

Preserving Historical Materials

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Presentation at the Covered Bridge Summit 2022

Covered bridge image from M2010, Edward H. Stone collection



Covered bridge over East Canada Creek,
1899 October 3. Photograph by Thomas
D'Arcy Lucas.

Agents of Deterioration (Canadian Conservation Institute)



- Physical forces
- Thieves and vandals
- Fire
- Water
- Pests
- Pollutants
- Light, ultraviolet and infrared
- Incorrect temperature
- Incorrect relative humidity
- Dissociation (neglect)

Image from the University of Arizona, <https://research.arizona.edu/stories/art-conservation->

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Temperature and relative humidity

- General recommendation:
 - RH 30-60%
 - Temperature 35-65°F
- Datalogger for long-term data gathering and analysis
- Dew Point Calculator (IPI)
<http://www.dpcalc.org/>
- eClimateNotebook (IPI)
<https://www.eclimatenotebook.com>

Click to Solve for:

☐ Temperature

☐ % RH

☒ Dew Point

68

50

49

Temperature Scale: ☒ °F ☐ °C

Preservation Evaluation

Type of Decay	Environment Rating	Preservation Metric
Natural Aging	RISK	PI 44
Mechanical Damage	OK	% EMC 9.3
Mold Risk	GOOD	Days to Mold No Risk
Metal Corrosion	OK	% EMC 9.3

Record and Compare Values

T	RH	DP	PI	Days to Mold	EMC

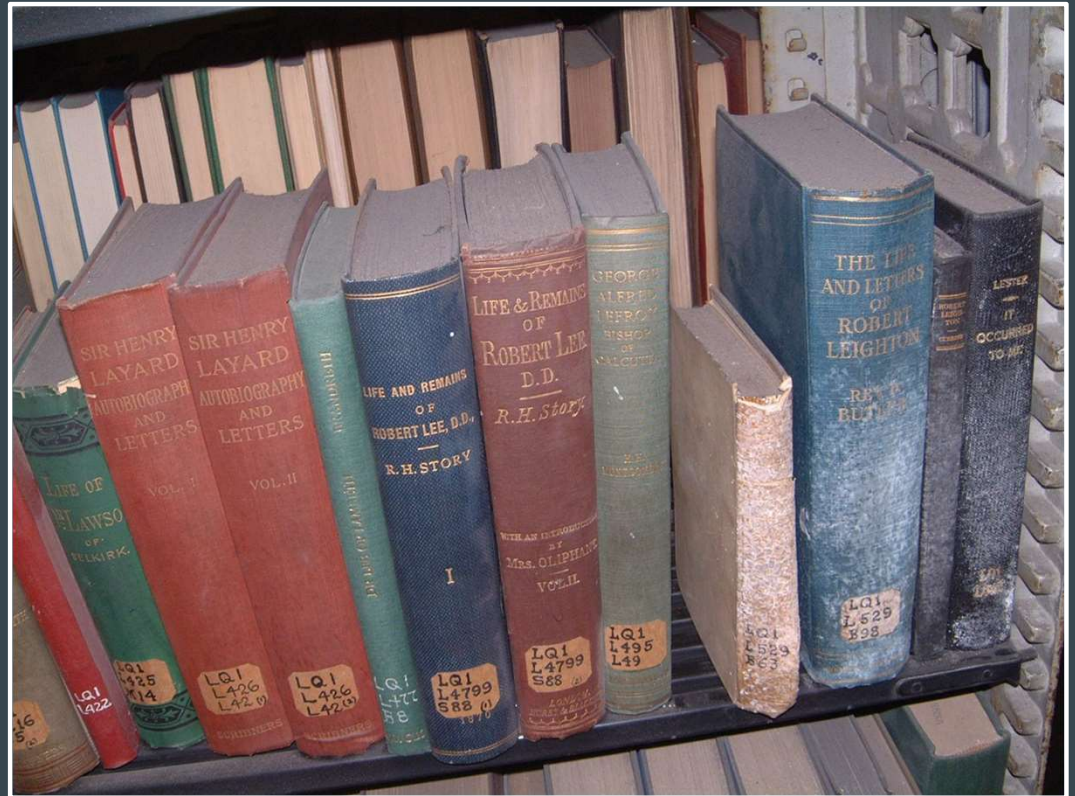
Save

Clear

Export

Pests: Mold

- Result of high humidity or wet collection material
- Health hazard
- Additional training recommended for identification and treatment
- Some materials can be cleaned but mold spores will always be present and need to be controlled



