

The Preservation of 19th-Century Photographic Print Materials



*Debra Hess Norris,
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Photographic Collections are Varied

- Early direct positive processes
- Print Materials
- Negative Materials
- Photographic albums
- Framed materials

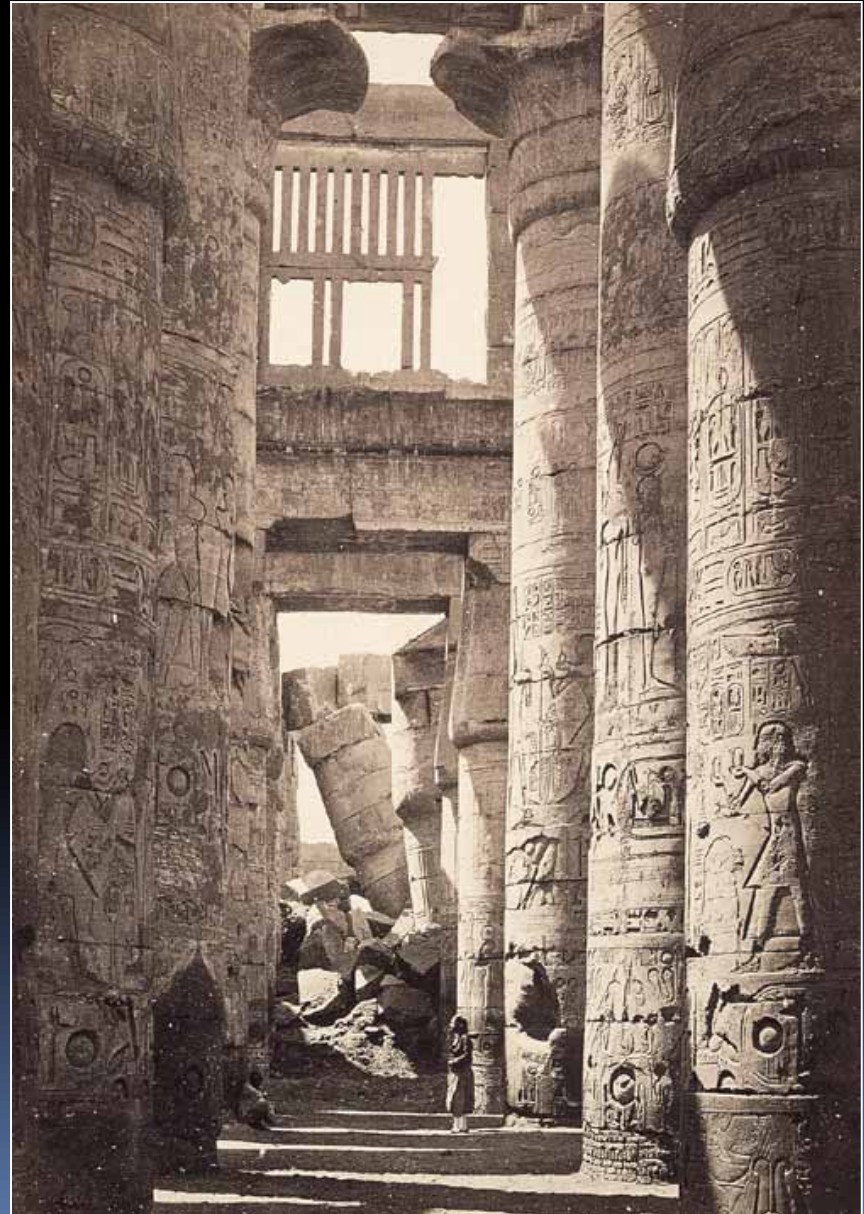


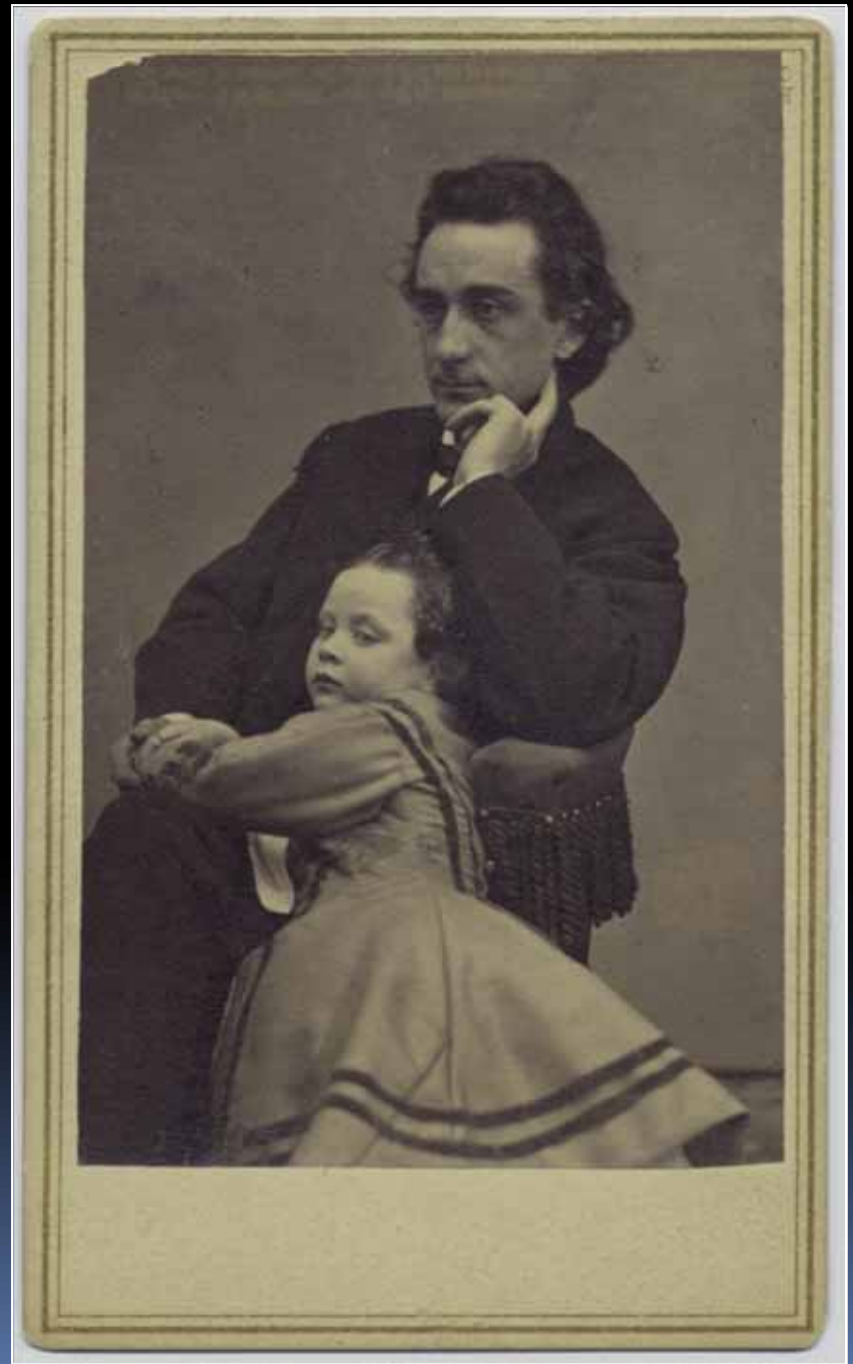
Southworth & Hawes: *[Young Girl with Portrait of George Washington]* ca. 1850.
Whole-plate daguerreotype.

