User:

Please review the <u>Application Guidelines</u> for details about the information requested in this proposal. Fields marked with an asterisk are required.

Eligibility

To be eligible for a Digitizing Hidden Collections grant in 2016, applicant projects must meet the following requirements:

- Minimum allowable request for 2016: \$50,000
- Maximum allowable request for 2016: single-institution projects: \$250,000 / collaborative projects: \$500,000
- Minimum allowable project term: 12 months
- Maximum allowable project term: single-institution projects: 24 months / collaborative projects: 36 months
- Projects must begin between January 1 and June 1, 2017
- Single-institution projects must be completed by May 31, 2019
- Collaborative projects must be completed by May 31, 2020

Is this a collaborative project?

Yes/No Yes

What is the size of the request?

NOTE:

- The minimum acceptable request in this program, for all projects, is \$50,000.
- Single-institution projects can request **no more than \$250,000**.
- Collaborative projects can request **no more than \$500,000**.

Amount Requested \$448,893

Provide the proposed project length in whole months, and list the project start and end dates.

NOTE:

- All projects must begin between January 1 and June 1, 2017.
- The minimum project length, for all projects, is 12 months.
- Single-institution projects can last up to 24 months and must end by May 31, 2019.
- Collaborative projects can last up to 36 months and must end by May 31, 2020.

Project length (months) 36

Project Start Date 01/01/2017

Project End Date 12/31/2019

A note regarding principal investigators:

An individual may not be named as a principal investigator (PI) on more than one proposal, and may not serve as PI on two funded projects simultaneously. Please tick the box below to confirm your acknowledgement of and compliance with this guideline.

Tick to confirm: Confirmed

Project Summary

All applicants are required to upload a <u>cover sheet</u> with their final proposals. The cover sheet provides you with a place to point reviewers to the sections in your final proposal where you've addressed questions or concerns they have may expressed in first round feedback. <u>Click here</u> to download the cover sheet template.

Cover Sheet proposalcoversheet.pdf

Applicant Institution Northern Illinois University

Applicant Institution: legal name

(if other than above)

Collection/Project Title The Albert Johannsen Project: Digitizing the House of Beadle and

Adams and their Nickel and Dime Novels

Project Summary Northern Illinois University (NIU) and Villanova University (VU)

most important publisher of the format. The project will involve digitizing Albert Johannsen's personal collection, acquired by NIU in 1967, and will include related publications from VU's special

propose to digitize the dime novels of Beadle & Adams, the first and

collections. A total of 5,400 dime novels will be digitized and made freely available to read and download via the website Nickels and Dimes. In addition, the project will incorporate metadata from Johannsen's The House of Beadle and Adams and their Nickel and

Dime Novels (1950), one of the most significant works of dime novel scholarship and bibliography of the 20th century, including relationships between stories, editions, and authors. This will be published as open linked data on dimenovels.org and include digital

holdings information, which will be used to coordinate dime novel

digitization across multiple institutions.

Collaborating institutions (if applicable)

If this is a collaborative project, include the names of the collaborating institutions below. Use the green **add** button to list additional partners as needed.

Collaborating Institutions (if applicable)

Institution Villanova University

Quantities and Types of Original Materials to be Digitized during the Project

Enter below the estimated quantities and select the units of measurement and material types that best describe the extent of original materials that will be digitized during the project. You may add as many different measurement/material types as you like by clicking the green add button found below this section, but each individual item should be accounted for in only one category.

If the quantities provided are rough estimates rather than precise descriptions, explain the method used for estimating those quantities in the space provided for additional information.

Materials

Amount of Materials

5400

Unit of Measurement

volumes

Type of Materials

books

Type of Materials: Other

Additional information (optional)

The estimate of 5,400 volumes is derived from the original invoice received when the Albert Johannsen Collection was first purchased in 1967, exclusive of the three series previously digitized. It also includes known gaps that will be filled by items in VU's special collections.

Quantities and Formats of Master Digital Files to be Created during the Project

Enter estimated quantities of uniquely described digital files to be created through digitization, as well as the relevant format(s) created.

If additional files are to be derived from those created in the digitization process for the purposes of backup, preservation and/or access, do not count these derivative files or formats in the totals entered; you may describe any derivative formats to be created and the purposes these will serve in the space provided for additional information.

Digital Files to be Created

Quantity

166000

Format

TIFFs at 400 dpi

Additional information (optional)

Page count varies significantly series-bto-series, from 8 pages to 200 pages. There may also be significant variation even within the same series. Our estimate of 166,000 TIFFs is based on each series' average page count, as listed in Johannsen's bibliography and as corroborated by page counts derived from MARC records whenever possible.

Several derivatives are created during ingest for the purpose of access, including JPEG and JP2 images at 400 dpi and OCR and HOCR files. PDFs at 400 dpi are also created for each novel.

Catalogs/repositories/services

List the name(s) and URL(s) of the catalogs/repositories/services through which the digitized files and associated metadata will be made available.

Portals

Portal	
	Nickels and Dimes
URL	http://dimenovels.lib.niu.edu
Portal	
	The Edward T. LeBlanc Memorial Dime Novel Bibliography
URL	https://dimenovels.org
Portal	
	Dime Novel and Popular Literature (Villanova Digital Library)
URL	http://digital.library.villanova.edu/Collection/vudl:24093

Description of Content: Public

Description of materials

Provide a brief narrative description of the materials nominated for digitization, including their provenance, relevant associated people, organizations, events, and/or subjects.

Description

By 1864, Beadle & Adams had sold more than five million dime novels, making them one of the most successful publishers in the country. The secret to this success was undercutting rival publishers by selling novels for a dime, which was significantly lower than the going rate of a dollar. This was achieved by using inexpensive paper, exploiting cheaper postage rates for periodicals, and reprinting previously published works. Although their popularity waned towards

the end of the century, they were among the most significant and innovative publishers of their time, single-handedly responsible for popularizing the dime novel format and playing an important role in the evolution of American popular fiction and the novel.

Albert Johannsen (1871-1962) wrote The House of Beadle and Adams and Its Nickel and Dime Novels (1950), a landmark work in the study of 19th century popular literature and publishing. While working on his book, he amassed one of the largest private collections of dime novels and story papers in the United States, purchased by Northern Illinois University in 1967. This collection contains 6,593 publications issued by Beadle and Adams between 1852 and 1897, representing approximately 86% of Beadle & Adams' total output, including near-complete runs of Beadle's New York Library, Beadle's Half-Dime Library, the Saturday Journal, and Beadle's Weekly. The bulk of this collection consists of 25 dime novel series and 7 story papers, but also includes songbooks, handbooks, biographies, almanacs, histories, and even national tax laws.

Villanova University's dime novel collection covers gaps in the Johannsen Collection, along with related publications. The latter includes titles originally published by Beadle & Adams that were later reprinted by other publishers, like M. J. Ivers and Arthur Westbrook.

Geographic Scope

Describe the range of geographic regions represented in the nominated collection(s).

Geographic scope

Beadle & Adams were based in New York, but also had offices in London, where they published such series as American Library and American Tales. The stories themselves are predominantly set across the continental United States, from urban New York City to frontier territories in California.

Date range of materials to be digitized

Enter the earliest and latest dates the original materials in the nominated collection(s) were created, in whole years. Dates should be formatted as YYYY BC/AD – YYYY BC/AD (e.g. 356 BC - 1542 AD).

Date range of materials 1852 AD - 1910 AD

Collection level descriptions (if applicable)

If applicable, identify and provide the URL(s) for any collection-level descriptions currently available online.

Collection URL(s)

Collection name(s)

Collection Description

Collection URL

http://dimenovels.lib.niu.edu/about

Collection name(s)

LibGuide

Collection URL

http://libguides.niu.edu/dimenovels

Collection name(s)

Dime Novel and Popular Literature (Villanova Digital Library)

Collection URL

http://digital.library.villanova.edu/Collection/vudl:24093

Description of Content: Confidential

List of collections to be digitized

Your list must follow CLIR's format, found here.

List of Collections (.pdf, .xls,

johannsen listOfCollections.xlsx

.xlsx)

Current arrangement and description(s) of materials to be digitized

Provide a brief narrative that summarizes the physical arrangement and the level(s) of processing, cataloging, or other descriptive work that has previously been done for the nominated collection(s). Include the date(s) this descriptive work took place and the standard(s) and/or current format(s) of the records that were created.

Current Arrangement

The Albert Johannsen Collection consists of 330 leather-bound volumes and 600 individual volumes, which are stored in archival boxes by series. When the collection was purchased in 1967, dime novels were cataloged at the series-level only in accordance with then-AACR guidelines. Many individual issues were later analyzed under AACR2 to create brief analytics, but the majority of these cards were discarded during retrospective conversion in the 1980s. In 2004, NIU began comprehensive issue-level cataloging, leading to significantly increased collection use. NIU's 2,170 MARC monographic series records from the Johannsen Collection include a mix of AACR2 and RDA MARC records, more than half of which were created recently to support digitization. Story papers, which unlike dime novels consist of multiple serialized stories, are not cataloged as monographic series, but as serials.

Villanova University's Dime Novel and Popular Literature Collection was established in 2012 when the collection of Charles Moore Magee was rediscovered in storage. This formed the seed around which a larger collection was grown through acquisitions and donations from scholars. Because the collection is actively growing, its description is still in progress and its arrangement is evolving. It is currently housed in archival boxes arranged by series. A mixture of monographic and serial MARC records describe the collection; serial issues are given more detailed Dublin Core descriptions when digitized in Villanova's online repository. Most Beadle & Adams titles in the collection are not yet cataloged.

The dimenovels.org website is a central repository of metadata about dime novels and story papers, based on Edward T. LeBlanc's unpublished bibliography. It includes many authorities not found in the Library of Congress Name Authority File or elsewhere and also includes digital dime novel holdings, which help to unify scattered collections.

Current condition and housing of materials to be digitized and plans for their conservation and preservation

Describe the current condition and housing of the materials to be digitized, including the means through which this condition has been assessed. Identify the individual or individuals responsible for this assessment and approximately when the assessment took place. Describe the strategies to be employed for stabilization, conservation, and/or preservation of the materials, including the means through which this work will be supported and sustained long-term. Explain the environmental provisions made for the long-term management of the source materials and the strategy for responding to requests for access to them.

Current Condition

While ubiquitous in the 19th century, dime novels were considered, at best, to be disposable entertainment, or, at worst, morally dangerous, especially to young people and the working classes. As a result, most research libraries did not actively collect the format until well after the 1920s, when the books themselves were no longer commercially available. To make matters worse, dime novels were printed on the cheapest available wood-pulp paper, which has not aged well after decades of neglect. They are exceedingly brittle and prone to damage through even minimal use. NIU and VU have opted to proceed with in-house digitization of their dime novel collections, rather than outsourcing the scanning, in order to minimize handling of these materials as much as possible. At NIU, two Zeutschel scanners were purchased expressly for this purpose.