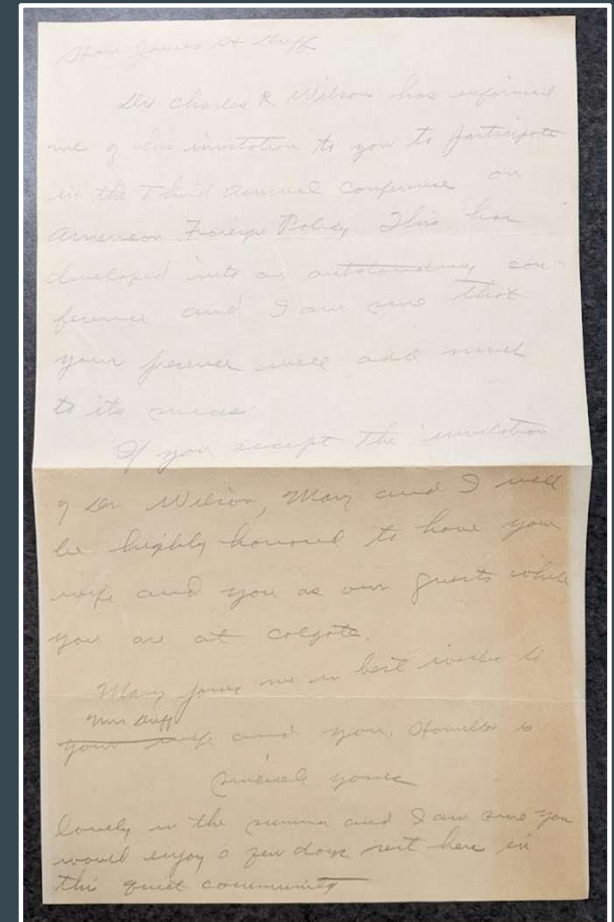
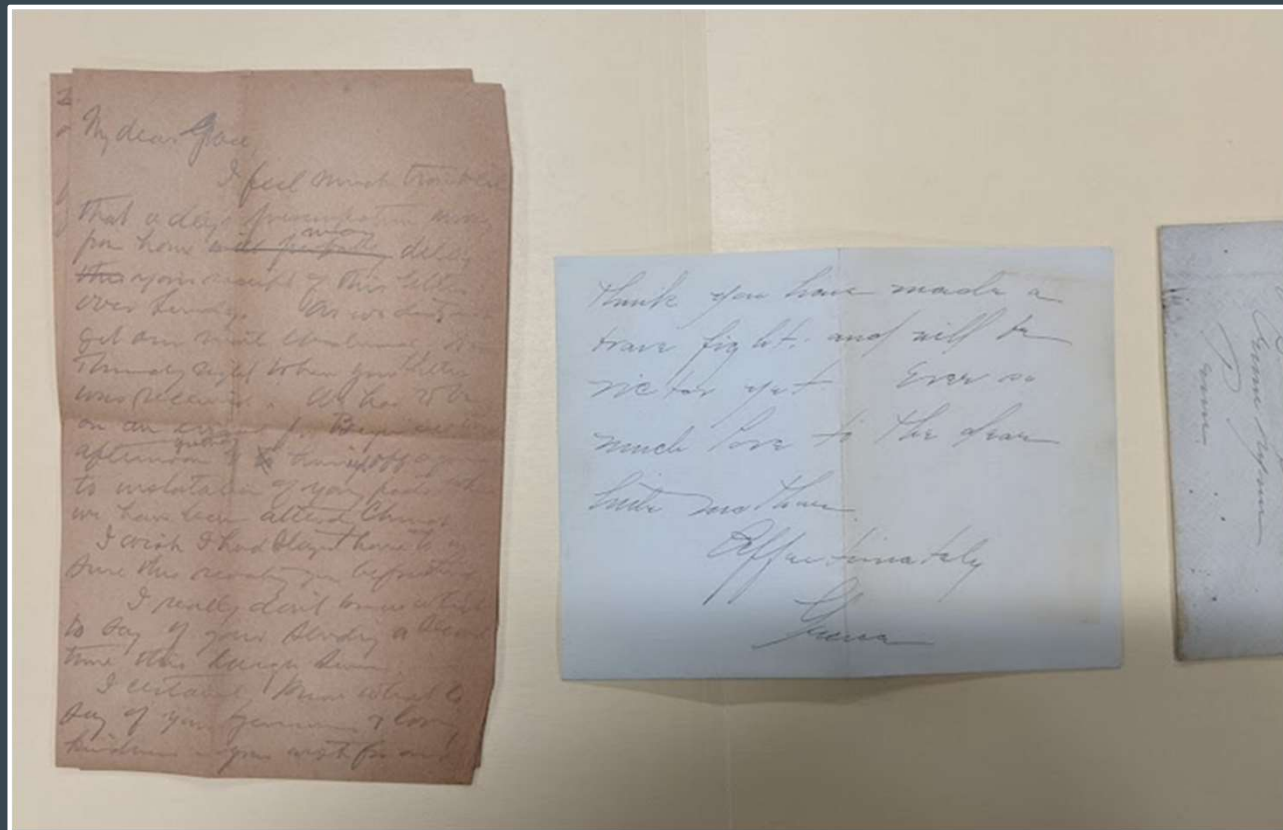
Light

- Light (ultraviolet, infrared) damages materials
- Be aware of sources of UV and infrared light
- LED lighting
 - No UV
 - No infrared
 - Energy efficient



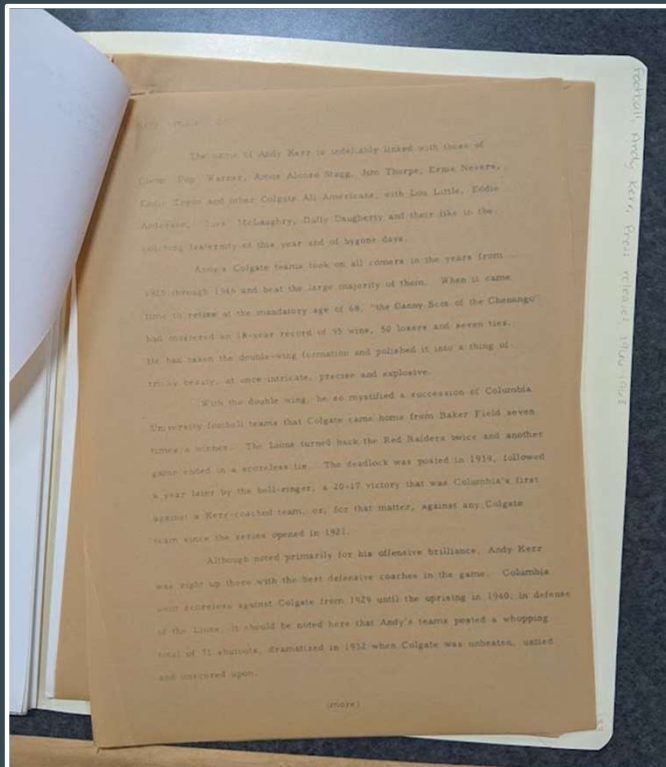
Preservation of Collections

Collections: Paper



Collections: Paper

Thermal transfer paper



Onion skin paper

Colgate University Service Record
The World War, 1917-1919

7 Nov 1921

Alumni and former students in the	
U. S. Army	734
U. S. Navy	188
U.S. Marines	18
British Army	1
British Navy	1
Canadian Army	7
Italian Army	3
Total	939

In Colgate S.A.T.C.	
Colgate Naval Unit	59
Other S.A.T.C.	13
Other Naval Units	5
National Reserve Corps	2
Total	79

With the Red Cross	
With the Y.M.C.A.	6
Faculty members	8
War Camp Community Service, Libraries, etc.	112
Total	140

These men held commissions as follows:

Army, Lieutenant Colonel 4	
Major	15
Captain	46
1st Lieutenant	82
2d Lieutenant	127
Total	283

Navy, Commanders	
Ensign	47
Lieutenant (J.G.)	7
Total	54

Marines, 2d Lieutenant	
Total	2

Chaplain Corps	
Army Captain	4
Lieutenant	15
Navy Captain	2
Lieutenant	4
Total	25

