

Pratt Institute; School of Information

# Environmental Plan: Charles A. Platt Architectural Records and Papers

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Conservation and Preservation

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The Charles A. Platt Architectural Records and Papers collection consists of materials relating to this architect's personal and professional lives. With materials spanning from 1879-1981, this collection houses project drawings, photographs, glass negatives, and other types of records. The bulk of the materials span from 1901-1933 and document his professional projects.

## **Overview of the Materials**

### **Architectural Drawings**

The largest group of items in the collection is the architectural drawings. This includes working, presentation and publication, and standard drawings spanning from the 1890s to the 1950s. The materials in this collection use a span of image forming materials - ink, graphite, colored pencil, watercolor, and crayon - and supports - tracing paper, linen, standard paper, cloth, and board. There are also a variety of drawing reproductions including blueprints, photostat, and sepia process prints.

Half of the drawings use at least ink for the media. From the 18th to the 20th century, India, China, and Japan ink were the most popular used by architects, and while these inks are mostly stable, they would frequently be mixed with other materials, commonly iron gall ink. Even when pre-made bottled inks became commercially available around 1840, it still usually included iron gall ink for permanence.<sup>1</sup> Any drawings with iron gall ink are subject to ink corrosion. Signs of corrosion happen in stages: ink color changing to brown, discolored halos around the ink lines and on reverse, then cracks in the ink area which can lead to loss.<sup>2</sup> Graphite is also one of the most commonly used materials, but is mostly vulnerable to smudging and

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<sup>1</sup> Price, Louis Olcott. "Fabrication of Architectural Drawings." Northeast Document Conservation Center, n.d. [https://www.nedcc.org/assets/media/documents/Pres101/4\\_price\\_arch\\_draw.pdf](https://www.nedcc.org/assets/media/documents/Pres101/4_price_arch_draw.pdf)

<sup>2</sup> Reissland, Birgit, Frank Ligterink, and Claire Phan-Tan-Luu. "Ink Corrosion - Slow Changes over Time." Cultural Heritage Agency of the Netherlands (RCE), 2010. <https://irongallink.org/ink-corrosion-slow-changes-over-time.html>.

particle loss, along with the few drawings including colored pencil<sup>3</sup>. Watercolor is present in a few of the drawings and tended to be used by architects during this time for shadows and color addition<sup>4</sup>. It is particularly vulnerable to water as it can resettle or change the pigment. Fading is probably the biggest risk of the watercolor itself, especially if exposed to direct sunlight or harsh light.<sup>5</sup> This is a similar risk to the drawings with crayon and colored pencil as colorants tend to be light sensitive and can fade quickly<sup>6</sup>. Since crayon is a wax, it is also subject to melting and abrasions.

Unsurprisingly, the majority of the architectural drawings use tracing paper, a traditionally thin and translucent paper, as its support, as it was ideal for redrawing and overlays as well as blueprints. Oils or resins would be added to increase the translucency, but these oils tend to darken and embrittle the paper and if there is damage to the oiled paper, breaking the oil film, an opaque area may be created. It wasn't until 1950 that an acrylic resin that avoided these issues was made, so it is likely that most of these drawings are subject to degradation due to the preceding oils and resins.<sup>7</sup> Any drawings on paper other than tracing paper is at risk of decay due to lower quality paper taking over in the mid 19th century. Deterioration can be visible in the form of discoloration or embrittlement, and all paper is subject to mechanical damage like tearing<sup>8</sup>. Linen and cloth are also used as supports for some of the drawings. Architects have and still use something known as tracing cloth or drafting cloth, originally made from linen, but

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<sup>3</sup> Northeast Document Conservation Center. "Session 4: Caring for Paper Collections — NEDCC." <https://www.nedcc.org/preservation101/session-4>.