In preparation for a 2004 NEH grant application, NIU's Curator of Rare Books and Special Collections conducted an initial assessment of the Johannsen Collection, which led to the discovery of inappropriately housed materials. Over the past 8 years, as the budget has permitted, preservation work on NIU's dime novels has been focused solely on stabilization and documentation. As cataloging has progressed, individual dime novels have been rehoused in lignin-free, archivally appropriate boxes and envelopes in a secure, climate controlled environment, along with the many bound

dime novels. This stabilization process is nearly complete.

At Villanova University, when the Magee collection was rediscovered in 2012, it had been stored for decades under poor conditions and had suffered accordingly. The books have since been rehoused in archival boxes and moved to a climate controlled environment under the supervision of the Special Collections and Digital Library Coordinator to prevent further degradation. More recent acquisitions to the collection have been given a similar treatment, with any existing non-archival-quality containers discarded upon receipt.

At both institutions, handling of these materials is kept to a minimum due to the fragility of the 19th century paper. Dime novels with multiple copies are preferred for classroom use to minimize risk to unique copies. Careful, well-documented digitization of these collections will allow the fragile originals to survive for much longer while conveying their content to a broader audience. Full-text, searchable online surrogates with appropriate digital management will also provide better access than is currently available for fulfilling user requests via photocopies or ad-hoc scanning, the bulk of our current demand.

Many of the dime novels in both collections are unopened or have been stored folded, which will require unfolding, cutting, and realignment for digitization. In addition, many of the dime novels were bound together by collectors and some of these bindings are in very poor condition. Staff will be trained by NIU's Curator of Rare Books and Special Collections and VU's Special Collections and Digital Library Coordinator on specific handling procedures to open these materials or remove/repair bindings prior to digitization.

Representative samples of materials to be digitized (max. 10 pages, 12 MB, .pdf format only)

Upload a PDF document containing images of up to ten (10) selected items from the collection(s) to be digitized, and provide a brief description of the contents of the file, below. Each image should be accompanied by a description and full citation that includes the name of the holding institution, the collection title, any identification numbers or shelfmarks, and any available information about rights or licensing. The document may contain embedded URLs linking to additional content, such as sample audio or audiovisual files, but must contain samples of no more than ten items.

Description of Samples

These samples include an assortment of dime novels and story papers published by Beadle & Adams, as well as a Deadwood Dick reprint from M.J. Ivers. Most of the samples include links to surrogates in NIU's and VU's digital collections. These items were selected to demonstrate the range of content in the proposal, from western and detective stories marketed to boys to romance novels marketed to women, as well as the variety of formats, including story papers with only 8 pages and dime novels with 215 pages. Some common challenges with digitizing and describing these materials are demonstrated and described.

Samples (.pdf format only)

johannsen_samples.pdf

May CLIR excerpt from and display some portion of these representative samples within the Hidden Collections Registry, elsewhere on CLIR's website, or in program-related social media?

If you	select	"Yes"	but wou	ld pref	er that	some	represe	entative	samples	be	display	ed b	ut not	others,	note
below	which	specif	ic sampl	es CL	IR has	permis	ssion to	share.							

Yes/No	Yes
Selected Permissions (if	
applicable)	

Rights, Ethics, and Re-Use

All parties to this proposal understand that as a condition of acceptance of any *Digitizing Hidden Special Collections and Archives* award from CLIR, all recipient institutions and collaborating partner organizations will be required to sign and execute the program's intellectual property agreement.

Tick to confirm: Confirmed

All parties to this proposal understand that as a condition of acceptance of any *Digitizing Hidden Special Collections and Archives* award from CLIR, all metadata created in the course of funded project activities must be dedicated to the public domain under a CCO Creative Commons license. Exceptions may be made for culturally sensitive metadata.

Tick to confirm: Confirmed

All parties to this proposal understand that as a condition of acceptance of any *Digitizing Hidden Special Collections and Archives* award from CLIR, recipient institutions, including partnering institutions in cases of collaborative projects, must not claim additional rights or impose additional access fees or restrictions to the digital files created through the project, beyond those already required by law or existing agreements. Digital copies of materials that are in the public domain in their analog form must also be in the public domain. CLIR strongly encourages grant recipients to share digital copies as public domain resources and/or with Creative Commons licenses, as appropriate. Exceptions may be made for those materials in the public domain without the express wishes of local, traditional, and indigenous source communities.

Tick to confirm: Confirmed

Applicants who tick any of the four boxes below should provide details clarifying their responses in the Rights, Ethics, and Re-Use Statement.

Tick all that apply:

Rights, Ethics, and Re-Use statement (max. 3 pp, 2MB, .pdf format only)

Upload a description (maximum 3 pages) that summarizes all known rights, embargoes, and access or legal restrictions applicable to the source materials to be digitized and describes how these rights, embargoes, or restrictions will be communicated to the public. Identify and explain any ethical considerations that affect circulation of, access to or re-use of the digital copies. Explain the basis upon which the proposed activities are justifiably legal and ethical, and the specific terms under which users of the collections will be able to access and re-use the digital copies created through the project. Explain and justify any institutional watermarks incorporated into copies made accessible to users and any fees charged for re-use. Describe any other measures to be taken to restrict or re-define access to or re-use of the digital copies in order to comply with the law or with applicable, pre-existing agreements or contracts or to uphold ethical and moral claims and rights of individuals or communities.

Statement (.pdf format only)

johannsen_rights.pdf

Value and National Significance

Describe the impact of the proposed project upon scholarship, and explain why digitization is the most appropriate means to maximize the value and significance of the materials to scholars and students.

Address the importance of the collections to teaching, research, and the creation of new knowledge.

Value and Significance Statement

Dime novels were marketed and sold to "the millions," which included working class people and children, who often could not afford conventional hardback fiction. As the leading publisher of the format, Beadle & Adams played an important role in the evolution of the dime novel and had a significant influence on the development of early American genre fiction and the novel. A fully accessible collection of these works would be valuable for interdisciplinary research across multiple scholarly domains, including the history of the novel and publishing, the reading habits of working class people and children, and the roots of popular fiction. In the primary and secondary school context, such a collection would also provide a rich source of primary documents to aid teachers in bringing 19th century American history and culture alive.

While dime novels have been in the public domain for decades, they have received little scholarly attention relative to the other formats of popular literature that proliferated in their wake, like the pulps and comic books. In part this is because very few of these novels have been commercially available since the 1920s. Scholars and teachers interested in dime novels must have access to one of the few major research collections specializing in 19th century popular literature, limiting who is able to study this significant part of American history and culture. Mass digitization has begun to change who has access to these collections, democratizing scholarship in much the same way that dime novels themselves democratized reading.

Another barrier to studying these materials is their bibliographic complexity and lack of subject analysis. Users are presented with

hundreds of series containing thousands of titles, which were commonly reissued in numerous formats, often with major or minor variations between editions. These variations may include changes to author or title, currently invisible in the library catalog, or changes to the content of the novels themselves, like the addition of new parts or chapters. Most catalogs also lack detailed subject analysis, since dime novels have traditionally been cataloged at the series-level and because subject analysis for fiction can be challenging and time-consuming. For the uninitiated, such complexity can be intimidating and limits who is able to join the discussion. Publishing the Johannsen bibliography as linked data with subjects and keywords extracted from the text will make these relationships much more explicit.

The approach described in this proposal will also allow libraries to collaborate on dime novel digitization by providing access to digital holdings, which can be navigated using a user-friendly interface (dimenovels.org) or leveraged as linked data within discrete digital collections. Whether an edition of a story was digitized by NIU or VU does not matter to the scholar, who is primarily interested in placing that story within its larger bibliographic context. Not only will the Johannsen Project bring the bibliography directly to them, it will also break down institutional barriers to dime novel digitization, especially important given the incomplete nature of most dime novel collections.

Upload three letters of scholarly support for your project (max. 10MB, .pdf format only).

Letter #1

Letter #2

Letter #3

Project Context and Impact

List and describe all envisioned project deliverables. Explain the means through which each will be available to the public, and any applicable conditions or terms limiting their availability.

Describe all expected outcomes, how each will be made accessible to others, and under what conditions. Deliverables include the digital surrogates created during the project and related metadata, and they may also include aggregations of those files and metadata with related collections, catalog records, finding aids, authority files, description and digitization manuals, training materials, new or improved software tools, reference guides, or other outcomes of the proposed project. Address any relevant restrictions or licensing terms not already explained in the intellectual property statement.

Deliverables

The Albert Johannsen Project will result in the digitization of all publications issued by Beadle & Adams and held in the Albert Johannsen Collection, in addition to related publications from Villanova's special collections. This includes more than 5,400 dime novels and story papers.

Approximately 166,000 TIFFs will be created at 400 dpi, with JPEG and JP2 derivatives. OCR and HOCR will also be generated from the TIFFs for full-text search, including term-highlighting. OCR quality will likely vary significantly from novel to novel, depending on the condition and typography of the item. Initial tests of Beadle's Dime Novels no. 1 and Beadle's Dime Novels no. 21, comparing against the same texts in Project Gutenberg, suggest that overall word accuracy is typically in the 65-70% range, which is comparable to other 19th century text corpora (the British Library's 19th Century Newspaper Archive, for example). Multi-page PDFs of each item and JPEG cover images will be available for download, without restriction, on each book's landing page. TIFFs of illustrated covers will also be uploaded to the image sharing site Flickr, both for bulk download and because of that platform's wider reach. Finally, the entire text corpus will be uploaded to Nickels and Dimes and made available for download by digital humanists interested in analyzing the text itself, which will include word counts for each novel, so that users can make informed choices about which texts they want to use.

Metadata deliverables will include MARC records for all dime novels, which will be transformed into MODS 3.5 containing URIs for names and subjects. These URIs will come from LCNAF and LCSH, with dimenovels.org used as an authority file for names and subjects missing from other sources. The dimenovels.org database will also document the relationships between persons and their various identities. Story papers will be described down to the article level using the dimenovels.org platform, with constituent parts derived from this data and added to the MODS records. All of the dimenovels.org content will be published as linked open data, available to download on a record-by-record basis or as a bulk download in the N-Triples serialization. A subset of data specifically from the Johannsen Project will be made available explicitly under a CC0 license.

Digitized content will be made available to be searched, read, or downloaded on NIU's digital collections platform, Islandora, via the Nickels and Dimes website. All holdings will be published to the dimenovels.org bibliography, allowing virtual collocation with other items available online beyond the scope of this project. Content from the dimenovels.org bibliography, including links to related editions, will also be used to provide additional navigation options within the Nickels and Dimes interface.

The project team is also interested in adding all dime novels digitized to HathiTrust for maximum interoperability with other 19th century texts. NIU is in the process of requesting a partnership fee estimate, but HathiTrust has indicated that they may still be interested in the content even if a partnership is not possible.

Describe all outreach and marketing activities planned to maximize the impact of the project, for both scholarly and professional communities of interest.