363

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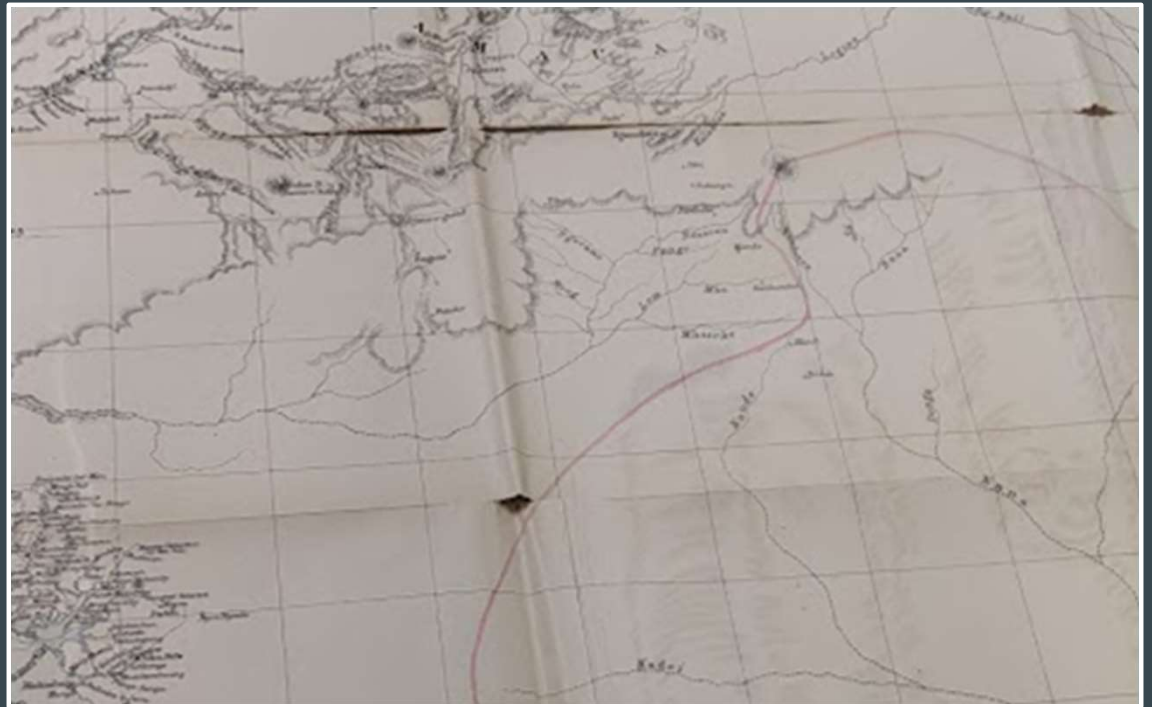
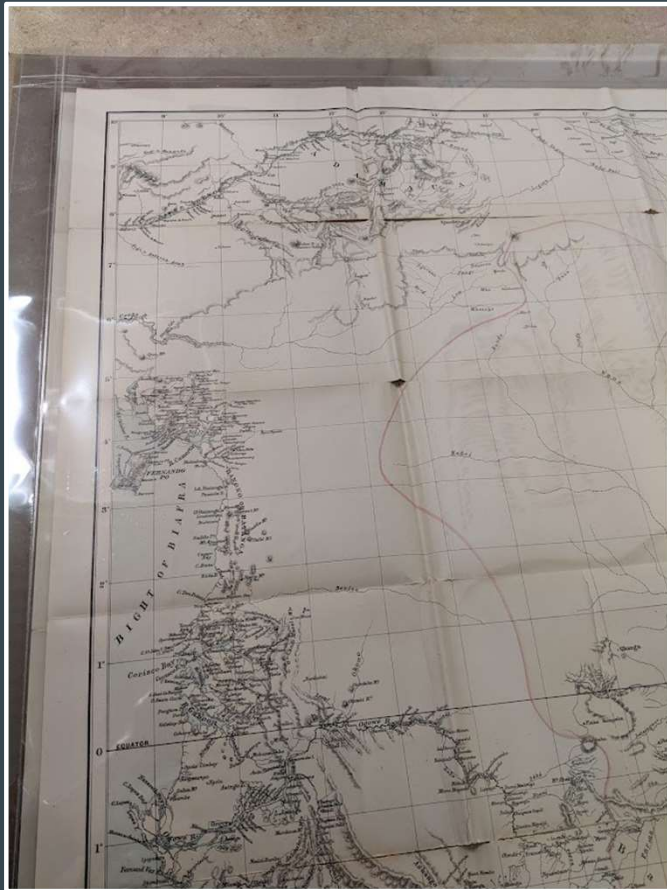
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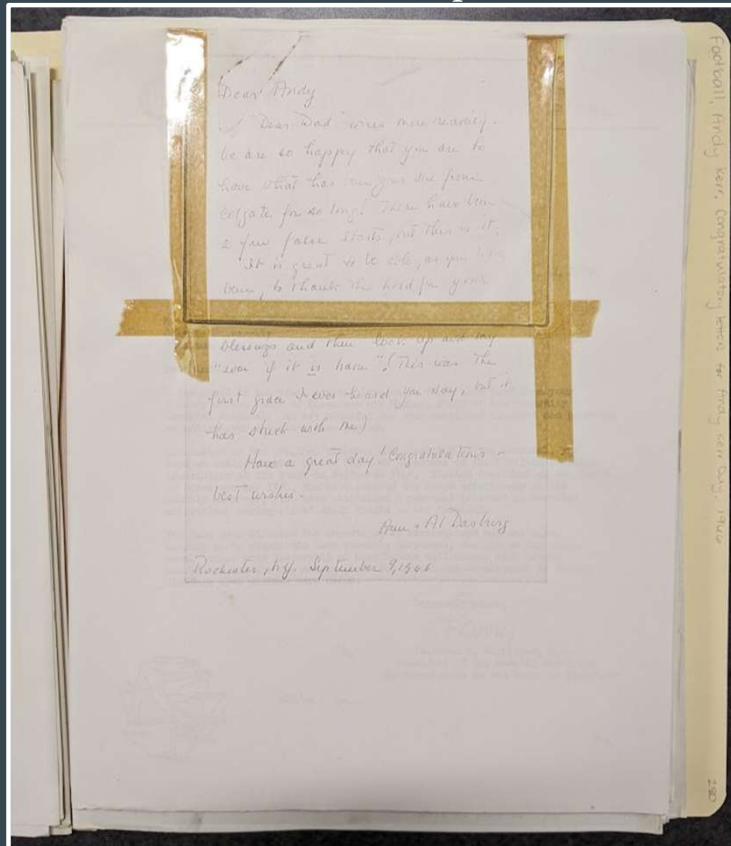
363