<sup>4</sup> Price, *Fabrication of Architectural Drawings*

<sup>5</sup> Ragona, Elizabeth. "The Care and Framing of Your Watercolor Art." Alabama Art Supply, February 20, 2025. <https://www.alabamaart.com/blogs/studionotes/the-care-and-framing-of-your-watercolor-art>.

<sup>6</sup> "Preservation Self-Assessment Program (PSAP) | Architectural Papers (Unidentified)." <https://psap.library.illinois.edu/advanced-help/paper-unbound-architectural-unidentified>.

<sup>7</sup> Price, *Fabrication of Architectural Drawings*

<sup>8</sup> University of Illinois Urbana-Campaign, *Architectural Papers (Unidentified)*

manufacturers later used long fiber Egyptian cotton<sup>9</sup>. Tracing cloth is at most at risk for becoming limp or fraying<sup>10</sup>. One of the drawings is on paper, mounted on board, being the only drawing to have “board” as a material. It is hard to know the exact makeup of the material, but it is likely it is some sort of pulp/wood based material.

Included in the collection are multiple types of architectural drawing reproductions. Since this is an architectural collection, the blueprint is a common type of material. The blueprinting process was introduced in the late 1870s and depends on light sensitive salts that react when exposed to light to form an image based on the original drawing or image. It became widely used for architectural drawings around 1878. Machines that could make blueprints rather than by hand arose around 1900, but by 1920 these machines could do it all in one step and became commercially used. This did however affect the durability because the washing process was shortened and the wet prints were dried using heat.<sup>11</sup> Blueprints are most subject to fading via light damage or yellowing and embrittlement if not kept in the right conditions<sup>12</sup>. The collection has a few sepia processed prints, which is a type of Diazo process. This method replaced blueprints around the 1950s, although there is overlap time wise. These types of prints are light sensitive so they are subject to fading. Sepia as a color was used because it blocks light better than other dyes creating clearer images, which was sometimes amplified by oiled papers for increased translucency that has the tendency to cause pink stains. There are also a few black line, blue line, and green process prints, all of which are different types of Diazo prints. The last type of drawing reproduction in the collection are photostats. These silver based images covered with

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<sup>9</sup> Price, *Fabrication of Architectural Drawings*

<sup>10</sup> University of Illinois Urbana-Campaign, *Architectural Papers (Unidentified)*

<sup>11</sup> University of Illinois Urbana-Campaign, *Architectural Papers (Unidentified)*

<sup>12</sup> “Preservation Self-Assessment Program (PSAP) | Architectural Papers (Blueprint).”  
<https://psap.library.illinois.edu/advanced-help/paper-unbound-architectural-blueprint>.

a gelatin emulsion were created using a specific type of camera.<sup>13</sup> They are prone to yellow discoloration and silvering, similarly to gelatin silver prints<sup>14</sup>.

### Photographs

The collection includes many types of photographic materials including project and copy images. Gelatin silver prints, black and white prints made of tiny silver particles on a paper base with a gelatin binder and overcoat, are the most common in this collection. Most of the photographs span from 1890 to 1932, which coincides with the beginning widespread use of these types of prints. Around this time as well, manufacturers started adding what is called a baryta layer which coats the gelatin and smooths the surface. The most common visual sign of deterioration of the image is fading of the image or yellow discoloration. Silver mirroring, a metallic blue sheen, and orange discoloration around the edges are also possible. The gelatin binder and support, which is usually paper, are subject to water damage, mold, cockling, and mechanical damage like tearing and surface abrasions. Toners began to be added in order to stabilize the silver. This collection includes a few photographs using sepia toner, which actually adds to archival longevity, but still has risk of the same damage as untoned prints.<sup>15</sup>

Included as well in the collection are photomechanical reproductions. It is hard to decipher the type of photomechanical reproduction since there are many types used since the period of Charles Platt, and these images only have project dates, not necessarily image dates. As reproductions, they could have been made at any point past the project date. Although unable to specify a specific type without further examination of the photographs, it can still be said that

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<sup>13</sup> Price, *Fabrication of Architectural Drawings*

<sup>14</sup> “Preservation Self-Assessment Program (PSAP) | Office Copies (Photostat).”