Outreach and Marketing

In the first year of the project, the project team will call a formal advisory group of five scholars, teachers, and librarians to develop dissemination strategies and to help reach out to related scholarly and educational communities. This group will be responsible for shaping the public face of the project and will meet remotely over three years.

In addition to any recommendations made by the advisory group, the project team plans to submit articles to appropriate scholarly and professional venues, such as Dime Novel Round-Up, D-Lib, and Cataloging & Classification Quarterly. Team members have also had early discussions with the editors of Dime Novel Round-Up about guest editing a special issue, which would feature articles about Beadle & Adams, Albert Johannsen, and the project.

The project team also intends to present at national and international scholarly conferences, such as the Popular Culture Association and Society for the History of Authorship, Reading, and Publishing (SHARP).

The project will hold a national symposium in year 3 of the project, with a modest travel fund for early-career scholars. This will be modeled on "Paper for the People: A Conference on Dime Novels and Early Mass Marketing," held at Villanova University in 2013, and will include presentations, papers, a tour of the Johannsen Collection, and a dimenovels.org training workshop. These workshops will also be tested at the Popular Culture Association annual conferences and/or events focusing on the intersection of technology and the humanities, such as THATCamp or Code4Lib. In addition to training future volunteers, these workshops will be an opportunity to collect usability feedback which can be used to improve the site's aesthetics and navigation.

Prior to the symposium, K-12 educators from the Midwest will be invited for a day of workshops and presentations at NIU that will explore how dime novels might be used in Social Studies and English Language Arts curricula. Working with the advisory group, the team will develop example lesson plans, assignments, and other classroom resources modeled on those created by the Library of Congress and aligned with Common Core standards. These materials will address topics such as Western expansion, the Civil War, American Indians, and Race and Ethnicity. A modest travel stipend will be provided for those teachers who travel from out-of-state.

The project team will investigate the possibility of live streaming both the Symposium and the workshops for those unable to attend in person.

Outreach and marketing will be conducted online via social media as

content is added, consisting of brief weekly updates that highlight recently digitized dime novels. Members of the Johannsen Project team will publicize these additions across dimenovels.org's established social media platforms and channels, including Twitter and Facebook. These updates will also be shared by NIU's and VU's digital libraries across their own social media accounts. A coordinated social media strategy and timeline will be one of the project's first deliverables.

Describe any collections related to the materials nominated for digitization and describe any plans for creating meaningful linkages to those collections.

Applicants should be as specific as possible in naming these related collections. Related collections may be held by the applicant or partner institutions, or by other institutions not participating directly in the project.

Related Collections

The Edward T. LeBlanc Collection (40,000+ volumes) at NIU and Villanova's Dime Novel and Popular Literature Collection consist of materials from a variety of dime novel publishers, such as Frank Tousey and Street & Smith, and contain many more volumes than the Johannsen Collection. One of the goals of the project is to build formal relationships and workflows between NIU and VU to facilitate a more robust collaboration in the future, focused on digitizing dime novels from all publishers.

Although the Johannsen Collection is nearly comprehensive within its scope, it still contains gaps. Many of these will be filled from Villanova's collection, but other significant collections containing Beadle & Adams publications include the University of Minnesota's Hess Collection and the Frank P. O'Brien Collection at the New York Public Library. After digitizing holdings at NIU and VU, these other institutions will be approached to help with digitizing missing items. Should institutions prefer to house digital copies in their own repositories rather than through Nickels and Dimes, dimenovels.org will provide a mechanism for bringing all of this content together.

The Johannsen Collection also contains Johannsen's personal papers, including 13 volumes of notes, photographs, newspaper clippings, and correspondence compiled while writing his bibliography over the span of 17 years. We are seeking permission from Johannsen's heirs to digitize these papers, which would make a compelling complement to Johannsen's dime novel collection.

NYPL's O'Brien Collection and the Beadle & Adams Archives at the University of Delaware also include original manuscripts and personal correspondence from Beadle & Adams authors and the publishers themselves. Much like Johannsen's papers, these collections could enhance the materials nominated for digitization with relevant secondary and primary sources.

Describe any future scholarly initiatives that would be made possible by the completion of project work.

Future Initiatives

The Albert Johannsen Project has the potential to fundamentally change how 19th century American fiction is studied and taught by making freely available nearly all of the dime novels from one of the most significant publishers of the format. Because of the dime novel's popularity and its unprecedented reach to previously underserved demographics, such as working class people, they provide unique insights into contemporary attitudes on gender, class, race, and ethnicity. These publications also provided a market for early American women writers, many of whom have received little attention from scholars. Making these novels available on Nickels and Dimes will enable the creation of online exhibits and curriculum resources on these topics.

The linked open data generated through this project for dimenovels.org represents a step forward into a rapidly growing field and will provide a seed for a broad array of digital humanities and data-mashing projects. This data will be readily harvestable, so that it can be incorporated into related linked data efforts. The wealth of full text generated will also be extremely valuable for text mining, allowing construction of corpora with a better balance between popular materials and works from the established literary canon, offering a more holistic view of the 19th century literary landscape. Finally, electronically combining Johannsen's work with subsequent bibliographic work by LeBlanc and others will allow useful extensions of the existing scholarship by drawing relevant relationships between Beadle & Adams publications and later works.

Project Design

Describe prior research or experiences that have directly informed the design of the project, including any notable innovations or practices that will make the proposed approach particularly efficient, ground-breaking and/or cost-effective.

Project Context

NIU and VU have been digitizing dime novels separately for over three years. The NIU collection currently contains a total of 2,100 items, consisting of over 100,000 pages, while VU's collection contains 2,200 items, consisting of 71,500 pages. Over this time, both institutions have been optimizing workflows for digitization and metadata creation. For example, in June 2015, NIU implemented UCLA's Digital Project Toolkit, which involved formalizing guidelines for planning, scanning, and metadata creation, including checklists for quality control. This has improved tracking and communication, allowing a much higher volume of digitization with fewer errors. The Metadata Librarian at NIU also developed scripts to semi-automate the creation of MODS records from MARC, including URI reconciliation for names and subjects and keyword extraction and genre suggestion. At Villanova, a new tool was recently developed

for simultaneously reviewing and labeling pages within digitized books, improving the speed with which errors can be identified and corrected and reducing the time between scanning and public availability.

The dimenovels.org bibliography was begun in 2013 by VU, using the open source Geeby-Deeby bibliographic management platform to publish the dime novel bibliography compiled by Edward T. LeBlanc. Project contributors include VU, NIU, the University of South Florida, the American Antiquarian Society, and a small team of independent collectors and scholars. The Johannsen bibliography was previously digitized by NIU in 1999, when all three volumes were published as HTML, but these static documents were not designed to take advantage of the full power of the web. NIU plans to migrate this data into dimenovels.org.

In 2015, NIU and Villanova developed an OWL ontology to describe the relationships between dime novel editions, creative works, names, and people, which was used to publish a subset of dimenovels.org in RDF. In the process, a custom import tool was developed for loading data from NIU's MODS records directly into the database, improving the efficiency of data entry. NIU also developed a method for storing and querying the data locally, enabled by the simple RDF crawler Murpoint, allowing them to request data about related parts and editions on the Nickels and Dimes website. This project was presented at Code4Lib and PCA/ACA in March 2016.

NIU was also the lead institution on Digital POWRR (Preserving digital Objects with Restricted Resources), an IMLS-funded study that investigated, evaluated, and recommended sustainable digital preservation solutions for libraries with fewer resources. This experience informed NIU's recently formalized digital preservation policy, which is in the process of being implemented, as well as this project's Digital Preservation and Discoverability Plan.

In summary, the current proposal builds on what NIU and VU have learned in the past three years through first-hand experience digitizing dime novels, research into linked data, and the efforts of Digital POWRR. We believe that this experience will allow us to scale up our dime novel digitization efforts, while also serving as a model for other projects interested in sharing domain-specific bibliographic information as linked data and leveraging the power of RDF to collaborate on digitization projects.

Upload a project plan with timeline that includes all major project activities and deliverables, including a project timeline with deliverable deadlines (max. 3 pages, 2MB, .pdf format only).

The timeline for the project should be as explicit as possible, identifying major activities to be undertaken during each quarter of the proposed grant term and naming the parties who will participate in those activities.

Project Plan (.pdf format only)

johannsen_projectPlan.pdf

Technical Plan (max. 4 pages, 5MB, .pdf format only)

Upload a document detailing your proposed technical approach, including a description and justification for the proposed workflow that clearly identifies all tools, systems, standards, and technologies to be employed in the project.

Technical Approach (.pdf format only)

johannsen technicalPlan final.pdf

Principal Investigators/Primary Staff

Briefly describe the relevant qualifications of up to three individuals who will contribute substantially to the project. The qualifications of all named Principal Investigators (PIs) must be included here. If the project includes fewer than three PIs, applicants may optionally use this space to describe other important staff members' qualifications.

Upload resumes/CVs for these individuals below (.pdf, .doc, or .docx format only). In the event that a person holding major responsibility for the project has not yet been identified, applicants may upload a job description for that unidentified person's role.

Staff Qualifications

Matthew Short, Metadata Librarian at Northern Illinois University, has been cataloging and digitizing dime novels from NIU's Johannsen and Edward T. LeBlanc collections since 2012. He received an MLIS and a Certificate of Advanced Study in Digital Libraries from the University of Illinois, where he worked on the Illinois Digital Newspaper Project, beginning a fascination with serialization. His C.A.S. thesis, "The Dime Novel Ontology Project; or, Modeling Late 19th Century Popular Fiction," examines how serialized fiction has been cataloged historically and introduces an OWL ontology for dime novels that incorporates many existing vocabularies. This model is part of NIU's collaboration with Villanova University and dimenovels.org. He has presented on this research at the annual PCA/ACA conference twice (2014 and 2016) and at Code4Lib in 2016 with Demian Katz. In addition to taking the lead on metadata creation and ingest for digital projects at NIU, Matthew designed, coded, and maintains Nickels and Dimes. In Spring 2016, he also coached an experiential learning class through NIU's Digital Convergence Lab, working with students in the humanities and computer science to develop text mining applications for improving the efficiency and accuracy of dime novel cataloging, in particular subject analysis. He is also currently a member of the I-Share Next Task Force, which is drafting an RFP on behalf of the Consortium of Academic and Research Libraries in Illinois for a next generation library management system.

Demian Katz, Library Technology Development Specialist at Villanova University, has been intimately involved with Villanova's dime novel collection since its rediscovery in 2012 and backs up his enthusiasm for the subject area with a broad range of complementary skills. As an open source software developer, he leads the widely-adopted VuFind discovery layer project, which is used as the software front end for Villanova's Digital Library; he also maintains Geeby-Deeby, the database-driven bibliography system powering dimenovels.org. As a librarian, he has direct, hands-on experience with rare book cataloging and the entire end-to-end digitization process, from scanning through processing to description. As a scholar, he is an active member of the dime novel community, presenting regularly at the annual PCA/ACA conference and with one article published in Dime Novel Round-Up and another article forthcoming. As the manager of the dimenovels.org project, he trains new volunteers and coordinates all data entry efforts. Demian brings significant domain knowledge and a diverse set of tools and capabilities to the project.