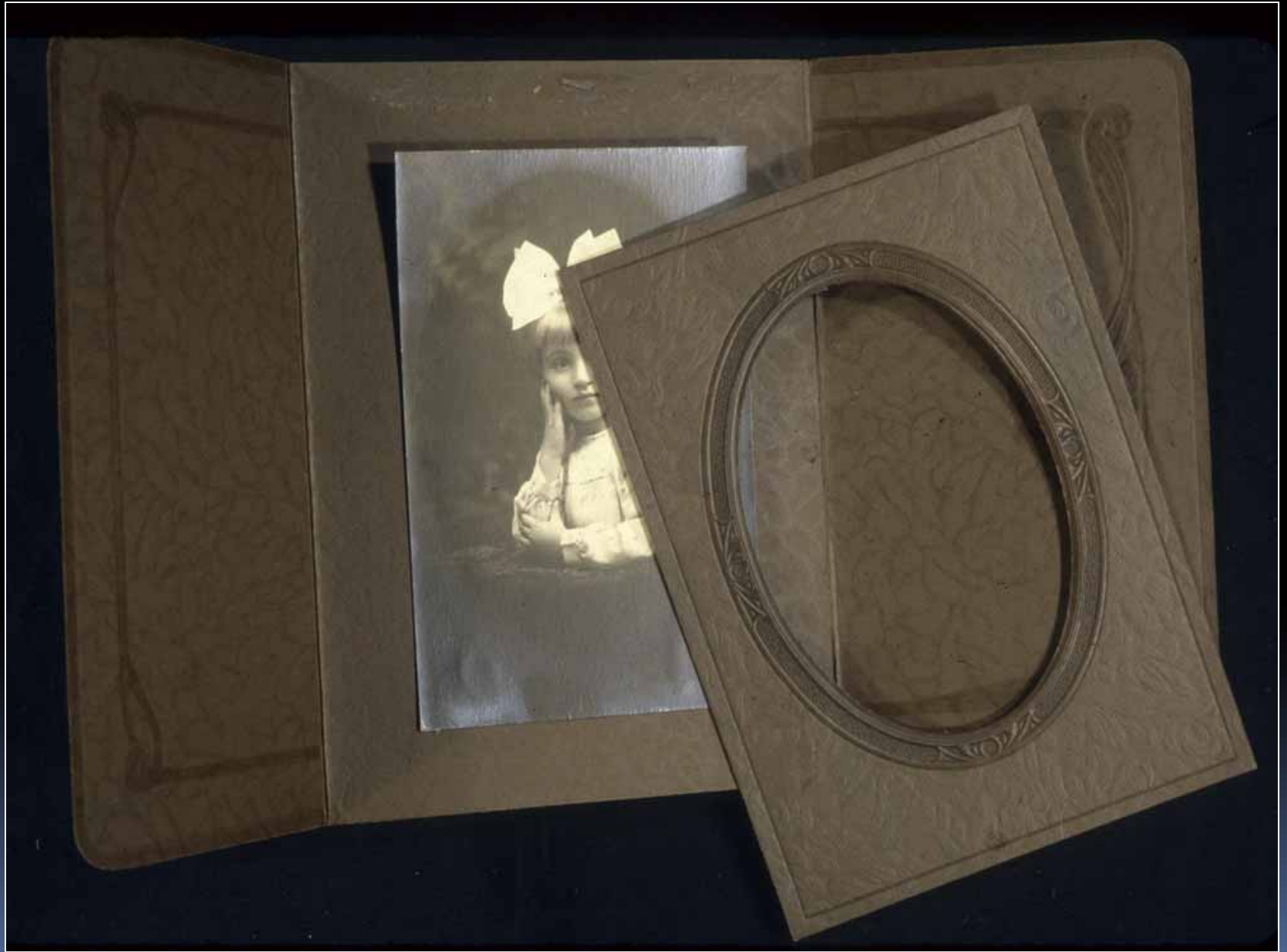
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Francis Frith, *Interior Hall of Columns, Karnac*,
Albumen Photograph,
George Eastman House







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19th Century Photographic Print Materials

Key Topics to Consider

- Timeline & Identification



Department of Photographs
Metropolitan Museum of Art

19th Century Photographic Print Materials

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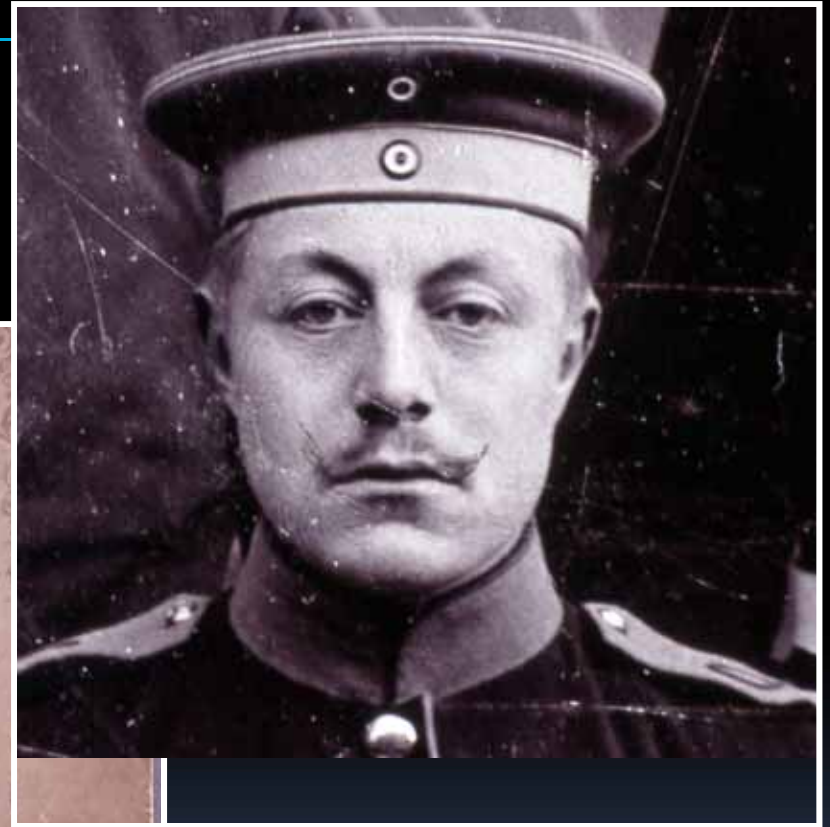
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- Deterioration Problems