Collections: Paper

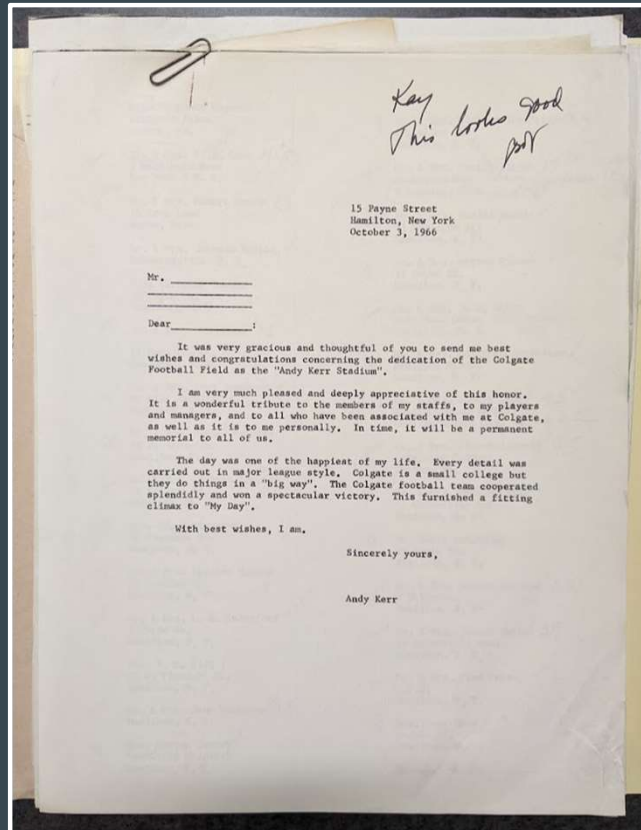


Collections: Enemies of paper

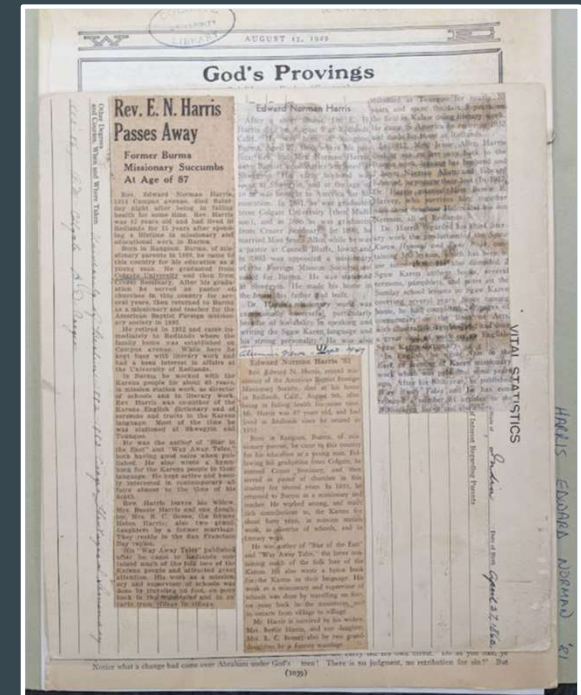
Adhesive tape



Paper clips and staples



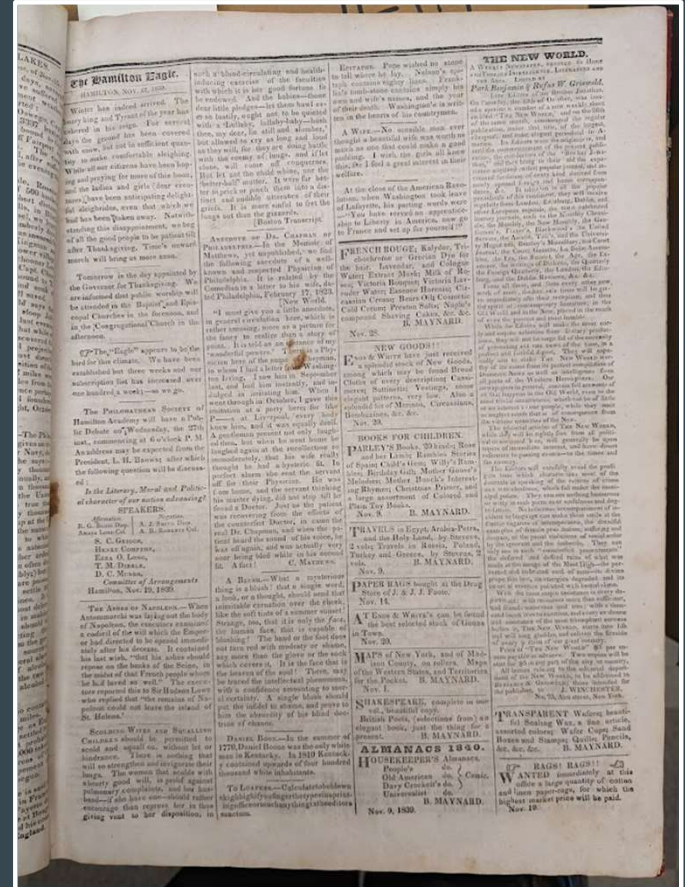
Glue



Collections: Storing paper

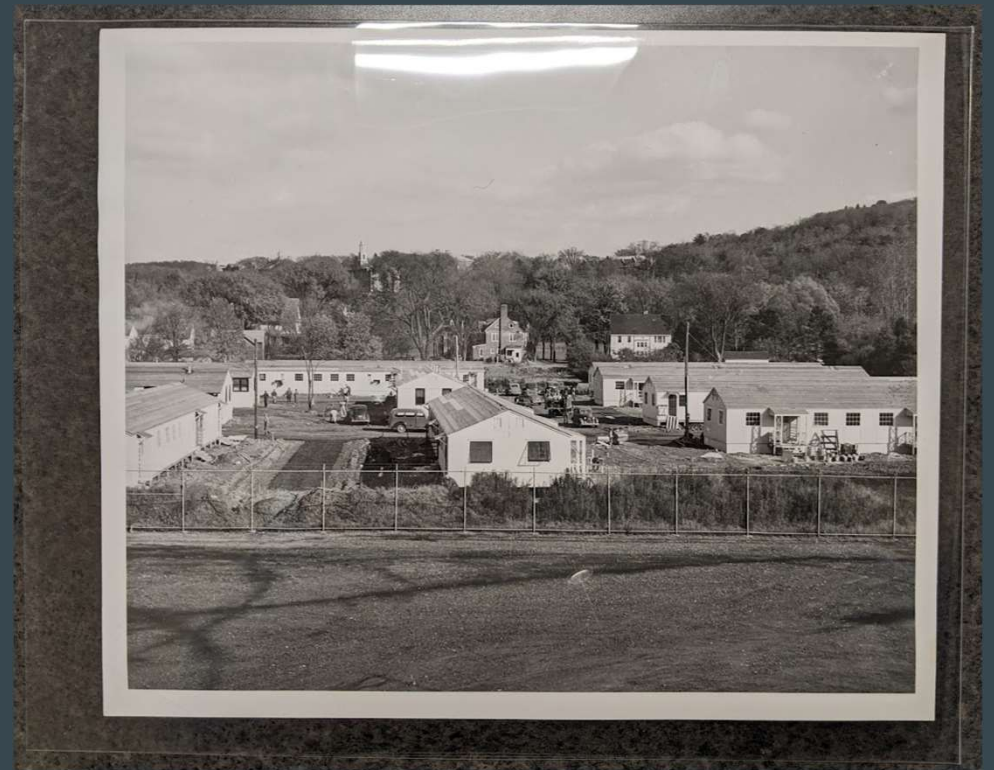
- Acid-free, lignin-free folders
- Archival boxes
- Store like-sized materials together
- Larger items should be stored flat