Lynne M. Thomas, Head of Special Collections at NIU, was the co-PI for the IMLS-funded Digital POWRR project (\$575,000) and contributed to the NEH-funded 2nd phase (\$195,000). She holds an MLS from the University of Illinois and an MA from NIU. She has curated the Johannsen and LeBlanc collections since 2004, including writing two previously unfunded grant applications to digitize them, and has published peer-reviewed articles about cross-dressing in dime novels. She co-authored Special Collections 2.0 (2009) and is the co-editor of New Directions in Special Collections (forthcoming 2016) with Beth M. Whittaker (ABC-CLIO). She has won four Hugo Awards for editing and podcasting.

Resume #1 (.pdf, .doc,.docx)

short_cv.pdf

Resume #2 (.pdf, .doc,.docx)

katz_cv.pdf

Resume #3 (.pdf, .doc,.docx)

thomas_cv.pdf

Staffing

How many staff will be assigned to this project? You may include students and volunteers in this list.

Staffing

Ten staff will be hired to work on the project:

5 part-time temporary workers for dimenovels.org data entry;

4 part-time undergraduate digitization technicians; and

1 full-time project manager.

Five permanent staff will contribute to the project part-time:

- 1 Metadata Librarian (Matthew Short);
- 1 Library Technologist and Developer (Demian Katz);
- 1 Curator of Rare Books and Special Collections (Lynne Thomas);
- 1 library specialist cataloger (Kristen Lash); and
- 1 scanning coordinator (Brian Conant).

Training

Describe any training necessary to undertake the project.

Training

New digitization technicians will be trained on the appropriate care and handling of fragile dime novels and story papers, with an eye to minimizing damage during digitization. Training on special handling of fragile novels includes straightening and cutting, as well as identifying problems that require stabilization prior to digitization. They will also be trained in scanner operation, filenaming conventions, workflow tracking, and quality control assessment.

Training for temporary workers will be split into two phases:

Phase I: Story paper description – workers will be trained to transcribe titles and authors from digitized story papers into the web-based dimenovels.org system.

Phase II: Quality checking – workers will be trained to read dimenovels.org listings and Johannsen's bibliography in order to compare listings and detect errors. Workers will also be trained on making corrections in the web-based dimenovels.org system.

Each phase will require 2 hours of initial training to describe the basics; this training will be presented to small groups of employees at a single session, when possible. A reference manual and style guide has been prepared at VU and further training will be provided on an as-needed basis in response to spot-checking of data quality and employee questions.

Sustainability

Digital Preservation and Discoverability Plan (max. 2 pages, 2 MB, .pdf format only)

Upload a digital preservation and discoverability plan explaining how project deliverables will be made secure and discoverable for the long term.

Preservation/Discoverability Plan (.pdf format only)

johannsen_sustainability_final.pdf

Institutional Capacity

Upload a letter of support from the head administrator of the applicant institution.

Letter of inst. support:

Institutional Strengths

Describe the institutional strengths that justify the undertaking of the proposed project by the applicant (and any collaborating institutions). Strengths may include existing infrastructure, partnerships, professional associations, staff experience, access to local expertise (scholars, volunteers, students), financial or other resources, etc.

Institutional Strengths

NIU has a long history of successful grant-funded digitization programs and continues to maintain a Digitization Lab, equipped with two Zeutschel overhead scanners and supervised by a full-time scanning coordinator. Award-winning collaborative projects include the Southeast Asia Digital Library, funded through the Department of Education in 2005 and administered by NIU, and the Abraham Lincoln Digitization Project, one of several historical collections of primary source documents, interpretive essays, and curriculum materials. More recently, NIU has been focused on digitizing its own unique materials, including the Johannsen and LeBlanc dime novel collections. Combined, there are over 250,000 objects in NIU's digital repository, including images, sound recordings, and videos. In 2011, these were migrated from a variety of platforms into Islandora, an open source digital collections management system. Project staff have experience working with all components of the Islandora application stack, from the Fedora Commons repository to the Drupal front-end. As mentioned in the Technical Plan, there are a number of existing workflows for ingest, metadata creation, and quality control. This will allow the Johannsen Project to start digitizing dime novels and story papers on day 1 of the project.

Like NIU, Villanova University's Falvey Memorial Library has a long history of digitization. Its online Digital Library has added more than 25,000 items since opening its virtual doors in 2006. A significant portion of this content was digitized in partnership with other cultural heritage institutions. VU also has a strong track record of successful open source software development, with its Mellon-award-winning VuFind discovery layer seeing wide use and with the library's technology team actively participating in shared open source projects like the Universal Viewer and investigating trending technologies like linked data.

NIU and Villanova University have been informal partners in dime novel digitization since 2013. This has involved sharing ideas and code, coordinated digitization prioritization, and working on the Linked Open Dime Novels project. The latter, which is still ongoing, was successfully piloted in summer of 2015 using the existing dimenovels.org infrastructure and its associated network of volunteers and subject matter experts. Prior to that project, both NIU and Villanova have had consistent ties to the dime novel scholarly community, through periodic attendance and presentations at the Popular Culture Association annual conference and multiple publications in Dime Novel Round-Up.

Institutional Priorities

Describe the applicant's (and collaborating institutions') institutional priorities for digitization, digital collection development, maximizing access, and supporting scholarship, learning, and/or the public good.

Institutional Priorities

Digitization and digital collection development are core components of the NIU Libraries' recently updated Strategic Plan. Key objectives from the plan that are currently being implemented include: 1)

developing procedures for selection, digitization, metadata creation, and copyright verification; 2) writing and implementing a digital preservation policy and plan; 3) exploring models for more sustainable technological infrastructure for the digital repository; and 4) educating the University community about the purpose and scope of the digital collections through outreach and marketing.

Many of NIU's existing digital collections were grant-funded more than 15 years ago and often used formats and technologies that are obsolete today. In 2011, significant resources were invested in migrating all of these digital projects into a single, sustainable platform. This work was undertaken to provide long-term access and preservation of NIU's varied digital collections, now located in a centrally-managed digital repository. With the bulk of the migration work now complete, the focus has been on digitizing NIU's unique collections, including theses, dissertations, yearbooks, sheet music, and dime novels.

There are approximately 42,000-44,000 dime novels in the Johannsen and LeBlanc collections, which when combined make up roughly one third of the total departmental collections. Over the long term, NIU is committed to making as many of these dime novels openly available online as possible. In order to make such an undertaking manageable, the project has been broken into phases, two of which have been completed and one of which is still ongoing. The Johannsen Project would constitute the most ambitious phase of this undertaking to date.

Villanova University's Falvey Memorial Library's current five-year plan, in keeping with the University's overall Augustinian mission of supporting learning and the public good, includes an emphasis on freely sharing unique University resources (including both rare digitized library holdings and library-developed open source software) for the benefit of the larger library and scholarly communities. The Digital Library, Special Collections and Archives strategic goals in the plan specifically include "Increase Access and Publicize Materials," "Content / Scholarly Creation," and "Increase Participation in the Broader Community." Participation in this project furthers all of these goals, by highlighting and making more accessible a unique strength of the library's Special Collections, and by participating in a significant inter-institutional collaboration that will produce tools and data that can fuel future projects and scholarly initiatives.

Prior Initiatives

Provide up to three examples of prior initiatives that demonstrate preparedness of the institution(s) to undertake project work.

Initiative #1

At NIU, two phases of the dime novel digitization project have been successfully completed and a third phase is currently in progress. Over 2,100 dime novels have been digitized, with more than 100,000 pages. From the Johannsen Collection, these include Beadle's Dime

Novels and Deadwood Dick Library, available on the Nickels and Dimes site. At VU, over 2,200 dime novels have been digitized, consisting of 71,500 pages. Since 2015, NIU and VU have been informal collaborators on dime novel digitization, through coordinated prioritization and sharing of metadata.

Initiative #2

The IMLS-funded Digital POWRR (Preserving digital Objects with Restricted Resources) Project investigated, evaluated, and recommended sustainable digital preservation solutions for libraries with fewer resources. NIU served as the principal investigator and lead, partnering with five other Illinois institutions. POWRR created a workshop based on the findings of the study, presented to groups of information professionals across the country through the dissemination phase. The workshops continue through grant funding from the National Endowment for the Humanities.

Initiative #3

NIU has a long record of collaborative digitization projects. The Southeast Asia Digital Library, funded through the Department of Education, digitized thousands of digital objects from libraries around the world, while the Abraham Lincoln Digitization Project and Mark Twain's Mississippi present primarily documents held by numerous Illinois libraries. Villanova also has a long record of collaboration, digitizing materials from such partner institutions as the Independence Seaport Museum, the Berkshire Athenaeum, and numerous Catholic organizations.

Building capacity

Describe how this project contributes to building local institutional capacity, as well as the professional development of all staff involved.

Development and capacity

In the last two years, NIU's digital collections have outgrown local capacity on in-house library servers. After a great deal of discussion in the last year, it was decided that the best long-term solution for reliable and scalable digital collections was to move them into the cloud. At the end of this project, if not sooner, NIU is committed to moving all of its digital collections into AWS. If successful, the proposed Technical Plan would serve as a model for all of the digital collections at NIU.

This project also comes at a time when linked data technology is becoming increasingly widespread. The ongoing development of BIBFRAME as a possible replacement for MARC and the increased emphasis of linked data in the widely-used Fedora 4 repository platform are just two reasons that understanding linked data is vitally important for professional development as a librarian. By including a linked data component to this project, staff at both partner institutions will be enabled to learn about and work with this technology first-hand. Project staff in Technical Services, in particular, will gain practical experience with string/URI reconciliation, as well as storing and querying RDF. This tangible understanding of the tools will help prepare staff to make informed decisions and plan intelligently as new technological changes arrive in the coming years.

Funding

Budget Documents

CLIR requires all applicants to complete and upload two budget documents:

- Budget Narrative (click here for detailed information about the Budget Narrative). *No page limit, max. 2MB, .pdf format only.*
- Budget Detail (must be submitted using CLIR's Excel form; click here for detailed information about the Budget Detail). Max. 2MB, .xls or .xlsx format only.

Budget Narrative (.pdf format only) johannsen_budgetNarrative.pdf

only)

Subcontracts (No page limit, max. 5MB, .pdf format only)

Provide below any subcontracts for work associated with this project. Quotes from vendors may be provided in lieu of more formal contract documents as necessary, as long as the relevant work to be conducted and costs incurred are clearly delineated.

If your project will involve multiple subcontracts, combine them into one PDF document for upload into the system.