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19th Century Photographic Print Materials

Key Topics to Consider

- Timeline & Identification
- Deterioration Problems
- Preservation Guidelines and Priorities



Visible Light Monitoring, Metropolitan Museum of Art

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Popular 19th Century Photographic Print Processes Timeline



1910

1840

1855



Salted Paper



Cyanotype



Silver Gelatin



Platinum



1910

1840

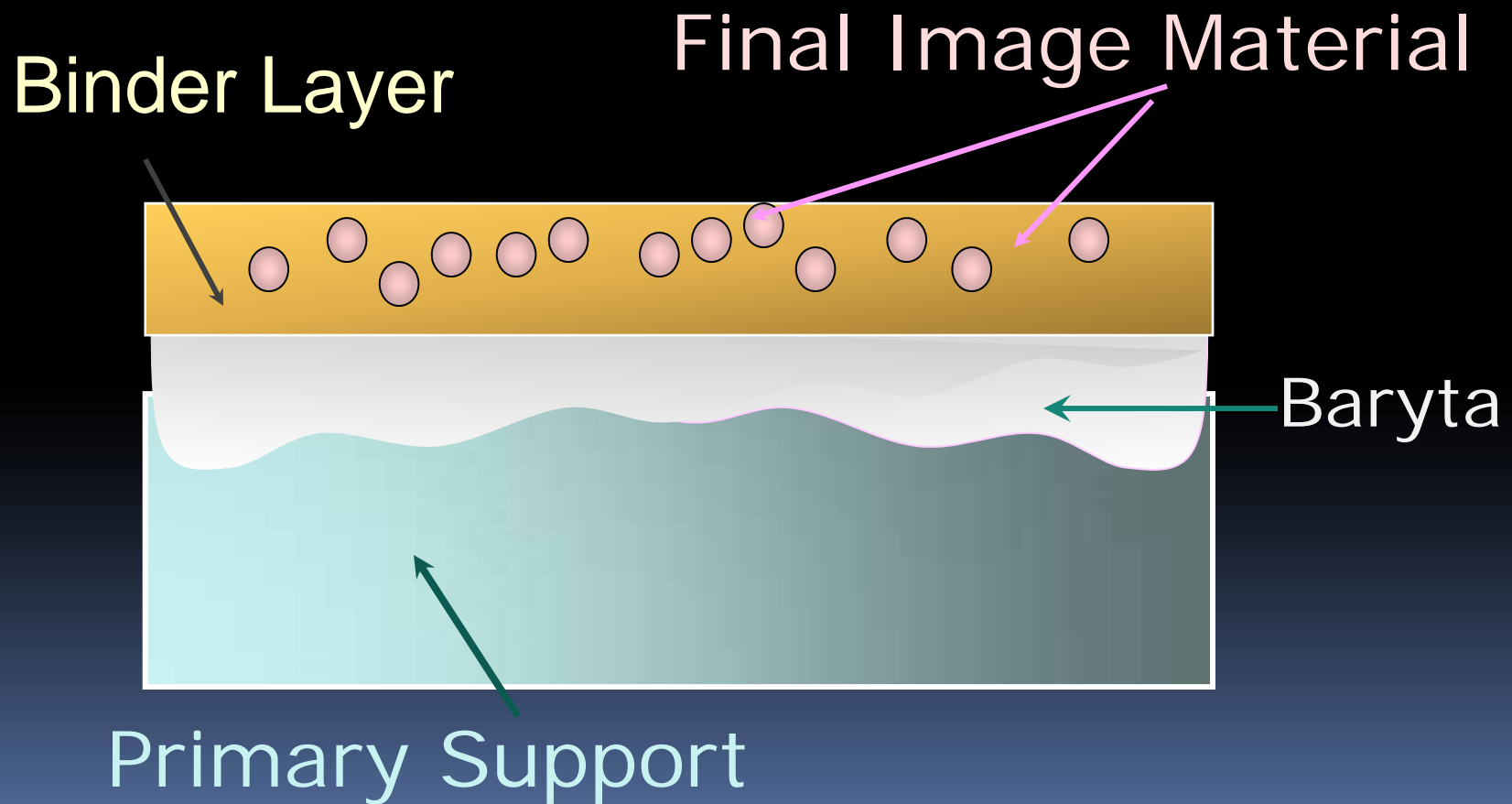
1855

Albumen



Collodion Chloride Papers

Structure of Photographic Print Materials



Common 19th Century Photographic Print Materials

- Salted Paper
- Albumen
- Silver Gelatin
- Collodion Chloride
Printing Out
- Platinum
- Cyanotype



ca. 1845
salted paper print
21.1 x 15.7 cm.
Museum Collection
George Eastman House