<https://psap.library.illinois.edu/advanced-help/paper-unbound-officecopy-photographic-photostat>.

<sup>15</sup> Weaver, Gawain. *A Guide to Fiber-Base Gelatin Silver Print Condition and Deterioration*. George Eastman House and Image Permanence Institute, 2008.

[https://gawainweaver.com/images/uploads/Weaver\\_Guide\\_to\\_Gelatin\\_Silver.pdf](https://gawainweaver.com/images/uploads/Weaver_Guide_to_Gelatin_Silver.pdf).

they are subject to mechanical damage but they generally do not show signs of image fading. Light plays no role in the production as no matter the specific process, the image is impressed or transferred mechanically from an inked plate using a photographic negative.<sup>16</sup>

Two color photographic prints are in the collection as well, one from a project from 1902-1903, and one from 1908-1918. It is likely that if the later image was made at the time of the project, that it was an autochrome photograph. This was the first successful screen process commercially available in 1907, meaning the earlier image could not be an autochrome print, but rather possibly made from one of the experimental color photography processes before.<sup>17</sup> These colored prints are most at risk of dye fading as well as physical damage to the support and emulsion layers. One photocopy is also in the collection, which does not have a lot of information attached since it is part of a set of copy photographs from various projects with no mention of when it was copied, but it can be assumed it is at risk of mechanical damage.

### Records/Papers/Correspondence

The rest of the material is all paper based materials including personal and professional papers, letters, and project records - like contracts, invoices, and notes. Typescript and typescript carbon are some of the main formats of these documents. Typescript can be assumed it means typewriter<sup>18</sup>, while it is possible the carbon means a carbon copy or carbon ink, which are both known to be relatively stable. It would make sense if this is referring to carbon copies as Platt would, as an architect, need copies of notes and documents. The collection also includes other typed pages, including the transcriptions of Platt's correspondence. Typewriters were known to

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<sup>16</sup> "Preservation Self-Assessment Program (PSAP) | Photomechanical Prints." University of Illinois Urbana-Campaign. (b) <https://psap.library.illinois.edu/collection-id-guide/photomechanical>.

<sup>17</sup> "A Short History of Colour Photography." Science and Media Museum, 2020. <https://www.scienceandmediamuseum.org.uk/objects-and-stories/history-colour-photography>.

<sup>18</sup> Beal, Peter. A Dictionary of English Manuscript Terminology 1450–2000. Oxford: Oxford University Press, 2008. <https://doi.org/10.1093/acref/9780199576128.001.0001>

use black ribbon ink, which is similar to carbon ink, meaning it is a pretty stable ink <sup>19</sup>. The collection also includes handwritten notes and papers, but since they were created in the same time period as the drawings, it is likely that iron gall ink is a possible issue in any of these. This means they are at risk of ink corrosion, although it is difficult to know for sure without examination. For all ink on paper items, whether or not the ink is deteriorative, lower quality papers are at risk for degradation, and all are at risk for mechanical damage.

### Glass Plate Negatives

The collection of glass plate negatives documents Charles Platt's 1892 trip to Italy. Glass plate negatives are photographic negatives made with an emulsion binding to a glass plate. The glass is subject to breakage from both degradation and improper handling as well as emulsion breakage or scratching. <sup>20</sup> There are two known specific types of glass plate negatives: collodion wet plate and gelatin dry plate. Although they are chemically different, with similar storage, care, and handling needs, knowing the specific kind can help to narrow down the possible degradation.