Subcontract(s) DiscoveryGarden Quote.pdf

Funding Justification

Explain why this project is uniquely suited to this funding program and how it reflects the program's <u>core values</u>. What prior efforts, if any, has the applicant made to identify other sources of funding for this project?

Justification

The Johannsen Project would make available thousands of novels that were far more socially influential than much of the established literary canon for the period. These have long been underutilized by scholars and teachers due to their bibliographic complexity and the incompleteness of most dime novel collections. Currently, researchers must use a combination of collector-generated print bibliographies and minimal serial catalog records to identify items in any number of special collections, then visit these collections or request photocopies. Not only does this present a significant barrier to new scholarship, but each visit or photocopy puts these fragile materials at greater risk. The open linked data that will be generated from this project will unpack this bibliographic complexity for the scholar, while also enabling other dime novel digitization projects to coordinate their efforts. More specifically, the bibliography at dimenovels.org will leverage open source software to serve as a gateway for these projects, in addition to making bibliographic and holding data available for use in discrete digital collections, like

Nickels and Dimes.

This proposal would also involve digitizing one of the most comprehensive and significant dime novel collections in the country. It seems appropriate to begin collaborative dime novel digitization on this scale with Beadle & Adams, the first publisher of the format.

NIU submitted two unsuccessful applications to digitize its dime novel collections, one in 2004 (NEH) and another in 2008 (IMLS). Comments from the 2004 application indicated that the technical plan was not sustainable, which have since been addressed through the creation of a robust pilot using open source software and best practices (Nickels and Dimes). IMLS grant comments indicated that a lack of a data management plan was the issue, subsequently addressed through the Digital POWRR Project and the development of a digital preservation policy.

Applicant Information

Applicant Institution Address

In the event this proposal is approved for funding, payment will be made to the applicant institution as named at the beginning of this application form, and will be mailed to the address listed here.



Proof of Nonprofit Status

Nonprofit Status (Max. 2MB, .pdf format only)

IRS tax status determination letter.pdf

Board/Trustee List (not required for colleges or universities; required for all other applicants)

Upload a current list of board or trustee members. The list must be on the applicant institution's letterhead.

Board/Trustee List (Max. 2MB, .pdf format only)

Board of Trustees FY16.pdf

Contact Information for Principal Investigator(s)

Provide the contact information for the proposed project's primary Principal Investigator(s) (PIs). The PI(s) will take direct responsibility for completion of the project, should funds be awarded. He or she must be significantly involved with the project's direction and execution and will be responsible for submitting required narrative and financial reports to CLIR.

Note: Applicants may propose up to three PIs for their project. All applicants must assign at least one PI. Information for co-PIs should be included below as applicable.

PI #1: Mr./Ms./Dr. Mr.

PI #1: First Name Matthew

PI #1: Last Name Short

PI #1: Title Metadata Librarian

PI #1: Institution Northern Illinois University

PI #1: Email

PI #1: Address

PI #1: City

PI #1: State/Province

PI #1: Zip/Postal Code

PI #1: Country

PI #2: Mr./Ms./Dr. Mr.

PI #2: First Name Demian

PI #2: Last Name Katz

PI #2: Title Library Technology Development Specialist

PI #2: Institution Villanova University, Falvey Memorial Library

PI #2: Email

PI #2: Address

PI #2: City

PI #2: State/Province

PI #2: Zip/Postal Code

PI #2: Country

PI #3: Mr./Ms./Dr. Ms.

PI #3: First Name Lynne M.

PI #3: Last Name Thomas

PI #3: Title Head, Special Collections

PI #3: Institution Northern Illinois University

PI #3: Email	
PI #3: Address	
PI #3: City	
PI #3: State/Province	
PI #3: Zip/Postal Code	
PI #3: Country	

Application Contact

If CLIR's point of contact during the application period should be someone other than the proposed Principal Investigator(s) (e.g. a grants administrator), enter the name and contact information for the relevant individual here.

Application Contact: Mr./Ms./Dr. Ms. Application Contact: First Name Andrea Buford Application Contact: Last Name Application Contact: Title Senior Research Development Specialist Application Contact: Institution Northern Illinois University Application Contact: Email Application Contact: Address **Application Contact: City Application Contact:** State/Province Application Contact: Zip/Postal Code **Application Contact: Country**

To view your complete application, including the contents of the files you have uploaded, <u>click here</u>. (Remember that this view-only portal has a separate password provided to you by CLIR in the email notifying you of your advancement to the second round. If you've misplaced that, just contact us at <u>hiddencollections@clir.org</u>.)

Reusage rights
(note all that apply):
Free, no watermarks (FNW)
Free, with watermarks (FWW)
Free, onsite only (FO)

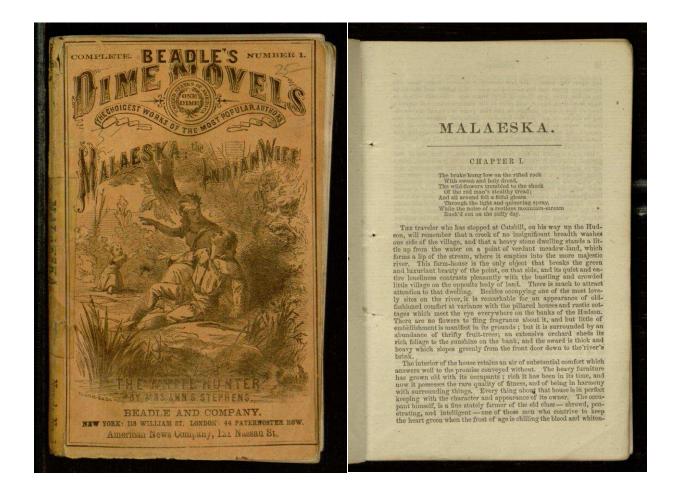
Collection Material Formats (e.g.

Holding Institution	Collection Title	Collection Size	manuscripts, photographs, etc.)	For a fee (FEE)
Northern Illinois University	Albert Johannsen Collection		5350 dime novels and story papers	FNW
Villanova University	Dime Novel and Popular Literature Collection		50 dime novels and story papers	FNW
-				
-				
			•	

Representative Samples of Materials to be Digitized

Sample #1. Mrs. Ann S. Stephens. *Malaeska, the Indian Wife of the White Hunter*. Beadle's Dime Novels; no. 1. June 9, 1860. 128 numbered pages. 6 % by 4 ½ in. Dime Novel and Popular Literature Collection, Villanova University. Available online from the Villanova Digital Library: http://digital.library.villanova.edu/ltem/vudl:286758

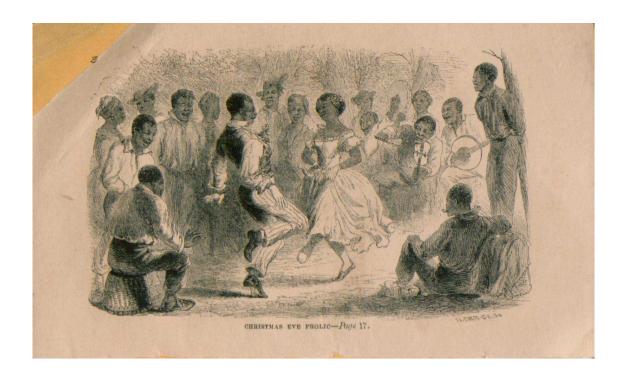
Often cited as the first dime novel, this item reprints a story that was originally serialized in *The Ladies' Companion* (1839) and tells of an interracial marriage between a Native American woman and a Caucasian man, ending with the tragic death of their son by suicide. Illustrated cover in orange wrappers, with pamphlet-style binding. Also shown is the first page of text.



Sample #2. Mrs. Metta V. Victor. *Maum Guinea and her Plantation "Children"; or, Holiday-Week on a Louisiana Estate: A Slave Romance*. Beadle's Dime Novels; no. 33. December 10, 1861. 215 numbered pages. 6 % by 4 ½ in. Johannsen Collection, Northern Illinois University. Available online from *Nickels and Dimes*:

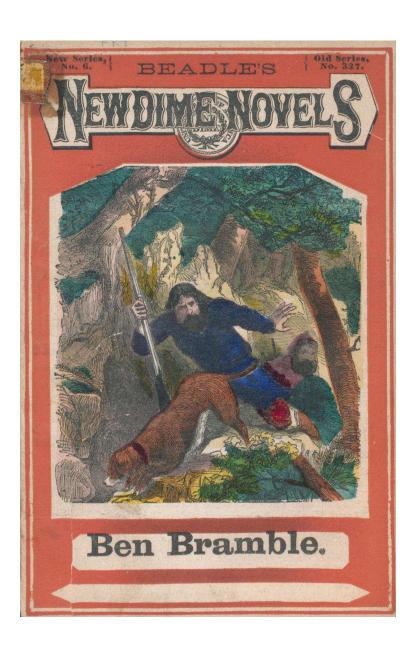
http://dimenovels.lib.niu.edu/islandora/object/dimenovels%3A110

Victor was a pioneer in the format and one of Beadle & Adam's most prolific authors, writing more than 100 dime novels, including the first American detective novel. This item, which was said to have been praised by Lincoln, expresses her strong abolitionist sentiments and deals with issues of race and gender in antebellum Louisiana. Pictured is the frontispiece by engraver Nathaniel Orr, depicting a Christmas Eve celebration on the plantation.



Sample #3. Henry J. Thomas. *Ben Bramble, the Hunter King of the Kenawha: A Tale of Kentucky*. February 9, 1875. Beadle's New Dime Novels; no. 6. 119 numbered pages. 6 % by 4 ½ in. Johannsen Collection, Northern Illinois University. Available online from *Nickels and Dimes*: http://dimenovels.lib.niu.edu/islandora/object/dimenovels%3A21983

Beadle's New Dime Novels is a continuation of the preceding series, consisting mostly of reprints with color cover illustrations. This story appeared in a total of five different series by Beadle & Adams, with major variations between editions, including changes to title, author, illustrations, character names, and the text. Johannsen argues that the story was plagiarized from a novel published by Harper & Brothers in 1844, which contains 56,000 additional words. Digitization of the Johannsen Collection using linked data from dimenovels.org would enable easy comparison of each edition.



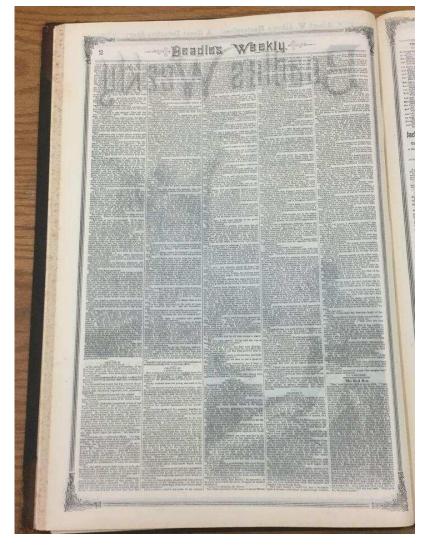
Sample #4. Beadle's Weekly ; v. 1, no. 13 (February 10, 1883). 8 numbered pages. 12 $\frac{1}{2}$ x 14 $\frac{1}{4}$ in. Johannsen Collection, Northern Illinois University.