Common 19th Century Photographic Print Materials

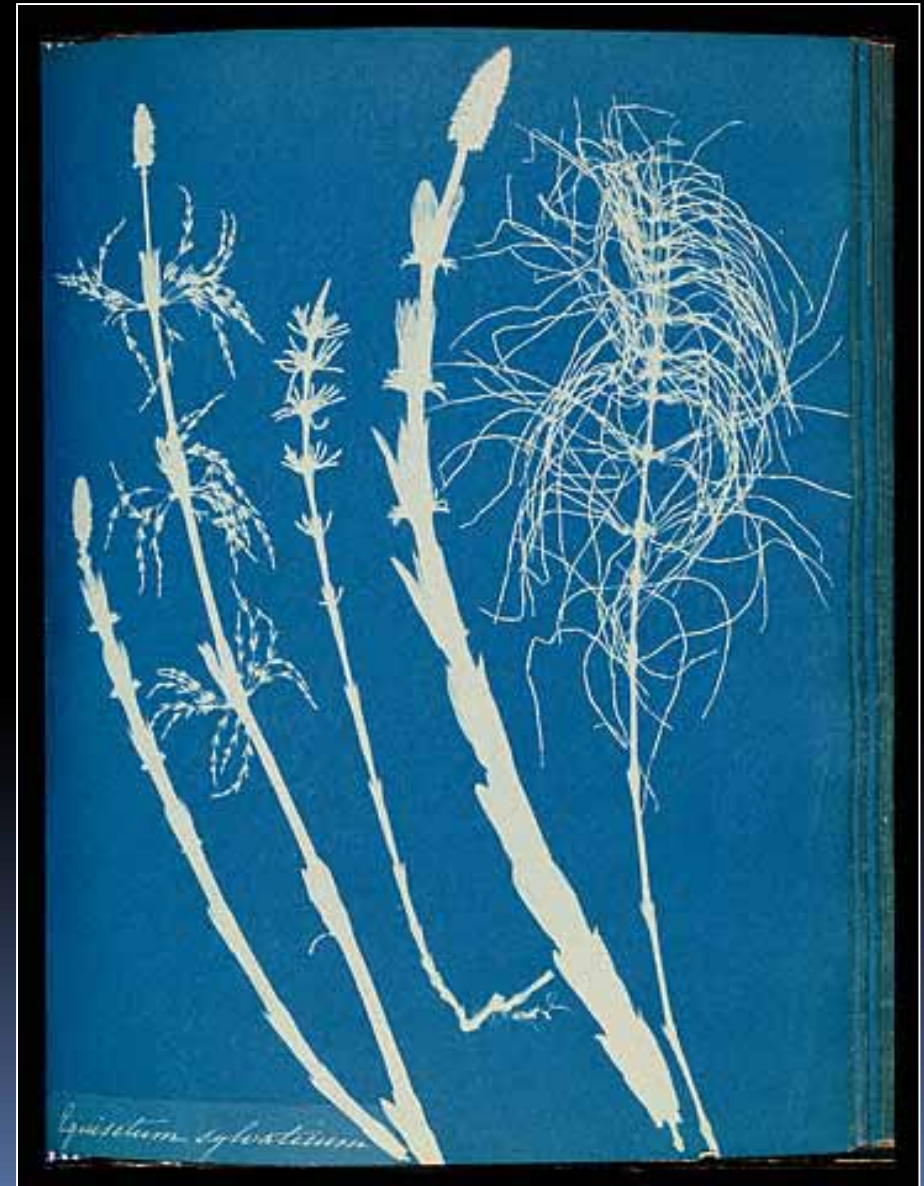
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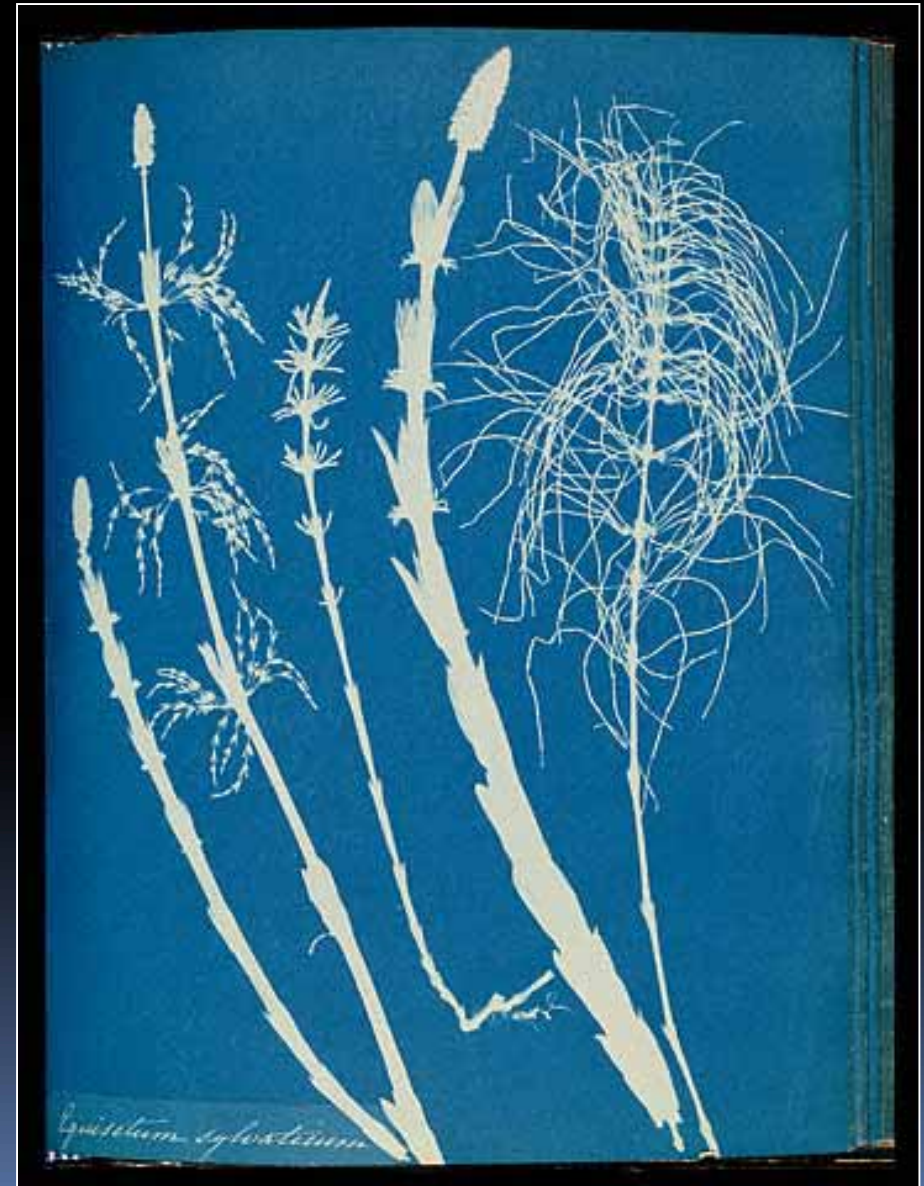
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Anna Atkins,
Cyanotype
Equisetum Sylvaticum
J Paul Getty Museum