Collections: Newspaper



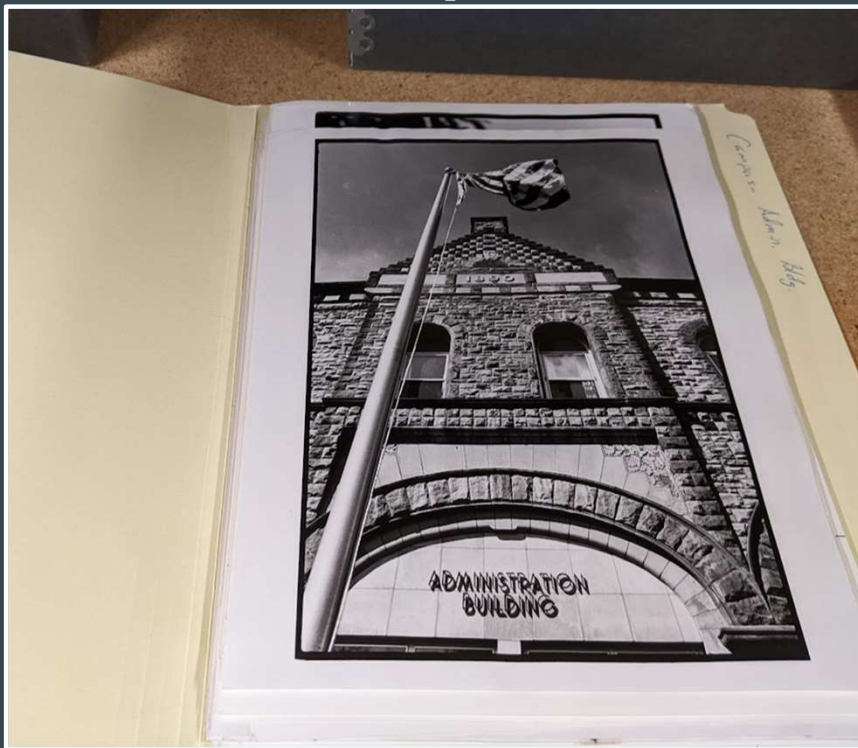
Collections: Photographic materials

Wear cotton or nitrile gloves
when handling materials



Collections: Storing photographs

Modern prints



Slides



Strip negatives



Collections: Audio and video recordings



Digitization for access, and preservation?

Resources

Northeast Document Conservation Center <https://www.nedcc.org/>

“Preservation 101: Preservation Basics for Paper and Media Collections”
<https://www.nedcc.org/preservation101/welcome>

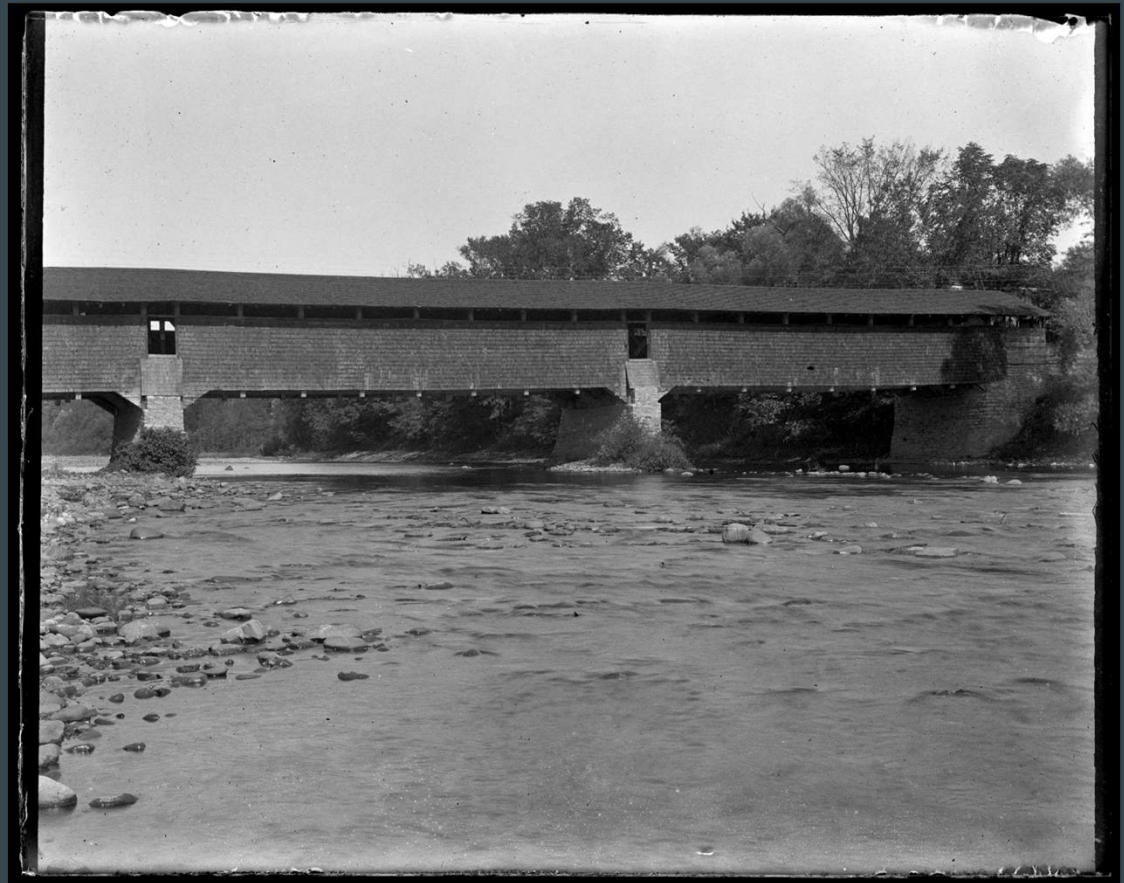
American Institute for Conservation <https://www.culturalheritage.org>