This story paper contains 3 serialized detective stories, 3 serialized western stories, 2 short stories, 4 poems, and a number of articles, including one lengthy essay admonishing gentlemen who spit. The series focuses primarily on detective fiction and westerns and was marketed to boys. Stories by women writers were disguised by using their initials only, in addition to being significantly reduced.

Because they are so much larger and contain so many parts, digitizing and describing story papers is more challenging. Many of the story papers in the Johannsen Collection were bound by the collector. These bindings are generally in very good condition and have contributed to preserving the story papers themselves much better than unbound issues in the collection. With the introduction of wood pulp based paper, however, the quality of the paper diminished significantly, with most of the items in this series taking on a grayish tone. As depicted on the right, bleed through becomes a much more common problem as well.

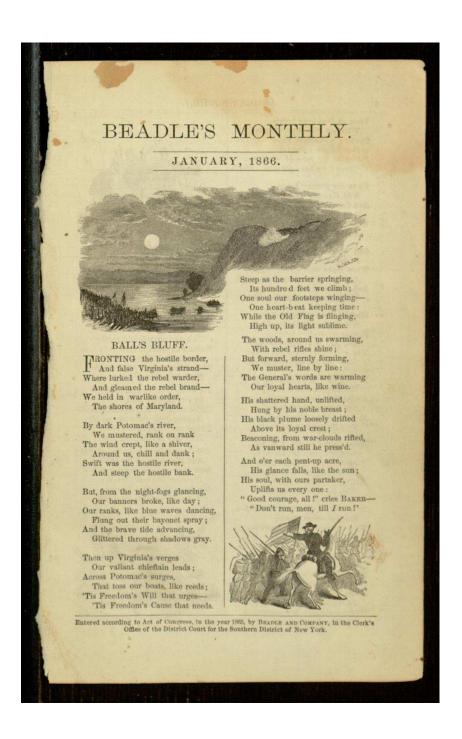






Sample #5. Beadle's Monthly (January 1866). 100 numbered pages. 9 ½ x 6 in. Dime Novel and Popular Literature Collection, Villanova University. Available online from the Villanova Digital Library: http://digital.library.villanova.edu/ltem/vudl:293113

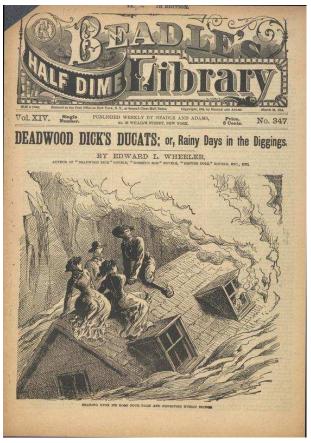
Beadle's Monthly was the publisher's attempt at a high-class magazine, intended to compete with Harper's Monthly and publishing fiction by many well-known authors of the period. The magazine was a failure, however, running for only 18 issues, because readers were not willing to associate Beadle & Adams with high-brow "literature."



Sample #6. Edward L. Wheeler. *Deadwood Dick's Ducats; or, Rainy Days in the Diggings*. March 18, 1884. Beadle's Half Dime Library; v. 14, no. 327. 16 numbered pages. 11 ¾ x 8 ¾ in. Johannsen Collection, Northern Illinois University. Available online from *Nickels and Dimes*: http://dimenovels.lib.niu.edu/islandora/object/dimenovels%3A36288

Beadle's Half Dime Library was one of the publisher's longest-running series, targeted primarily at young boys, who could more easily afford the cover price of a nickel. Over its nearly 30 year run, the Deadwood Dick stories by Edward S. Ellis were undoubtedly the most popular. The quintessential dime novel hero, Deadwood Dick is an outlaw and captain of a band of roadagents, who struggles throughout the series to reform and start a family, but is repeatedly met by betrayal and rejection. Towards the end of the series, as detective stories became more popular, Dick becomes more detective than outlaw. These stories would later be at the center of the Comstock controversy and deemed unsuitable for young readers.

Half of the issues of this series from the Johannsen Collection were bound and are in excellent condition. The other half, such as the item below, are loose and contain a number of imperfections, including missing text due to improper cutting by previous owners.



Deadwood Dick's Ducats;	and twinkling grow, in which the Dutch of his accounters was principarypole. His hart was of a figure reddish color, and the same of a figure reddish color, and the same of the figure of the same o	Rouring Roth directed Dave to kindle a fire out of some leaves and debris, and then she went and knell healds the wounded man.
6 8,	surmounted by a little cap; in other details his	
Rainy Days in the Diggings.	every day prospector.	rough, so also and predicted. He had a wiver, graceful figure, denoting great attempts and seafurance, and was cled in both and seafurance, and was cled in the property of t
BY EDWARD I. WHERLER. AUTHOR OF "DEADWOOD DICK," "ROSEHUD ROB," "DERVISE DOLL," "SKEISLA SAM" NOVELS, ETC., KTO.	he had evidently recently that.	a soit of dark clothing, with top hoots, som-
EOB," "DENVER DOLL," "SIERRA SAN"	"Well! well! are you back, at least? the girl demanded, as she turned at his approach.	In face, though now very pale, he was rather
	"Yab! I com yust so quick as I shoot dose birds." Dutch Daye replied. "You got in some	handsome, with dark magnetic eyes, a firm but pleasant mouth, a graceful mustache and im-
CHAPTER I. THE "PLAYED-OUT" PROSPECTOR. "DAVE! Dave!"	hurry, all de vile, en?	perial, and a wealth of dark hair, that clustered
"Dave! Dave!"	pour down, scon!" "Yah! I operve dot, purts quick, a csuple two or dree times. Don't nurt mpody, a leedle vater don'd. I'd makes a veller grow, day	down upon his shoulders.
A clear, ringing voice uttered the cry, and its tones reverberated along the mountain walls of the rugged gulch, with a mocking, weird	two or dree times. Don't nurt nupody, a leedle	pression of intense suffering, when Buth knell
echo- Dave! Dave! There came no other answer than the reacho.	vater, don'd. I'd makes a veiler grow, dey	She eyed him, rather curiously, as if she were
There came no other answer than the re-ocho. The clouds overhead looked dark and threat	"Nonsense, Like as not this ravine will be neck-full of a furious flood, inside of an hour. I	pression of intense suffering, when Bath knell beaton him. Imp. rather correctly, as if she were workervering to recall to mind whether she had over seen him before or not. Who are you'll be added, seening to intense who had not been been been been been been been bee
The clouds overhead looked dark and threat ening, predicting that the first inauguration of	don't see as we can go any further, to night, and the main thing to look out for ma place where	"Who are your be asked, seeming to infer that she was waiting for him to speak. "Do
the inevitable autumnal wet mason was at	the storm con't do us much barm,"	you belong to the Datchman?
period, when placer miners grow "down in the	blace. Der pe von dyin' veller, vot wants to	I am Roaring Ruth, the Girl Prospector. Who are you? I fancy I have seen your face, some-
to solo-a overhead tocsed dark and terest uning, predicting that the first imaggraphics of the inevitable autumnal wes means was at small—that oppy, soaking, steadily-pouring parfod, when placer miners grow "down in the mouth" over their inability to do much clas- than ast around the towers and drink bad liquor	heart through, and vants to make der quain-	are yout I fancy I have seen your face, somewhere,"
now and then, by meaning up weapons - a park-	dry to speng mis him his mind ond, but he me	"Very likely," he replied, dryly. "The au-
onal sea structure or overce and a right one inquestion and play carrie, me whap varying the monotony now and then, by meaning up weapons;—a parial when the winds blow high and flera, end when the mountain rivulets become floren and roaring formed, and sweep news toward the sea all obstacles coming within their reach, that a client roaring when all obstacles coming within their reach, that a client roaring out of the control of the contr	when food. It makes a wide grow, do you have a some and a some and the method of the control of	wbere." A necessary and the lift up his features. "Yesy likely," he replied, dryly, "The and "Yesy likely," he replied, dryly, est have had cate make of my pix, so well did they life it, and you may have seen it tacked up on some tree, stump or shartly-side, where men have mixed for gold. As a general thing, from one of the burnowl collars we such the offero has
rearing torrents, and sweep away toward the sen all obstacles coming within their reach, that	"A dying man? Where?" Rowner Buth looked interested.	and you may have seen it tacked up on some
a giant power could move. Down in the wild, bowlder-sown color where	"Oh! be pe lay up der mountain, a vays,	mined for gold. As a general thing, from one
see in distance coming whom their react, that a glant power could move. Down in the wild, bowlder-sown guich, where there was little foliage or vertices, except now and then a scrub fir or some runk-growing, ob-	to shoot him, vor von injines, ven be speag cop.	owner of the face."
noxious weed, stood a scrawny looking burve,	white,"	Roaring Ruth eyed him with a numbed look. "I don't know that I should know you by that description!" she said.
	"And you say he is shot?" "Yah! plum trough der heart.	"Maybe not, I am, now, a 'played' pros-
Beside the buryo, and leaning with one arm	"And you say be is short?" "Yah! plum Vrouga der heart. "And he wanted to see me?" "Yah! I Spee you he want to make his lasd "Yah! I Spee you he want to make his lasd "It und desdatorments, or somedings like doe,"	"I don't know that J about fine's year by "Mayle out. I am, now, a 'tyleput' proc. "Mayle out." I am, now the state of the state
opon its back, was the person who had uttered the call	vill und desdatorments, or somedings like dot,"	gradually dropped off, until I can't name a one
the coal. **Do a men, but a gift, when men was contained to the coal men, but a gift, when men was contained to the coal men and the coal men	will ted desilatorments or somedings like dots. "Pobalty were discussan recipit, whose "Pobalty were discussan recipit, whose Rotts concluded." Bonwere, lead the way, and I'll group and those look at life. Can the "Youl Jerrymister be go cop years like as "Youl Jerrymister be go cop years like as "You Jerrymister be go cop years like as "Only Jerrymister be go cop years like as "You Jerrymister be go cop years like as "You Jerrymister be go cop years like as "You have been as will be the proper "A strangely associated pair, those two young popil," They have a traveled, but not and good to be mounted on the proper come of the mounting comps, but it was eight as come of the mounting comps, but it was eight as come of the mounting comps, but it was eight as Topy were six account to the factories, and, in-	"Have you ever heard of a wild, reckless
though slightly inclined to robustness, was yet	and Fil goup and take a look at bim. Can the	at times, again only to espouse it; who faced
to say bandsome, but, as a jury would agree,	"Yah! Jerrymiaher be go cop youst like a	would face a single foe, and never knew a
ful and pleasant, with a sharp pair of honel	rebbet, Come!" and without further parley Dutch Dave led off.	it into a state of mortal warfare? In clearer
eyes, a pleasing mouth and fine nose, while her forehead was, for the better part, hidden be-	A strangely associated pair, those two young people. They always traveled, hunted and	meaning, did you ever hear of Deadwood Dick?" Ruth started.
A white combrero was set jauntily upon her	prospected together. They were known in some of the mountain carress, but it was only as	"I bave;" she replied. "I have heard many reports of him, both adverse and otherwise
head, from which a wealth of hair flowed in	the two rovers, Rearing Ruth and Dutch Dave.	Are you Deadwood Dick?"
	They were also known to be fearless, and, in- deed, recklessly bold, in penetrating the various labyrinths of the hills, where even old prospec-	bullet hole in me that would have killed nine
pair of fringed leggings and dainty morcasins.	tors hostated to venture.	shot was fired. How d'ye like the looks of
revolvers, and her right band supported a	altyrisate of the hills, where even did prospec- ture beliefated to vectors. The results beliefated to vectors. The results beliefated to vectors. The results beliefated to vectors and the wide of Arizons, they had been international in the company not of vectorizing control to the results of the vectorizing the results to be related to the results of the resul	thes?" He opened one hand and exposed a builtet of unissal size. Only a rifle of extraordinary hore could save sext it on its deadly errandand, clearly, it had already been used. "Heavess!" Boaring Ruth disculated, in astonishment, "He toget to kin in olephant much less a tumon boing?
ship,	epening up of several problems mining-cumps, and it was pretty generally believed that they	bors could have sent it on its deadly errand-
face as she received no answer to her cry, and	were well "heeled," as regards money, Although a young woman, and slone, save	and, clearly, it had already been used. "Heavenet" Rearing Buth ejeculated, in as-
she glanged more than once apprehensively at the sky.	for what protection Dutch Dave might be able to afford her there were few men who cared to	tonishment, "It ought to kill an elephant, much loss a human being?"
"I wonder why Dave don't come?" she mur-	risk the inevitable "trouble" resulting from of	much loss a luman being?" "Yev'i finlled to fetch ms!" Daudwood Dick said. "It will, though-1 baven't a doubt about that I am aware that I am filling up internally, and it won't take long to wind up my curer bere below." He spoke with a calminess that Ruth could
began to increase in the guich, "This narrow	It was a well-known fact that the girl was	about that. I am aware that I am filling up
of rain impending, as it appears to receive tue	and she would as lief shoot a man that insulted	my cureer here below."
therefore, would make this rugged bottom the	On the threatening night we encounter them,	not understand,
rider could live. If Dave does not return soon I	Case Binnes to a new "breeze" or "excite-	It was tecause she did not know this strangest of peculiar natures.
see glanos cure than once approbensively at the "Tember than the standard of the manuscrate and the standard of approaching religible than the standard of approaching religible than the standard of approaching religible than the standard of the standard of state inspectific, as is appears to receive the standard of t	mont," which labored under the suggestive title of Davil's Distrings, in Southern Arrests	Her interest in him, however, was already greatly aroused.
Ten minutes passed. The heavens grew densely black, and the very	Durch Dave, asthonga by no means an "old binner," to the peculiar life which he and the	"Won't you let me examine your wound?"
atmosphere was impregnated with the fore- warnings of the coming storm. Then gradu- ally, a grayish center appeared in the black mass, tinged with a purplish shade,	ber as to look at bro. On the Unredeeding night we encounter them, of the the Care Banne, to a new "lavega" or "exclusion of the Care Banne, to a new "lavega" or "exclusion" of "exclusion" of "berthe Care Banne, to a new "lavega" or "exclusion" of "exclusion"	not understand. J was become she fill not know this strangest like interest in bin, however, was already filled in the examine year wasnel? "West year in the examine year wasnel filled in the examine year. I don't care to have the woond touched year year year year.
ally, a grayish center appeared in the black	was especially a good trailer and bunter; and	young lady. I dug the bullet out myself, and
"If there isn't a regular waterspout, it'll be	craggy mountain side with the rapidity and	bled externally.
mees, tinged with a purplish shade, "If there iso't a regular waterspout, it'il be mighty queer" the girl mustered, tightening the berro's belly-band. "By jiego, Jerry, lisoks like we nin't goh' to pass a very comfort- site night, en?"	He, too, kept an anxious eye upon the over-	"Yes, you may be belord. If you-" "I don't care to have the wound touched.
looks like we nin't goin' to pass a very comfort- able night, ch?"	cast became, for he was well aware that it was co-minary store that was impending, and he was tearful they might not be she to reach the law for the common tears of the contemporary tears of the common tear	Tampering with it could do me no good. Have
As if understanding her words, the burno laid back its ears, and supplied visionals while	was fearful they might not be able to reach the	"Yes. Dave, bring me the fissk."
it shook one hind hoof, suggestively,	But, by good fortune, they did, and not a	a little of the liquor.
mistress declared, grimly.	torrents, and the darkness of night enshroused	be said, passing his hand over his forebead,
able night, ehr". As if understanding her words, the burro laid back its ears, and squeeled, viciously, while words are the properties of posting us into trouble, yet, with his lazines and benedering, time, to proper the properties of posting us into trouble, yet, with his lazines and benedering.	They had come to a half upon a little beach,	do. I must speak. As I told you a few minutes
and blundering." As she was spenking, a footstep sounded, just in her rear, and Dutch Dave made his appear-	or out cropping ledge, while above and project- ing far out over them, was another greater	ago, I have not a friend in the world who would shed a tear over my dead body. I am alone.
In her rear, and Dutch Dave made his appearance.	ledge, which snugly sheltered them from the storm.	and unbappiness has followed me to the last." You should cheer up, sir. There may be a
He was a well-formed, athletic looking fel- lew, of two-and-twenty, with a merry face	Here, upon a blanket, lay the man of whom Dutch Dave had spoken.	Tampering with it could do not us good. Here "We "Description the first part the first part "The Datebaum obeyed, and Dock swellowed "That Datebaum obeyed, and Dock swellowed "That will keep no up useful ! mast to go," "That will keep no up useful ! mast to go," "That will keep no up useful ! mast to go," the said, passing its hand over his formation of . Imate space, A. A. I took you a few minutes shed a fear cover up, dead body. I man sleen, and unhappione has followed me to the hast." "I will be a she will be a she will be a she will leight and happy future in store for yeaf! "If there is, if will not be here below? he re-
The street of th	Dates Dates Dad Michael.	A