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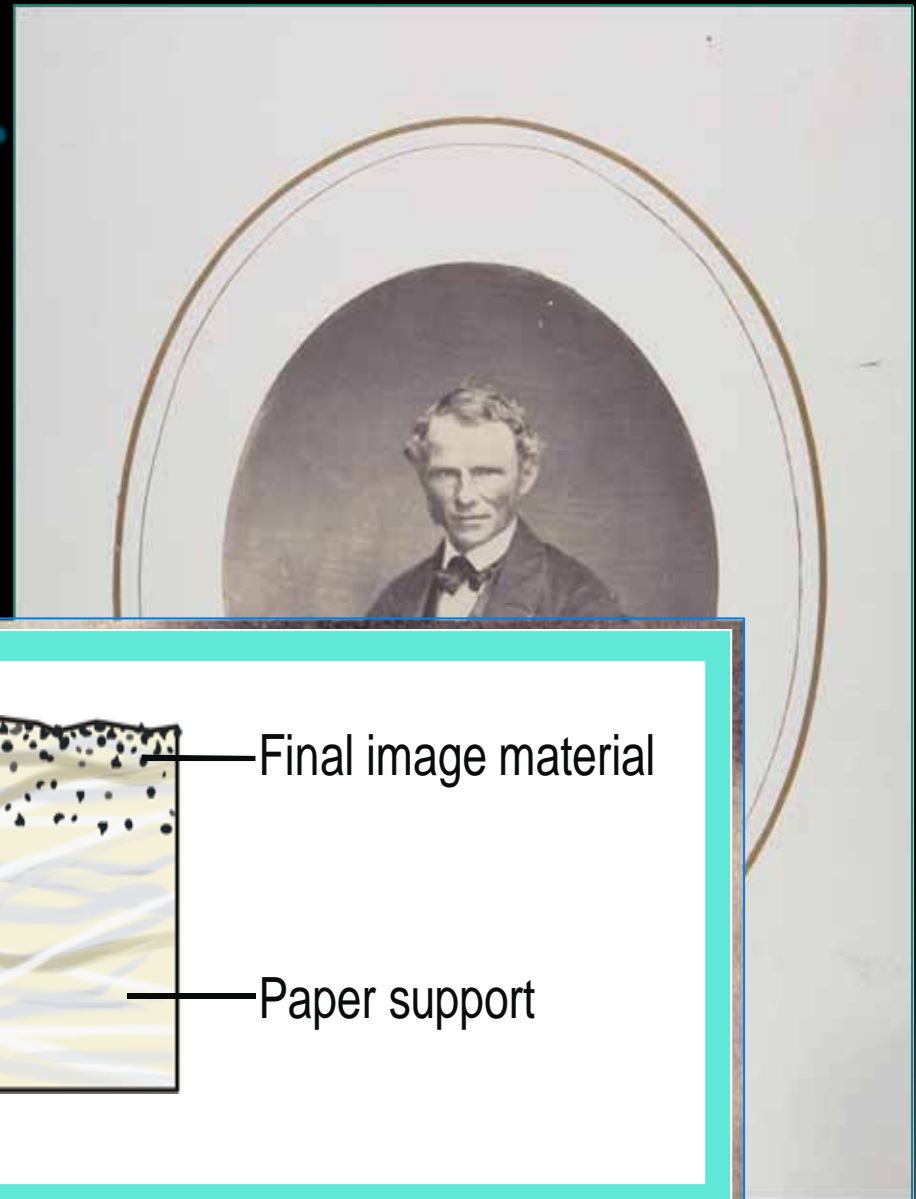
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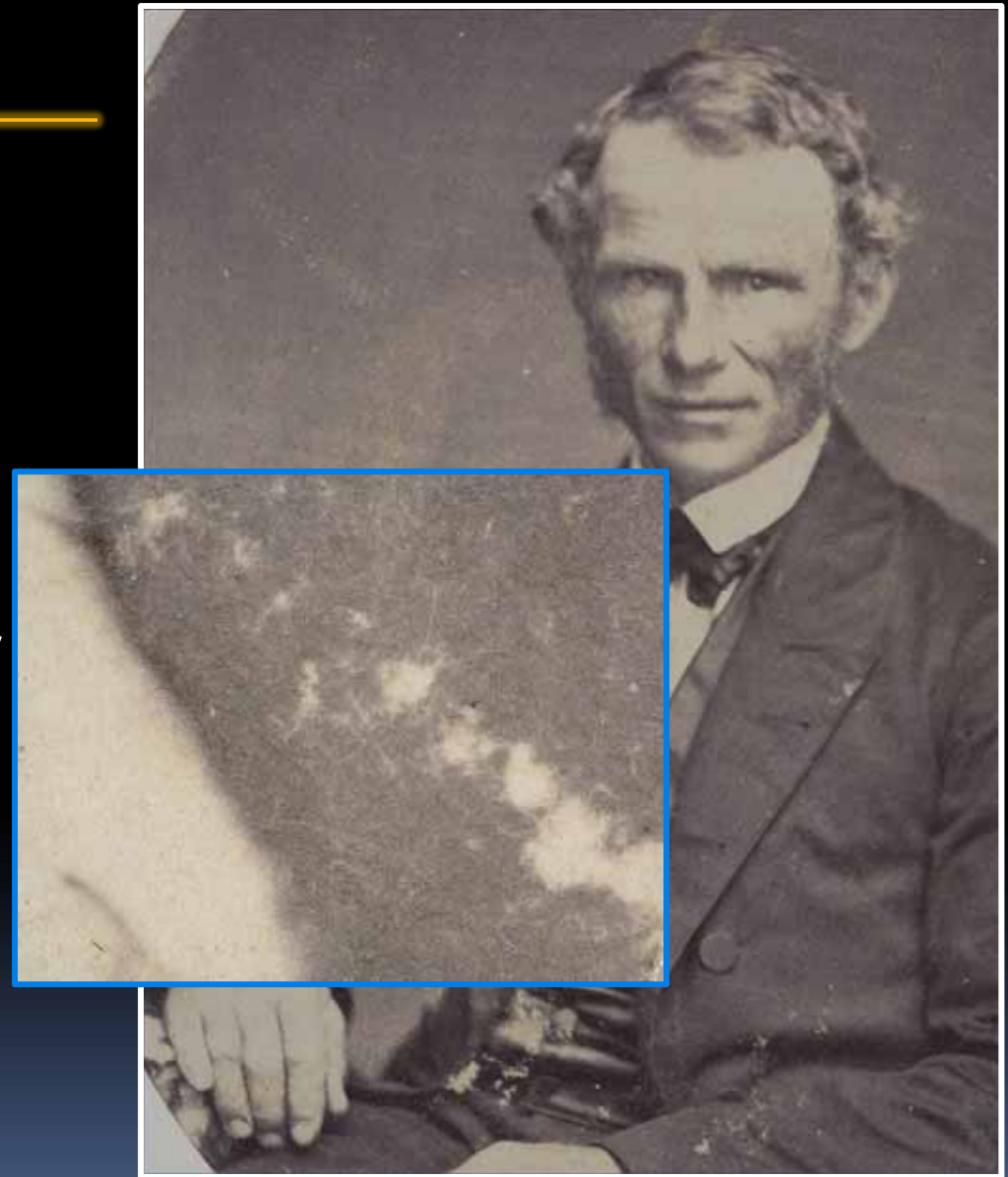
Salted Paper

- 1841 – 1860
- No binder layer
- Photolytic silver image produced by light
- Purplish-brown image
- Faded silver image
- May be abraded