<sup>21</sup> Collodion wet plate negatives were created around 1855 but were overshadowed and practically replaced by dry plate negatives by 1880 as the dry plate negatives were mass produced and more efficient due to the ability to be stored prior to exposure and developed at a later time. <sup>22</sup> Seeing as how the negatives were created almost a decade after 1880 and were used on an active trip, it is most likely that they are gelatin dry plate negatives. This particular type is subject to oxidative deterioration, which shows as fading, yellowing, and silver mirroring as well

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<sup>19</sup> "Preservation Self-Assessment Program (PSAP) | Inks and Other Media."

<https://psap.library.illinois.edu/collection-id-guide/inkothermedia>.

<sup>20</sup> "Preservation Self-Assessment Program (PSAP) | Glass Negatives." University of Illinois Urbana-Campaign. (a) <https://psap.library.illinois.edu/advanced-help/negative-glass>.

<sup>21</sup> Bahnemann, Greta. "The Preservation of Glass Plate Negatives." WebJunction, April 14, 2022. [https://www.webjunction.org/documents/webjunction/The\\_Preservation\\_of\\_Glass\\_Plate\\_Negatives.html](https://www.webjunction.org/documents/webjunction/The_Preservation_of_Glass_Plate_Negatives.html).

<sup>22</sup> "Glass Plate Negatives: A Brief History · Window To The Past: The Everett C. Block Collection · Champaign County Historical Archives." The Urbana Free Library. <https://urbanafree.omeka.net/exhibits/show/block-exhibit/glass-negatives>.

as delamination of the gelatin layer. Due to the organic compounds in the gelatin, it is also vulnerable to mold and pests.<sup>23</sup>

### **Priority Treatments**

There are three main formats I would claim as high priority: anything that might have iron gall ink, gelatin silver prints and diazo prints, and glass plate negatives.

Iron gall ink is a particularly deteriorative material that is not only quick but also irreparable. If the ink corrosion goes far enough, loss of information happens due to the thinning of the areas where ink is present<sup>24</sup>. This is why it is important to try to understand what items in the collection might have this ink. There are preservative techniques that can be taken in storage, but it could be helpful to consult a professional conservator in order to assess the risk of the items and what conservation treatment, if any, is necessary.

Gelatin silver prints are a large part of the photographic collection, and are a type of material that is particularly vulnerable to many forms of deterioration. The main risk is that silver can be very unstable and chemical deterioration of the silver ions is also not reversible. Most forms of decay are avoidable with proper storage conditions, but any items already damaged should be addressed quickly to avoid further deterioration<sup>25</sup>. Diazo prints are also of concern as they were known to be poorly processed and have the tendency to transfer dyes to other items<sup>26</sup>.

The glass negatives in this collection are not only fragile, but original. Glass plate negatives are mostly subject to breakage, especially since they are glass, requiring special

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<sup>23</sup> University of Illinois-Campaign, *Glass Negatives*

<sup>24</sup> ICR Pachamama “To Treat or Not to Treat? The Complex Case of Corrosion of Iron Gall Ink.” Icrpachamama, April 28, 2023.

<https://www.icrpachamama.com/en/post/to-treat-or-not-to-treat-the-complex-case-of-corrosion-of-iron-gal-l-ink>.

<sup>25</sup> Weaver, *Guide to Fiber-Base Gelatin Silver Print*

<sup>26</sup> Northeast Document Conservation Center. “Session 5: Care and Handling of Photographs.” <https://www.nedcc.org/preservation101/session-5/5-glass-supports>.

handling and storage. Broken glass not only poses a risk to the negative itself, but also to handlers and other items. It is also common for the emulsion layer to flake or separate, causing the image to be non-visible. Both collodion wet plate and gelatin dry plate negatives could decay if there are alkaline chemicals in the glass that was used, becoming wet in what is called “weeping glass”. This can cause the glass to crizzle, which is a bunch of small cracks.<sup>27</sup>