Connecting to Collections Care <https://connectingtocollections.org/>

Image Permanence Institute <https://www.imagepermanenceinstitute.org/>

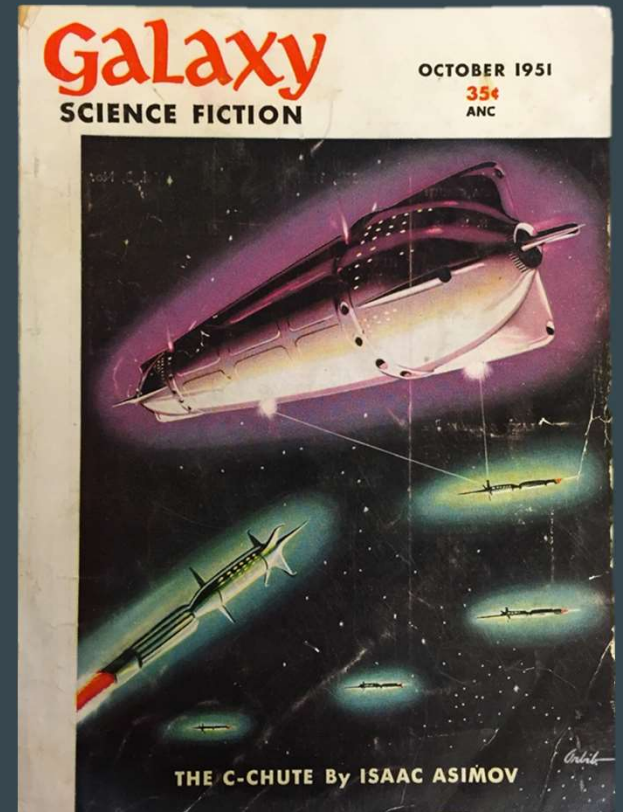
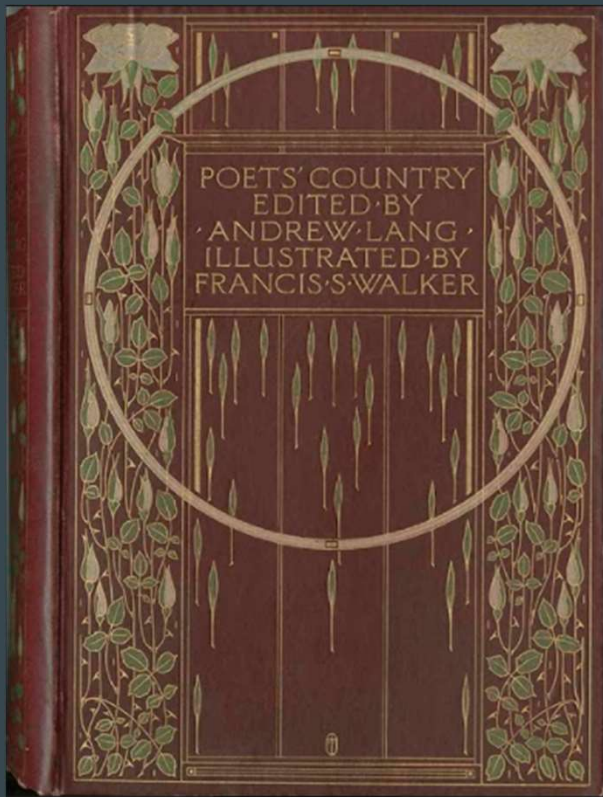
Documentary Heritage and Preservation Services for New York (DHPSNY)
<https://dhpsny.org/>

Questions?

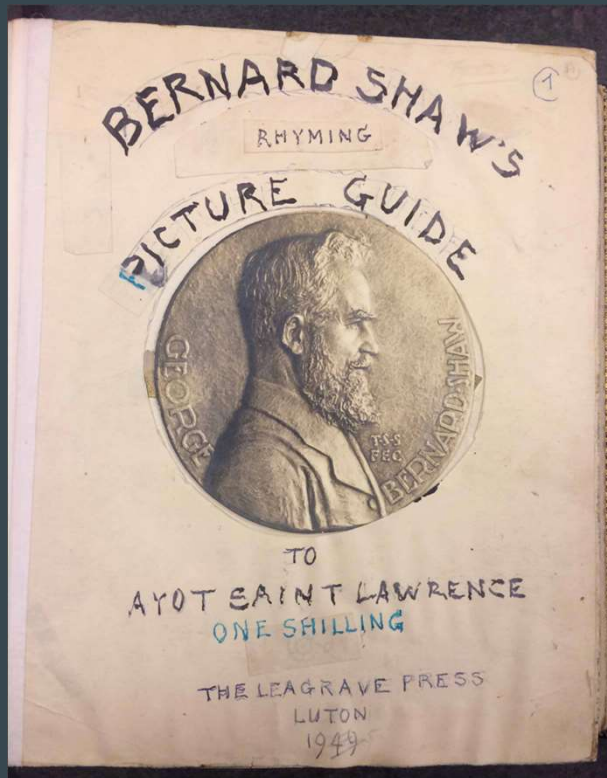


Brief introduction to Special Collections and University Archives, Colgate University