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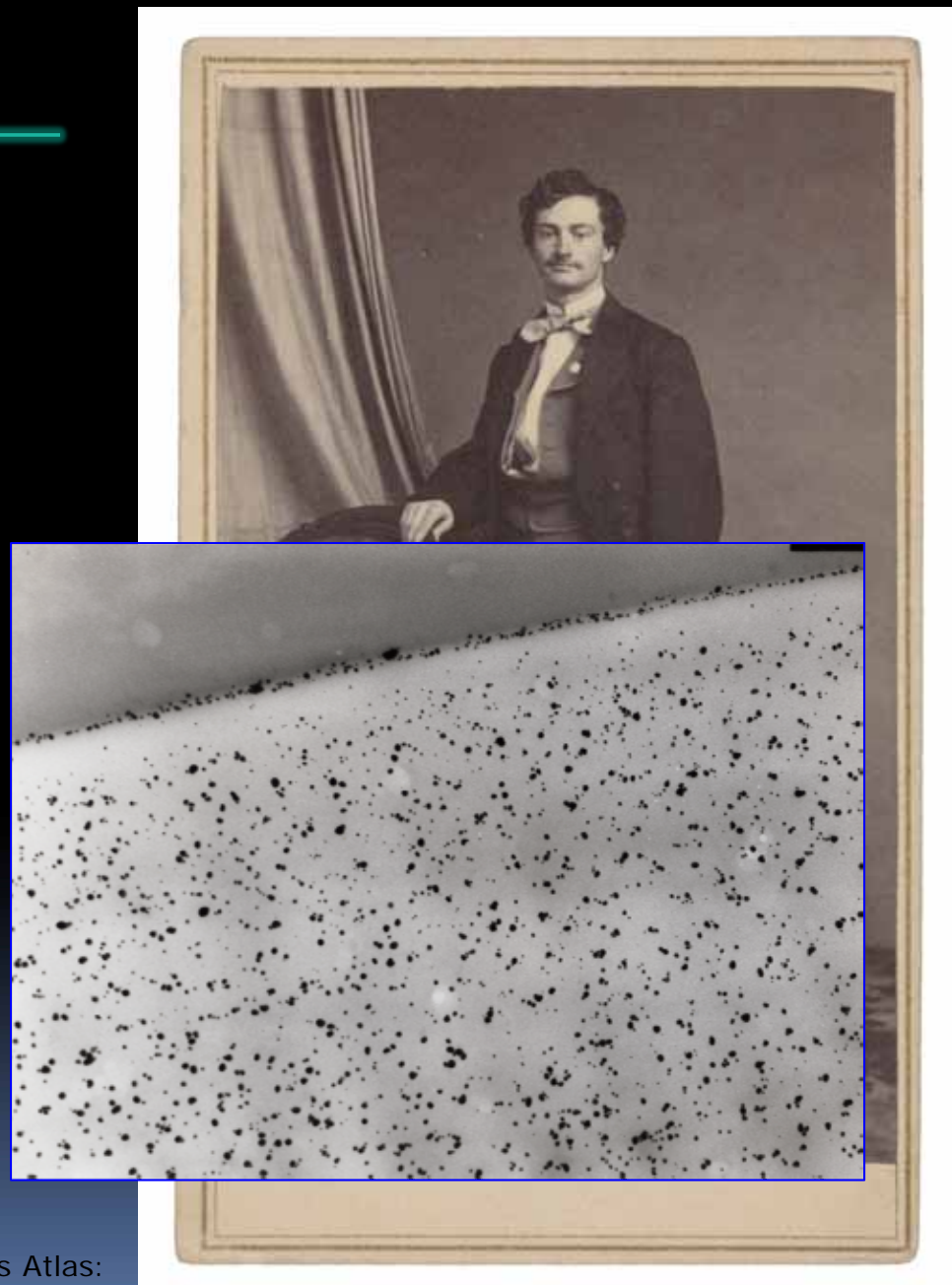
Albumen Photograph

- 1855 – 1895
- Egg white binder on thin rag paper support
- Photolytic silver image produced by light
- Typically gold toned
- Often mounted
- Purplish-brown image color
- Yellowed highlights
- Crazed egg white surface



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Silver Gelatin Printing Out Paper

- 1885 – 1940
- Gelatin binder layer
- Paper coated with baryta – glossy surface
- Photolytic silver image may fade or discolor
- Typically gold toned
- Often mounted
- Purplish-brown image color
- Gelatin may flake or abrade



Silver Gelatin Printing Out Paper

- 1885 – 1940
- Gelatin binder layer
- Paper coated with baryta – glossy surface
- Photolytic silver image may fade or discolor
- Typically gold toned. May be retouched.
- Often mounted
- Gelatin may flake or abrade