Sample #7. Edward L. Wheeler. *Deadwood Dick on Deck; or, Calamity Jane, The Heroine of Whoop-up*. June 21, 1899. The Deadwood Dick Library; v. 2, no. 15. 31 numbered pages. 8 ½ x 6 in. Johannsen Collection, Northern Illinois University. Available online from *Nickels and Dimes*: http://dimenovels.lib.niu.edu/islandora/object/dimenovels%3A22037

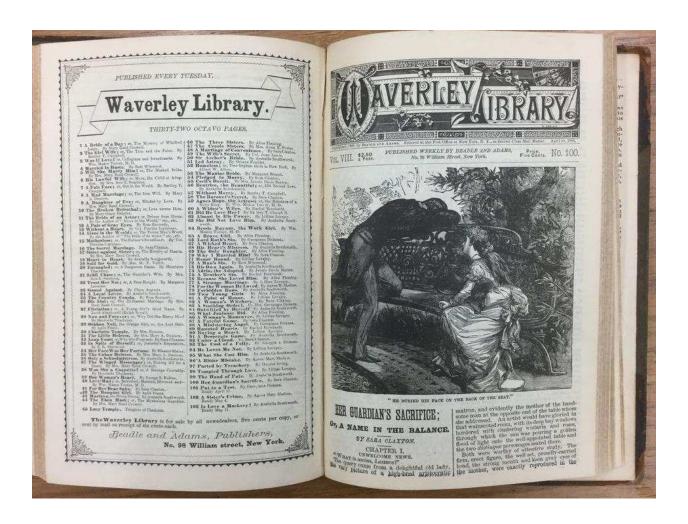
M. J. Ivers & Co. acquired the assets of Beadle & Adams after the firm finally closed its doors in 1897, and many stories originally published under the Beadle name were later reissued by Ivers. The Deadwood Dick Library was an Ivers publication reprinting titles from Beadle's Half Dime Library with the addition of color covers. The series was later reissued by Arthur Westbrook Co., one of the last publishers to keep dime novel titles in print in the United States before their near-total disappearance in the 1930's.



Sample #6. Sara Claxton. *Her Guardian's Sacrifice; or, A Name in the Balance*. April 20, 1886. Waverly Library; v. 8, no. 100. 32 numbered pages. 8 ½ x 6 in. Johannsen Collection, Northern Illinois University.

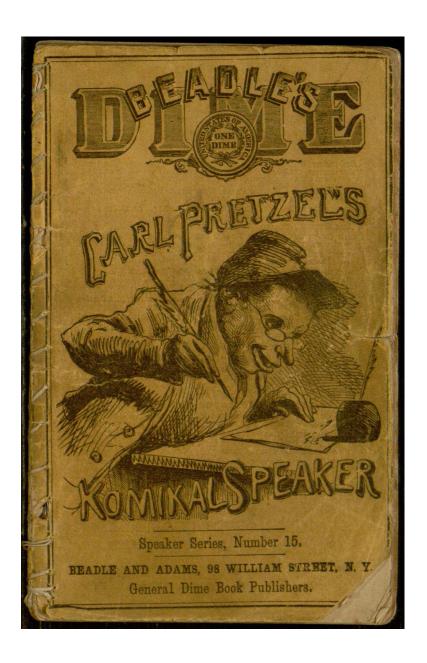
The Waverly Library was Beadle & Adam's most significant and sustained effort to attract women readers, running for 353 issues. The series featured romances by popular American women authors, including Sara Claxton, Arabella Southworth, Mrs. Metta V. Victor (writing under several pseudonyms), and Mary Reed Crowell.

As evident in the image below, many of these issues were very tightly bound. Unlike bindings in the rest of the Johannsen Collection, which were done by the collector and are in good condition, these bindings will need to be removed prior to digitization.