## **Housing**

Ideally the entire collection would be stored in a space that has temperature and humidity control. Proper fire, pollutant, and pest prevention systems, and a disaster plan is also recommended. Almost all of the materials require some sort of temperature and relative humidity (RH) regulations. Paper based collections are recommended to be kept at a temperature of 35-65 degrees Fahrenheit with a 30-50% RH<sup>28</sup>. Most photographs are recommended at the same regulations<sup>29</sup>. This is with the exception of glass negatives which are recommended to be stored at 20-50% RH with a 59-77F temperature<sup>30</sup> since too low of a temperature can cause the glass, emulsion, and binder to be brittle<sup>31</sup>. Gelatin silver prints are especially susceptible to mechanical change due to moisture expansion and softening, and although freezing storage is technically an option for these, it would be impractical for access and the cost does not weigh comparatively to the actual benefit.<sup>32</sup> Taking into consideration all of these guidelines, I would recommend if the entire collection is to be stored in one place, that it is regulated at about 60 degrees with a 30% RH with minimal fluctuations.

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<sup>27</sup> NEDCC, *Care and Handling of Photographs*

<sup>28</sup> “Archive Temperature And Humidity Recommendations.” Conserv, February 22, 2024.

<https://conserv.io/blog/archive-temperature-and-humidity-recommendations/>.

<sup>29</sup> University of Illinois Urbana-Campaign, *Photomechanical Prints*

<sup>30</sup> Hendriks, Klaus B. “Care of Black-and-White Photographic Glass Plate Negatives – Canadian Conservation Institute (CCI) Notes 16/2.” Canadian Conservation Institute, September 14, 2017.

<https://www.canada.ca/en/conservation-institute/services/conservation-preservation-publications/canadian-conservation-institute-notes/care-black-white-photographic-negatives-glass-plate.html>.

<sup>31</sup> Banhemann, *Preservation of Glass Plate Negatives*

<sup>32</sup> Weaver, *Guide to Fiber-Base Gelatin Silver Print*

## Drawings (3987)

All architectural drawings should be stored in steel map case drawers, like the Gaylord Archival Extra-Large 15-Drawer Horizontal Flat File<sup>33</sup>, flat, in archival folders, ideally separated by medium.<sup>34</sup> For the drawings made with ink, I am recommending Gaylord Archival Map and Print Folders<sup>35</sup>. As long as the iron gall ink is in stable conditions, it can be stored similarly to other paper materials<sup>36</sup>, so that is why I chose these large sized acid-free, lignin-free, buffered folders.

Graphite, colored pencil, and crayon are friable media, meaning that they are not well bound to the paper and can powder off. These should be framed or matted to protect the media, but should never be encapsulated.<sup>37</sup> According to the Pastel Society of America, matting materials should be 100% rag with at least ¼ space between the surface of the art and the highest point of the matting or frame<sup>38</sup>. I am recommending using Gaylord Archival Buffered 4-Ply Cream Museum Matting and Mounting Board<sup>39</sup> built in a form that has a bevel built in so the

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<sup>33</sup> “Gaylord Archival® Extra-Large 15-Drawer Horizontal Flat File | Flat Files | Document Preservation | Preservation | Gaylord Archival.”

<https://www.gaylord.com/Preservation/Document-Preservation/Flat-Files/Gaylord-Archival%26%23174%3B-Extra-Large-15-Drawer-Horizontal-Flat-File/p/HYB09311>.

<sup>34</sup> “Preserving Design Records.” Society of American Archivists.

<https://www2.archivists.org/groups/design-records-section/preserving-design-records>.

<sup>35</sup> “Gaylord Archival® Unbuffered 10 Pt. Map & Print Folders (10-Pack) | Folders | Document Preservation | Preservation | Gaylord Archival.”

<https://www.gaylord.com/Preservation/Document-Preservation/Folders/Gaylord-Archival%26%23174%3B-Unbuffered-10-pt-Map-%26-Print-Folders-%2810-Pack%29/p/HYB09115>.

<sup>36</sup> *Preservation and Conservation (PAC) Program* | Iron Gall Ink: Frequently Asked Questions. PAC North America, n.d.

