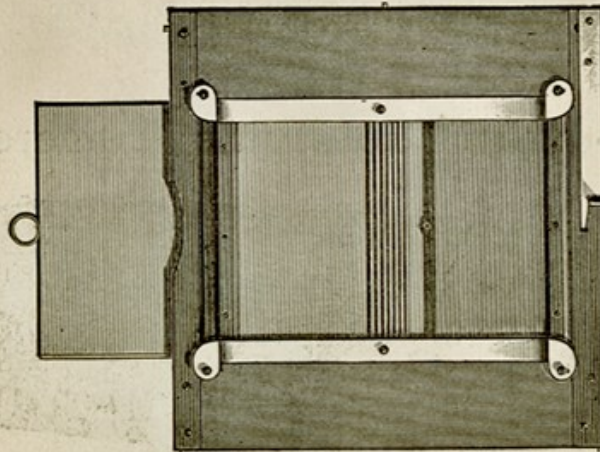


FIG. 2.

This Plateholder, invented by Mr. S. Wing, is a new departure in apparatus for using dry plates. It consists of an outside shell or sheath, open at one end or side only, and permanently sealed and light-tight in other parts. Into this shell slides an inside carrier, to the outer end of which is attached a strip of plush, which plugs the open end of the shell, thus making it totally dark inside. This inside carrier contains the sensitive plate.

The cut Fig. 1, shows the shell A, with the inside carrier B, containing the plate, partially inserted.

The cut Fig. 2, is an attachment made to go in place of ordinary plateholders, with the ground-glass made adjustable by springs.

After getting a focus, draw the end of the ground-glass back and slide the Metallic Plateholder in, in front of it; a spring in the side of the frame catches into the eyelet on the end of the Plateholder, holding the inside carrier, while the outside shell is withdrawn, leaving the carrier and plate in the camera ready for exposure. After exposing, shove the shell back onto the carrier, release the spring, and draw the whole Plateholder out of the camera.