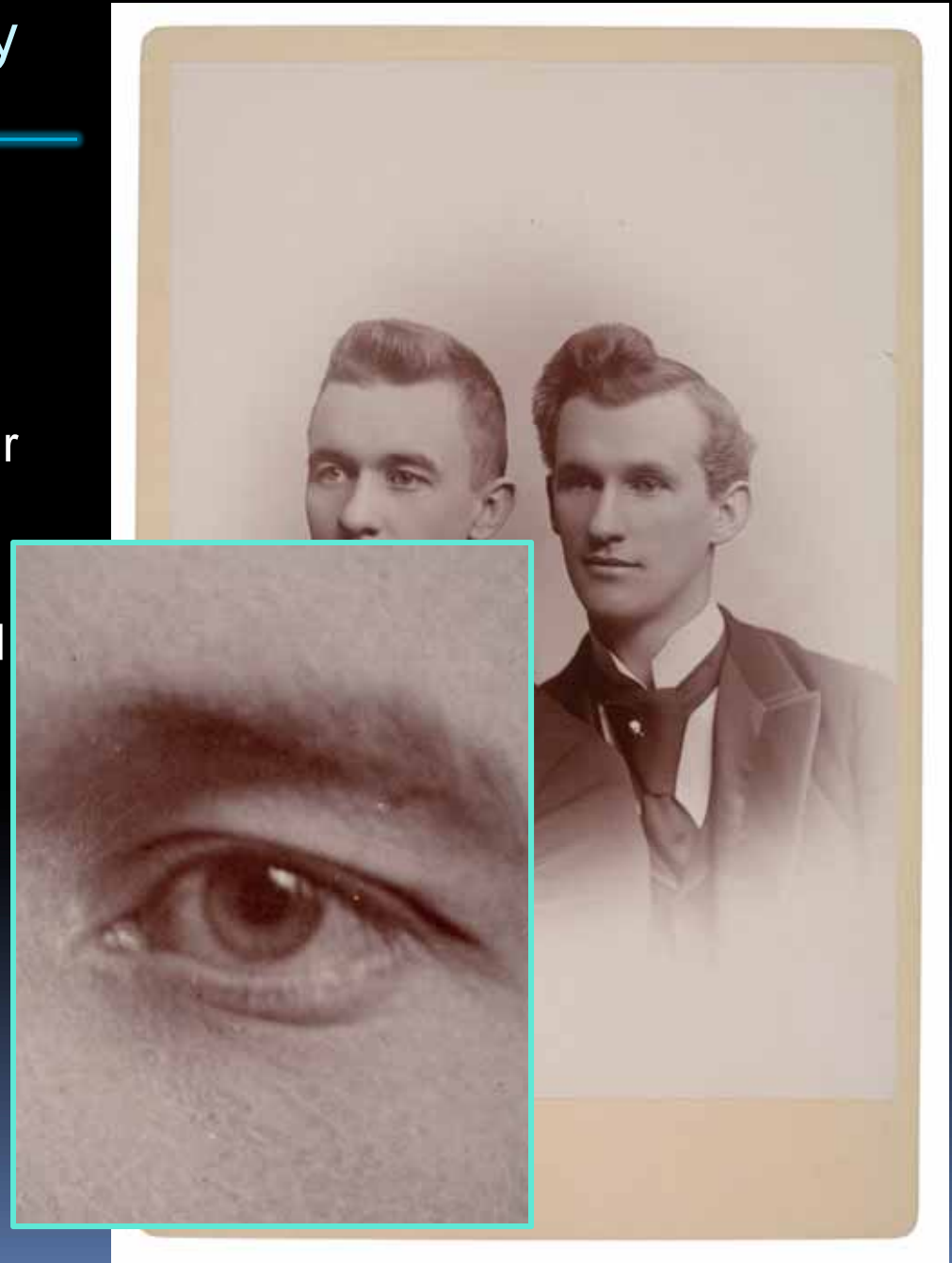
Collodion Chloride Matte

- 1894 – 1914
- Collodion binder layer
- Paper coated with thin layer baryta –matte surface
- Silver image toned with gold and platinum
- Very permanent
- Collodion may abrade



Collodion Chloride Glossy

- 1894 – 1914
- Collodion binder layer
- Paper coated with thick layer baryta – glossy surface
- Silver image toned with gold
- Image may fade
- Easily abraded



Platinum Print

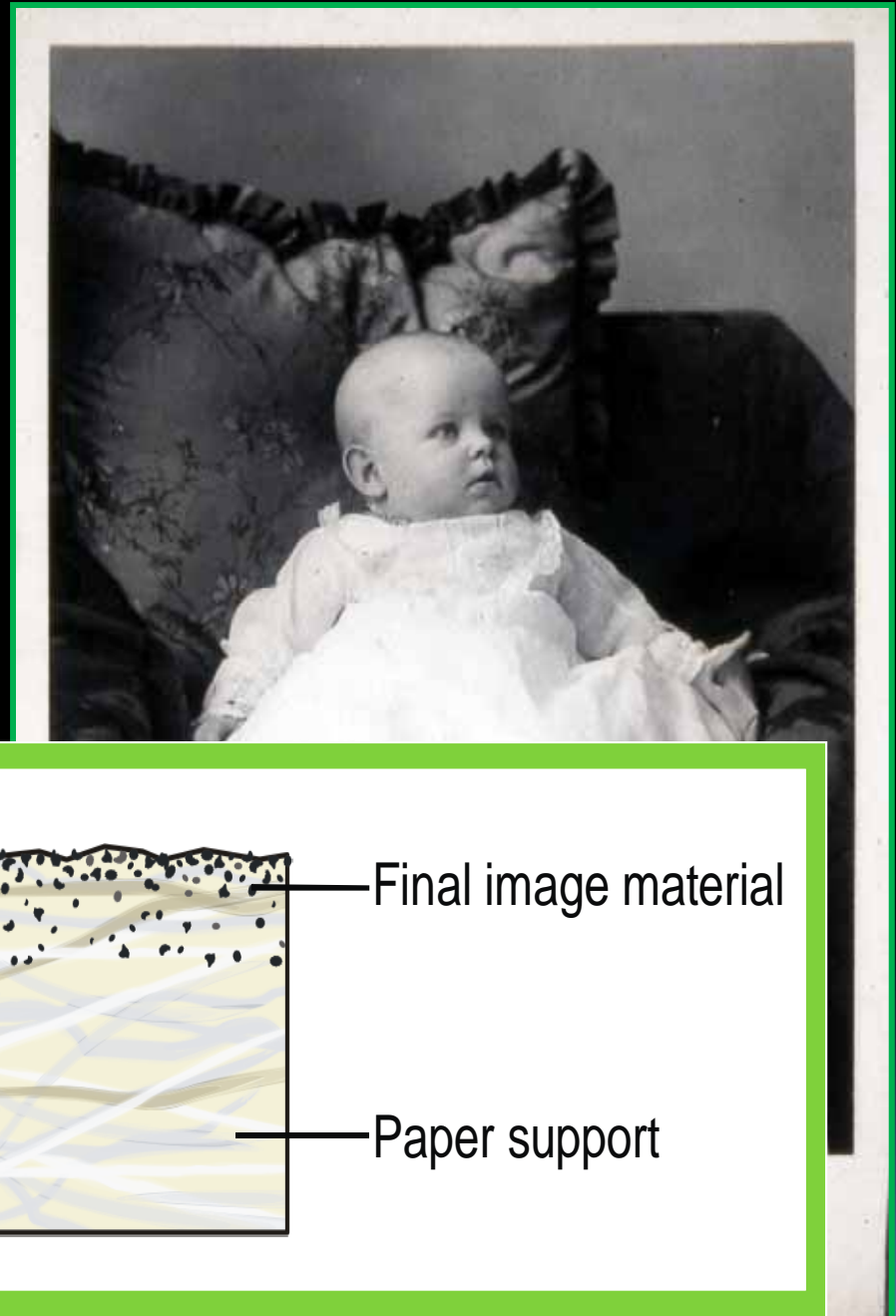
- 1890 – 1920
- No binder layer
- Based on light sensitivity of iron salts
- Platinum image
- Image will not fade
- Paper support may yellow