[https://www.ifla.org/wp-content/uploads/2019/05/assets/pac/Documents/faq\\_iron\\_gall\\_ink\\_north\\_america.pdf](https://www.ifla.org/wp-content/uploads/2019/05/assets/pac/Documents/faq_iron_gall_ink_north_america.pdf).

<sup>37</sup> “Caring for Paper Objects - Preventive Conservation Guidelines for Collections.” Canadian Conservation Institute, May 11, 2018.

<https://www.canada.ca/en/conservation-institute/services/preventive-conservation/guidelines-collections/paper-objects.html>.

<sup>38</sup> Paschke, Chris A. “Pastels and Friable Media.” PPFA Conference, 2018.

<https://www.designsinkart.com/library/WCAF-A7197-Pastels&FriableMedia2018.pdf>.

<sup>39</sup> “Gaylord Archival® Buffered 4-Ply Cream Museum Matting & Mounting Board | Matting, Mounting & Backing Boards | Matting & Framing | Photo, Print & Art Preservation | Preservation | Gaylord

material has a buffer between it and other materials. This of course is a time consuming process, so it may be necessary to do an assessment of what materials would most benefit from this, maybe focused on finalized original drawings. The rest of the drawings should be kept between sheets of Foam Core<sup>40</sup> clipped so not to move with glassine in between to protect each piece. Some sources also recommend a fixative, but they discolor with age and can be toxic<sup>41</sup>. Also possible to store in buffed folders with glassine in between for protection temporarily, but the friable media is vulnerable to any movement or vibrations.

Blueprints, Diazo prints, photostats, photomechanical reproductions, and the print must all be stored in a different type of folder. I am recommending the large size Gaylord Archival Unbuffered Map and Print Folders<sup>42</sup>. These are free of a buffered alkaline substance since these kinds of prints might retain chemicals that can give off-gas. It is also important to keep the Diazo prints stored separately from the photostats and gelatin silver prints as they can react with silver based images due to their added anti-oxidants<sup>43</sup>. All architectural drawings and reproductions should be stored flat in the steel map case with 12 or less prints to a folder with Neutral Glassine<sup>44</sup> interleaving sheets between them<sup>45</sup>.

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Archival.”

<https://www.gaylord.com/Preservation/Photo%2C-Print-%26-Art-Preservation/Matting-%26-Framing/Matting%2C-Mounting-%26-Backing-Boards/Gaylord-Archival%26%23174%3B-Buffered-4-Ply-Cream-Museum-Matting-%26-Mounting-Board/p/HYB09658>.

<sup>40</sup> “Foam Core (25-Pack) | Boards & Paper | Conservation Supplies | Preservation | Gaylord Archival.” <https://www.gaylord.com/Preservation/Conservation-Supplies/Boards-%26-Paper/Foam-Core-%2825-Pack%29/p/HYB00959>.

<sup>41</sup> Paschke, Chris A. “Pastels and Friable Media.” PPA Conference, 2018.

<https://www.designsinkart.com/library/WCAF-A7197-Pastels&FriableMedia2018.pdf>.

<sup>42</sup> “Gaylord Archival® 10 Pt. Buffered Map & Print Folders (10-Pack) | Folders | Document Preservation | Preservation | Gaylord Archival.”

<https://www.gaylord.com/Preservation/Document-Preservation/Folders/Gaylord-Archival%26%23174%3B-10-pt-Buffered-Map-%26-Print-Folders-%2810-Pack%29/p/HYB00028>.

<sup>43</sup> Price, *Fabrication of Architectural Drawings*

<sup>44</sup> Light Impressions. “NEUTRAL GLASSINE, 32 X 40 - 100/PKG.” Accessed December 1, 2025.

<https://www.lightimpressionsdirect.com/products/neutral-glassine-32-x-40-100-pkg>.