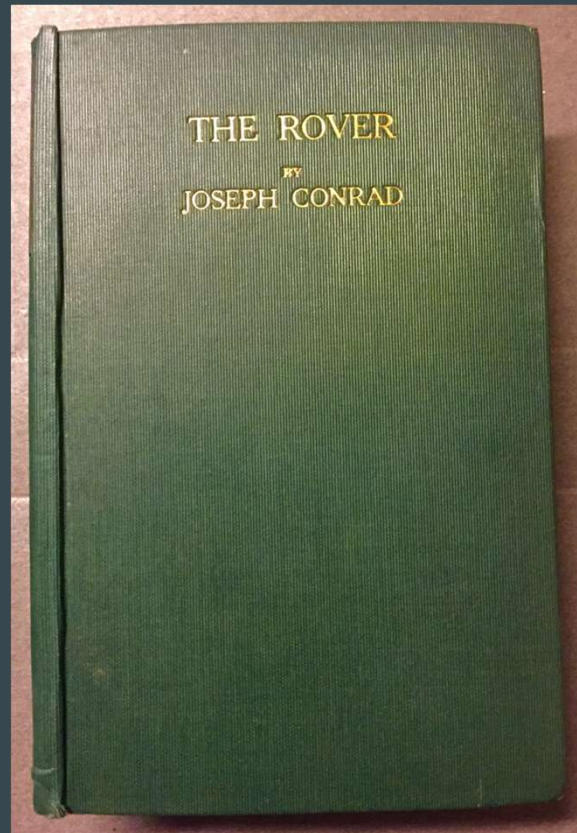
Rare Books and Manuscripts



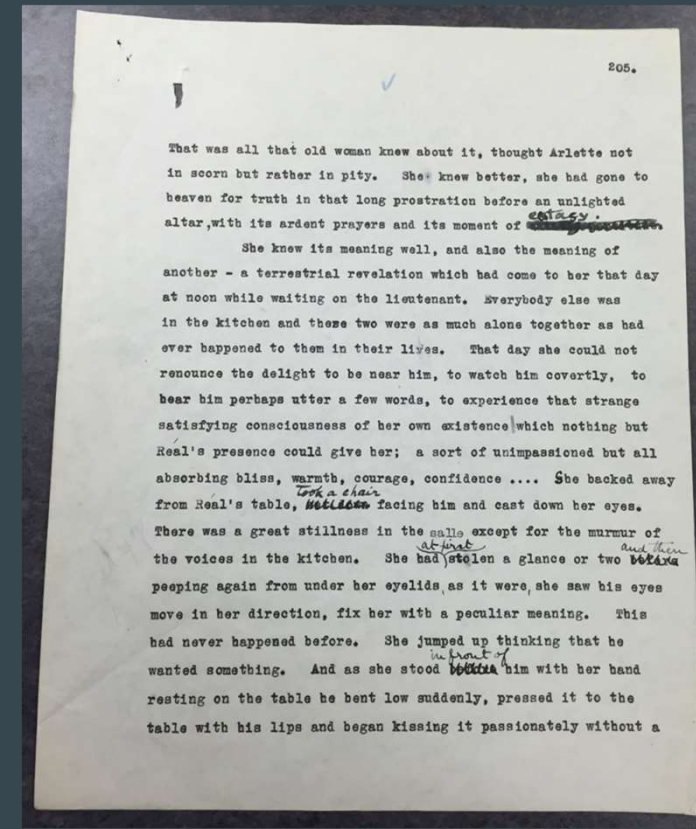
Literary Collections



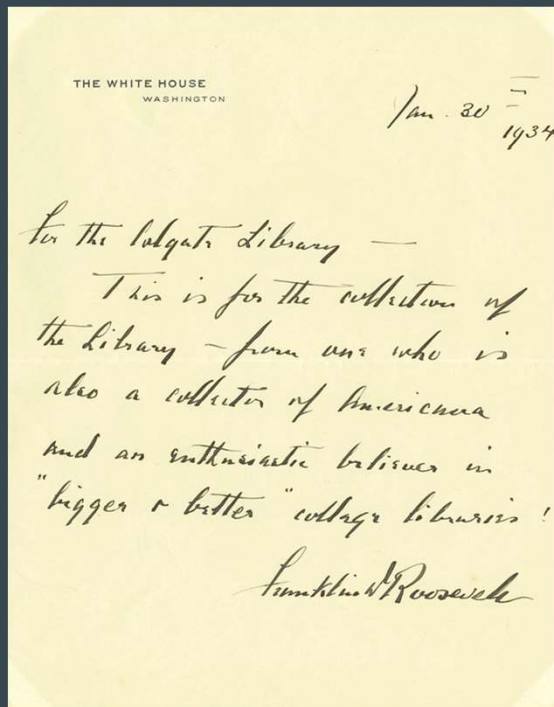
Richard S. Weiner Collection of
George Bernard Shaw, Mo100



Henry A. Colgate collection of Joseph Conrad, Mo101



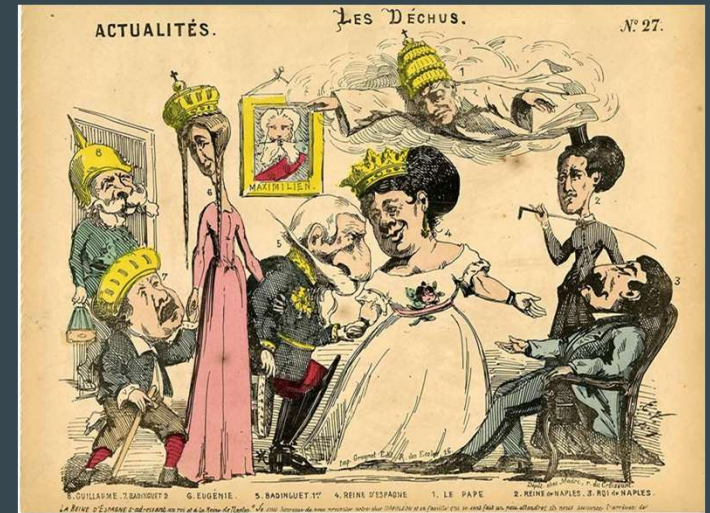
Historical Collections



Presidential letters collection, M4002

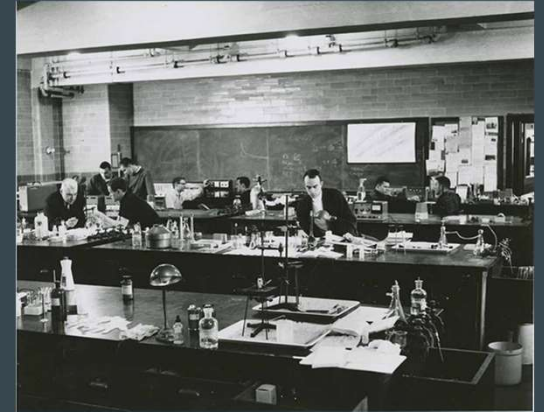
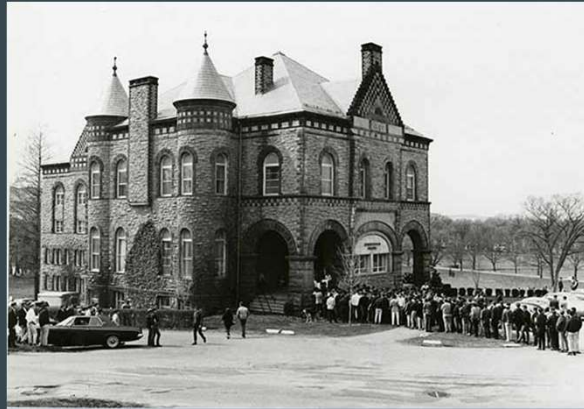