A. Marshall Studio
Platinum print
Private Collection

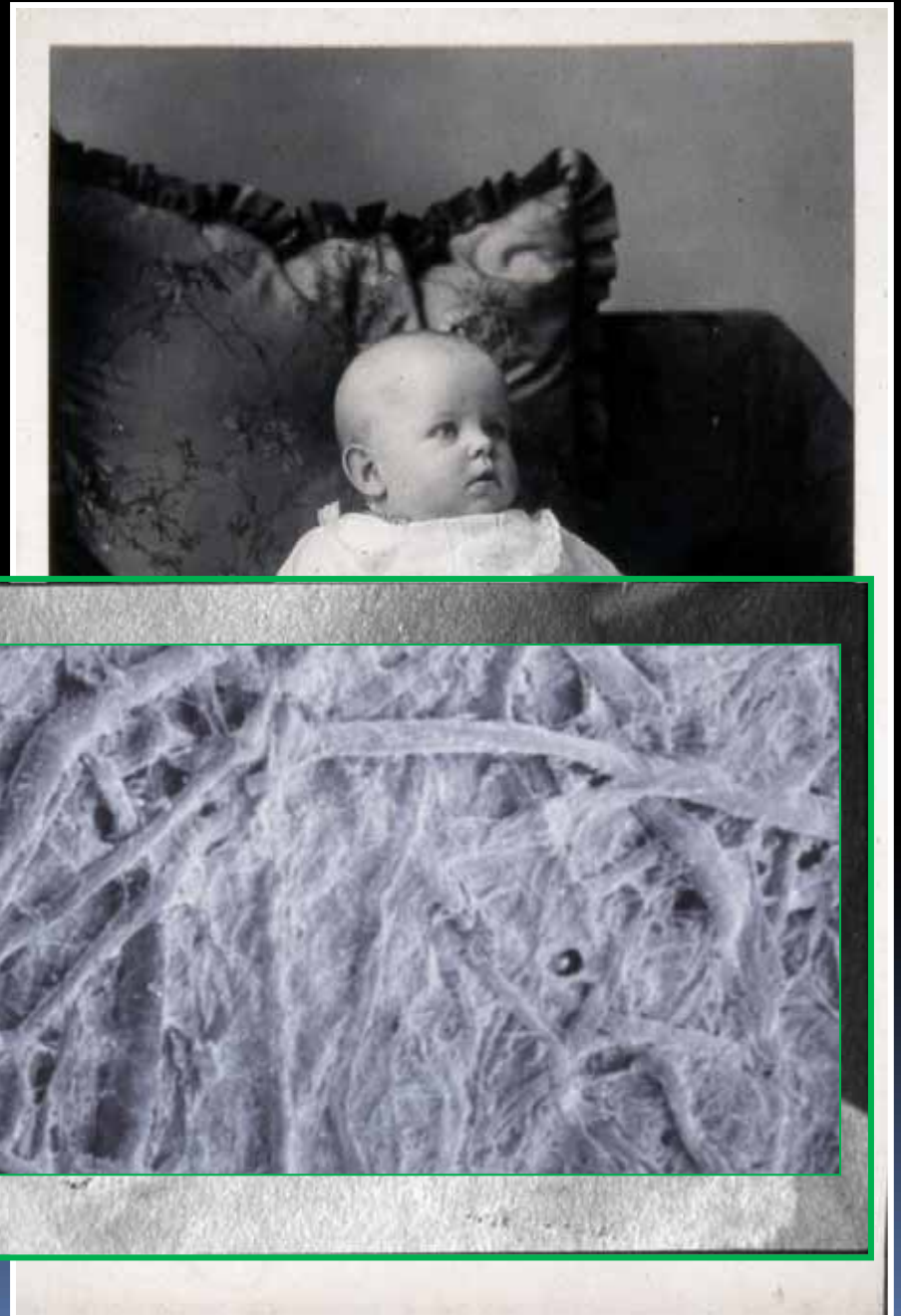
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Cyanotype

- 1890 – 1920
- No binder layer
- Based on light sensitivity of iron salts
- Blue pigment image
- May fade in light



Anna Atkins,
Cyanotype
Equisetum Sylvaticum
J Paul Getty Museum

Photograph Process Identification – Review

- Surface sheen
- Image tonality
- 30X magnification
- Mounting style
- Image fading
- Binder layer cracking
- Binder abrasion



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Preservation Guidelines

- Environmental control
essential
- Use high quality enclosures
- Handle with care
- Protect from dust and
abrasion
- Emergency plan established

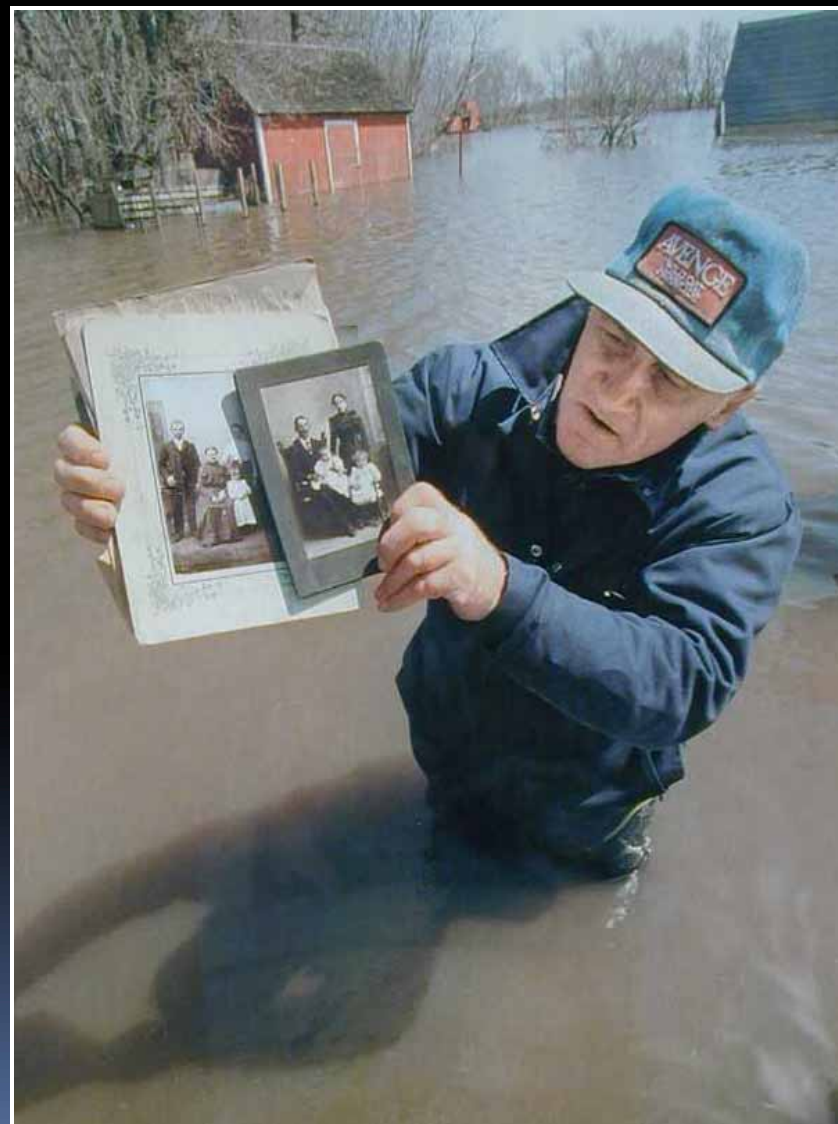
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Thank you for your attention....



And our wonderful collaboration