<sup>45</sup> University of Illinois Urbana-Campaign, *Architectural Papers (Blueprint)*

## Photographs (515)

All photos including color photographic print and photocopy are subject to light damage and abrasions meaning they should be stored covered and separate from anything that can cause friction on the surface. I am recommending Unbuffered Four-Flap Negative Enclosures<sup>46</sup> because they are made of alpha cellulose fibers and pass the Photographic Activity Text (PAT) as recommended.<sup>47</sup> Four flap enclosures also allow for safe storage and handling. The image material should be kept away from the seams and stored vertically. I chose paper enclosures although plastic allows for better viewing, they are more expensive and do not protect from light, which is a main issue faced with all of the photographs in the collection, especially the color photographic prints and Diazo prints.<sup>48</sup> I am also recommending storing the enclosed prints in Black Barrier Board Photo & Print Boxes<sup>49</sup> on shelving.

## Files (3 linear feet)

Most of the files are paper based materials, meaning they have similar storage considerations as the drawings. The main difference is that any files smaller than 15x9, which most of this series should be, can be stored in upright folders. For this case I am recommending

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<sup>46</sup> “Gaylord Archival® 70 Lb. Text Unbuffered Four-Flap Negative Enclosures (50-Pack) | Archival Envelopes, Sleeves & Protectors | Preservation | Gaylord Archival.”  
<https://www.gaylord.com/Preservation/Archival-Envelopes%2C-Sleeves-%26-Protectors/Gaylord-Archival%26%23174%3B-70-lb-Text-Unbuffered-Four-Flap-Negative-Enclosures-%2850-Pack%29/p/HYB01676>.

<sup>47</sup> Weaver, *Guide to Fiber-Base Gelatin Silver Print*

<sup>48</sup> Northeast Document Conservation Center. “5.5 Storage Enclosures for Photographic Materials.”  
<https://www.nedcc.org/free-resources/preservation-leaflets/5.-photographs/5.5-storage-enclosures-for-photographic-materials>.

<sup>49</sup> “Gaylord Archival® Black Barrier Board Photo & Print Box | Archival Storage Boxes | Preservation | Gaylord Archival.”  
<https://www.gaylord.com/Preservation/Archival-Storage-Boxes/Gaylord-Archival%26%23174%3B-Black-Barrier-Board-Photo-%26-Print-Box/p/HYB09578>.

Archival Hanging File Folders<sup>50</sup> in conjunction with the Ultimate Record Storage Carton<sup>51</sup>. Each file folder should hold no more than 15 sheets per folder, and then should be stored in the archival box. Newspaper is highly susceptible to degradation and can cause chemical damage when adjacent to other materials. The collection consists of very few newspaper clippings, but they should be stored separately from any other materials, and should be put into consideration for digitization and possible deaccessioning.<sup>52</sup>

There is one format that is unique to the collection and might require specialized conservation or customized storage: “holograph on paper bound with ribbon in silk and leather”. Leather is subject to red rot depending on how it was processed<sup>53</sup> and the binder used could be an issue depending on the chemical makeup.

### Glass Plate Negatives (91)

I am recommending Unbuffered Four-Flap Negative Enclosures<sup>54</sup> for each individual negative and the Tan Barrier Board Glass Negative Storage System<sup>55</sup> to house the enclosed negatives. The four flap envelopes are ideal because they do not use adhesives. The negatives should also be stored vertically along the longest edge. They can all be stored in the same boxes since they are all the same size. The box I chose has interleaved board spacers and is P.A.T.

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<sup>50</sup> “Archival Hanging File Folders (25-Pack) | Document/Paper Storage | For the Family Historian | YourStory | Gaylord Archival.”

<https://www.gaylord.com/YourStory/For-the-Family-Historian/Document-Paper-Storage/Archival-Hanging-File-Folders-%2825-Pack%29/p/HYB09462>.

<sup>51</sup> “Gaylord Archival® Ultimate Record Storage Carton | Record Storage Cartons | Document Preservation | Preservation | Gaylord Archival.”