Andrew J. Russell photographs of
the American Civil War, M4013



French Political Cartoon collection, M4007

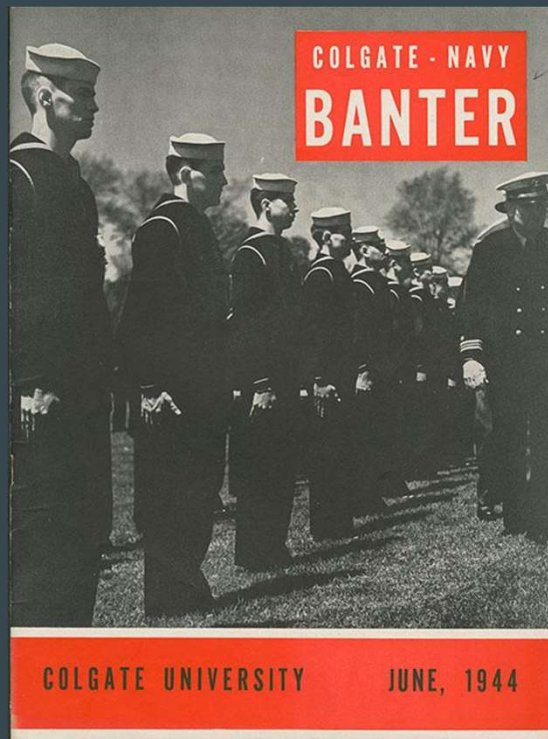
University Archives



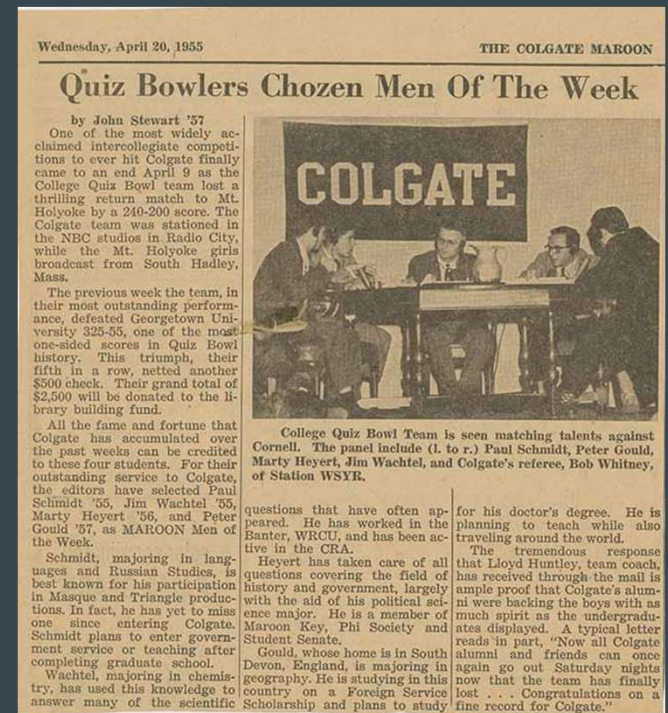
University Archives (continued)

Hamilton Lib & Theo. Seminary Aug. 4, 1837—
 Since my last date which is nearly one
 month I have been here studying as usual with
 the exception of one week absence, which on
 account of ill health I worked at haying for
 Bro. Hayward. There have been some incidents
 to break the dull monotony of things since
 my last date. An Anti-Slavery Society was
 formed in the institution in the early part of
 the term which was the second formed here.
 Though consisting of upwards of twenty mem-
 bers & prospering, the faculty pronounced it a
 nuisance & labored zealously for its dissolution.
 They wished to compel no one's conscience or
 restrain liberty in any respect save this, the so-
 ciety was noxious to the best interests of the insti-
 tution & must be dissolved. Hence the individ-
 uals composing it were presented with an offi-
 cial request to withdraw their names from the
 constitution within a fixed period or as an
 alternative leave the institution. The society
 was dissolved, all withdrawing their names
 except three who left for Hamilton College.

Isaac K. Brownson papers, A1065



The Colgate Banter,
A1085

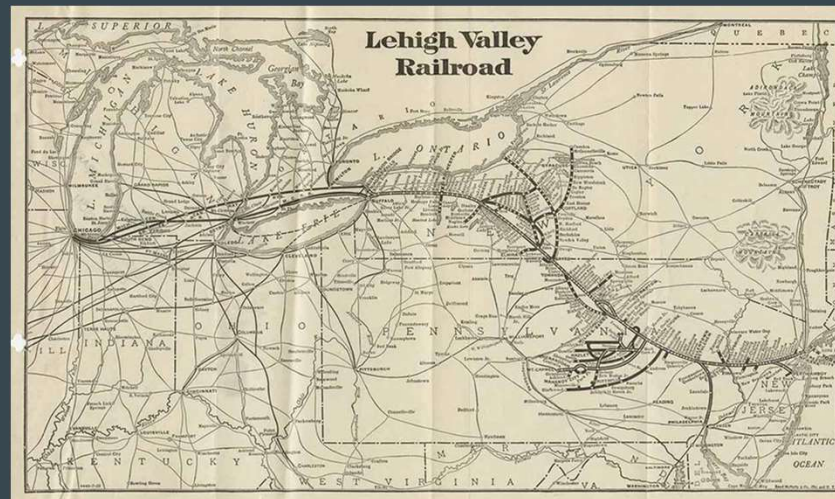


Colgate student newspaper

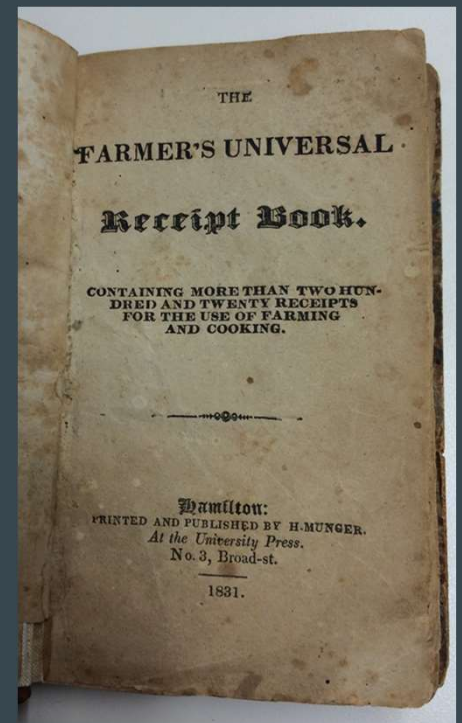
Local/Regional History Collections



Hamilton history collection, M2046



Winfield W. Robinson railroad collection, M2026



The farmer's universal receipt book.
Hamilton, [N. Y.]: H. Munger at the
University Press, 1831