<https://www.gaylord.com/Preservation/Document-Preservation/Record-Storage-Cartons/Gaylord-Archival%26%23174%3B-Ultimate-Record-Storage-Carton/p/U1215>.

<sup>52</sup> NEDCC, *Caring for Paper Collections*

<sup>53</sup> Dirksen, Vicki. The Degradation and Conservation of Leather | Journal of Conservation and Museum Studies. November 1, 1997. <https://doi.org/10.5334/jcms.3972>.

<sup>54</sup> Gaylord Archival®, *70 Lb. Text Unbuffered Four-Flap Negative Enclosures*

<sup>55</sup> “Gaylord Archival® Tan Barrier Board Glass Negative Storage System | Storage Boxes | Photo, Print & Art Preservation | Preservation | Gaylord Archival.” Accessed December 1, 2025.

<https://www.gaylord.com/Preservation/Photo%2C-Print-%26-Art-Preservation/Storage-Boxes/Gaylord-Archival%26%23174%3B-Tan-Barrier-Board-Glass-Negative-Storage-System/p/HYB02400>.

tested, as recommended. On the shelves, boxes should never be stacked, but should be adjusted to match height. Ideally, you would also label the boxes with some sort of warning that there are heavy and fragile glass negatives in the box.<sup>56</sup>

### **Accessibility**

Trying to decide what materials would benefit most from digitization comes from consideration of use and deteriorative factors. Materials that get a lot of use would benefit from digitization because it allows for easier access and less handling of materials. Digitization of deteriorative or risky items can also allow for retainment of the information as well as the ability to store away the items more permanently. Two items in particular that stand out in this collection are the glass-plate negatives and the newspaper clippings.

The glass plate negatives are very subject to breakage and deterioration, meaning it would benefit from less use. I did notice that the holders of the collection already decided to digitize the plates and I agree with this choice. The newspaper clippings, although they are few, will need to be digitized in order to ensure the information is preserved. I also think it should be said that any items that are popular should also be considered for digitization to keep the handling of it to a minimum, but it would take a personal knowledge of the collection to point out specific items that are most used.

Glass plate negatives should be handled as little as possible, as it decreases the change of deterioration and damage. When handling glass plates you should use non-vinyl plastic gloves, holding it by the opposite edges to avoid dropping the plate. In order to digitize glass plates, you have to backlight the plate to make the image visible and photograph it using a camera, ideally

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<sup>56</sup> Bahnemann, *The Preservation of Glass Plate Negatives*

mounted to a stand to ensure stability.<sup>57</sup> When it comes to the newspaper pieces, it is important to consider first if the actual pieces in the collection have research value, then it must be considered what the physical condition is in. The current condition of the newspapers must be stable enough to endure the digitizing process. Most newspaper digitization seems to be done via a vendor since it can be particularly tedious, but it is up to us to decide if it should or should not be digitized.<sup>58</sup>

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<sup>57</sup> Hammond, Ariel, Noelle Zocco, Anejandra Tomeo, and Diego Jimenez. "Please Don't Break: Best Practices for Digitizing and Archiving Glass Plate Photographs." *Journal of Western Archives* 15, no. 1 (2024). <https://digitalcommons.usu.edu/cgi/viewcontent.cgi?article=1173&context=westernarchives>.

<sup>58</sup> "Guide to Digitizing Newspaper." *Library of Michigan* 1, no. 2 (2025). <https://www.michigan.gov/libraryofmichigan/-/media/Project/Websites/libraryofmichigan/For-Libraries/Digitization/Guide-to-Digitizing-Michigan-Newspapers.pdf?rev=016ecaa226bb4808ba262bf31bc4656e&hash=92CF8C6B1F25B0EAD4749678FE098E61#:~:text=Physical%20Condition%20%E2%80%93%20Is%20the%20paper,2>.

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