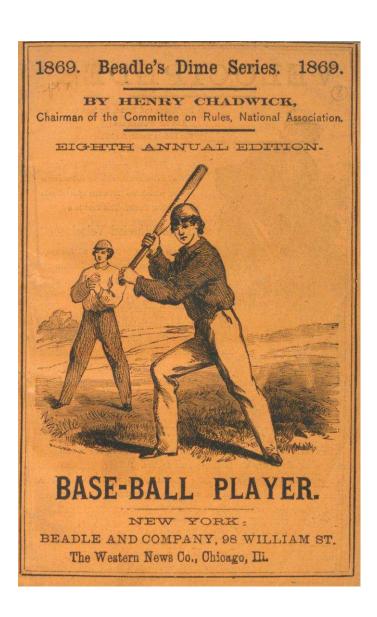
Sample #9. Carl Pretzel. *Carl Pretzel's Komikal Speaker: A New Collection of Droll, Whimsical, Laughable and Odd Pieces for Recitation, in Schools, Exhibitions, Young People's Societies, and Parlor Entertainments.* 1873. Beadle's Dime Speaker Series; no. 15. 94 numbered pages. 6 ½ x 4 ¼ in. Dime Novel and Popular Literature Collection, Villanova University. Available online from the Villanova Digital Library: http://digital.library.villanova.edu/ltem/vudl:318879

Beadle & Adams also used their distinctive paper-covered format for non-fiction publications, including texts intended for public performance such as the Dime Dialogues and Speaker Series. As this example demonstrates, many of these titles exploited contemporary ethnic stereotypes.



Sample #10. Henry Chadwick. *Beadle's Dime Base-Ball Player: Comprising the Proceedings of the Twelfth Annual Base-Ball Convention, Together with the New Rules Adopted, the New System of Scoring, Rules for the Formation of Clubs, Instructions for Players, and the Base-Ball Averages of 1868. March 29, 1869. Beadle's Dime Baseball Player*; no. 8. 100 numbered pages. 6 ½ x 4 ¼ in. Johannsen Collection, Northern Illinois University. Available online from *Nickels and Dimes*: http://dimenovels.lib.niu.edu/islandora/object/dimenovels%3A6841

Beadle & Adams produced one of the earliest baseball-related publications, with new editions issued annually for over two decades, containing evolving rules as well as statistics from the preceding year. As with the Speaker Series, these manuals share the familiar format of the Dime Novels. The Dime Base-Ball Player series have been among the most popular items on *Nickels and Dimes*, especially of interest to historians of sport and baseball.



Rights, Ethics, and Re-Use Statement

All of the dime novels and story papers in the Johannsen Collection and from Villanova's Dime Novel and Popular Literature Collection are in the public domain, with no embargoes or legal restrictions on their use. Northern Illinois University and Villanova University are both committed to making these materials freely available. Cover images, PDFs, and full-text corpora will be published on *Nickels and Dimes* in multiple downloadable formats, where users will be encouraged, but not required, to provide attribution. The following rights statement will be attached to each novel:

"Use of this public-domain resource is unrestricted, however, attribution is customary and requested."

All metadata created during the project and made available on *Nickels and Dimes* will be dedicated to the public domain under a CC0 Creative Commons license. This includes MODS and Dublin Core records and all associated linked data from the Johannsen bibliography. Metadata will also be aggregated at the Edward T. LeBlanc Memorial Dime Novel Bibliography (dimenovels.org), which is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike license. All metadata contributed to dimenovels.org over the course of the project, however, will be available as a separate download under a CC0 license.

Project Plan

The work to digitize and describe the materials in the Johannsen Project will be split into two phases, beginning with the story papers, which consist of many constituent parts and are not cataloged at the article-level, and concluding with the dime novels, which are cataloged as monographic series prior to digitization.

During the first phase of the project (January-September 2017), story papers will be digitized and ingested into *Nickels and Dimes* with minimal-level records so that they can be viewed online. Project staff at Villanova University will inspect these online versions and create more detailed description of all constituent parts on the dimenovels.org platform. Finally, the metadata in the digital repository will be augmented using a data feed from dimenovels.org, adding constituent parts to all MODS records.

The dime novel phase of the project (October 2017-December 2019) will rely on more traditional cataloging practices, with MARC records created prior to scanning for all books being digitized. Cataloging has been ongoing and should be more than 50% complete by the time the project commences. Scanned images and metadata will be simultaneously loaded into the digital repository, and this data will be automatically ingested into the dimenovels.org platform on a series-by-series basis as digitization progresses. Human quality checking and enhancement (cross-checking cataloged data with Johannsen's bibliography and adding relevant relationships) will be applied to all automatically migrated data to ensure integrity and completeness. *Nickels and Dimes* can then utilize dimenovels.org data to reveal relationships to other items and holdings in other institutions.

The timeline below shows how these tasks are broken down over the twelve quarters of the project, with the deliverables highlighted at each step. These deliverables include:

Images scanned: Individual page images (400 dpi TIFFs)

Images ingested: Page images ingested into the repository (with related derivative files generated)

MARC records: Catalog records created (in advance of digitizing dime novels) **dimenovels.org records**: Story paper issues whose contents have been described on dimenovels.org

Monographic data migration: Automated loading of MODS-derived data into dimenovels.org **dimenovels.org QC and enhancement**: Review/enhancement of data using Johannsen's bibliography

The timeline also notes other important tasks and milestones such as hiring, technology setup, and conference presentations.

Prior to start of project

- NIU completes ongoing scan and ingest of Waverly Library and Beadle's New Dime Novels
- VU adds dimenovels.org records for previously digitized dime novels
- NIU completes cataloging of 1,177 dime novels, with the remainder cataloged during the project
- VU develops documentation for dimenovels.org data entry, remediation, and enhancement

 NIU develops method for adding constituent part data to MODS records from dimenovels.org

January-March 2017

- NIU interviews and hires full-time SPS employee (Project Manager and Digital Imaging Specialist) to oversee project management, scanning, and quality control
- NIU and VU interview and hire undergraduate digitization technicians
- Co-PIs finalize standards and workflows for imaging and metadata across institutions
- Crowley calibrates and services Zeutschel overhead scanners
- Story paper scanning begins

DELIVERABLES: 15,000 images scanned; 250 MARC records

April-June 2017

- Co-PIs attend PCA/ACA Annual conference to pilot dimenovels.org workshop and meet to discuss outstanding data modeling and workflow problems
- VU hires temporary workers for story paper data entry in dimenovels.org
- NIU and the Cherry Hill Co. migrate Nickels and Dimes theme and existing collections to AWS
- Co-PIs establish coordinated social media strategy and timeline
- Story paper data entry in dimenovels.org begins
- Story paper scanning and ingest concludes
- Dime novel scanning begins

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; 600 dimenovels.org records

July-September 2017

Story paper data entry in dimenovels.org concludes

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; 914 dimenovels.org records

October-December 2017

- Data migration from MODS to dimenovels.org begins
- Annual report

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; migrate monographic data to dimenovels.org for 1 long series

January-March 2018

- Crowley calibrates and services Zeutschel overhead scanners
- Cherry Hill Co. updates Islandora to latest stable version

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; migrate monographic data to dimenovels.org for 1 long series

April-December 2018

- Co-PIs attend PCA/ACA Annual conference in April to present on the Johannsen Project and host dimenovels.org workshop
- Annual report

DELIVERABLES: 46,000 images scanned; 46,000 images ingested; 750 MARC records; migrate monographic data to dimenovels.org for 2 long series and 2 medium series

January-March 2019

- Crowley calibrates and services Zeutschel overhead scanners
- Cherry Hill Co. updates Islandora to latest stable version
- Project staff begin "Paper for the People" symposium planning

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; migrate monographic data to dimenovels.org for 6 short series

April-June 2019

• Co-PIs attend PCA/ACA Annual conference to present on the Johannsen Project, announce the "Paper for the People" symposium, and host a dimenovels.org workshop

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; migrate monographic data to dimenovels.org for 10 short series

July-September 2019

- VU interviews and hires temporary workers for dimenovels.org quality control/enhancement
- Quality control and enhancement of dimenovels.org data begins
- MARC cataloging of dime novels concludes
- Scanning of dime novels concludes
- NIU hosts "Paper for the People" symposium

DELIVERABLES: 15,000 images scanned; 15,000 images ingested; 250 MARC records; migrate monographic data to dimenovels.org for 17 short series; quality control and enhancement on 25 dimenovels.org series

October-December 2019

- Data migration from MODS to dimenovels.org concludes
- Quality control and enhancement in dimenovels.org concludes
- Dime novel ingest concludes
- Final annual report

DELIVERABLES: 15,000 images ingested; migrate all remaining monographic data to dimenovels.org; quality control and enhancement on all remaining dimenovels.org series

Technical Plan

Project staff will digitize approximately 5,400 dime novels, consisting of 166,000 pages. These will be made freely available to the public on Northern Illinois University's *Nickels and Dimes* website, in addition to 2,000 dime novels that have been previously digitized. Metadata will be aggregated at dimenovels.org, enhanced to include relationships from the Johannsen bibliography and published as open linked data. This data will then be harvested and cached locally for use within *Nickels and Dimes* to display relationships between dime novels, as well as digital dime novel holdings at other institutions.

Nickels and Dimes: This proposal calls for using Islandora 7.x-1.7 or the latest stable release version at the time the project commences. Built on Drupal, Fedora Commons, and Solr, Islandora consists of solutions packs, viewers, and utilities that allow users to work with and access various kinds of data. The proposed configuration includes both a production server and a staging server for better performance during ingest and derivative creation.

The production server will use an Amazon EC2 m4.xlarge instance (16GB RAM; 4 vCPU) with 500GB of general purpose SSD EBS instance storage (operating system, applications, Solr index, etc.) and S3 storage for the Fedora Commons data store. The MySQL database for Fedora and Drupal will reside on a dedicated db.t2.medium Aurora AWS RDS instance.

The staging server will use an Amazon EC2 m4.large (8GB RAM, 2 vCPU) with 500GB of general purpose SSD EBS instance storage. The Drupal site on the staging server will be configured to use the same MySQL AWS RDS instance as the production server. The m4.large-sized server allows NIU to isolate ingest and derivative creation from serving the website to the public.

dimenovels.org: The dimenovels.org site is hosted on a virtual server at Villanova University. The bibliography itself is powered by Geeby-Deeby, a PHP/Zend Framework 2 application which manages a MySQL-powered bibliographic database and, through content negotiation, publishes a subset of that database as RDF. This RDF data can be harvested with a variety of tools and ingested into any standard triplestore. Murpoint, a simple crawler, was written specifically to extract dimenovels.org RDF in a targeted fashion. For the purposes of this collaboration, a local copy of the data will be hosted at NIU within a BlazeGraph triplestore. The easy replication of RDF data allows scalability for searching, so that NIU's front-end infrastructure is not directly dependent on dimenovels.org. The dimenovels.org site itself has its own scalability through Villanova's virtual server infrastructure, which offers the possibility of increasing resources on demand; however, the requirements of this project are not expected to impose a significant load on the existing system.

<u>Dime Novel Ontology</u>: The Dime Novel Ontology is written in OWL/XML. It includes the local classes CreativeWork, Edition, Series, and Copy, intended to align with the existing dimenovels.org data model. Issues of a Series are treated as CreativeWorks containing one or more CreativeWorks, each of which is assigned an Edition. CreativeWorks can also be used as containers for other CreativeWorks, such as in the case of serialized stories. These local classes may be aligned with existing models or those currently in development, such as BIBFRAME, shema.org, or RDA. The majority of properties are taken from RDA Unconstrained, with the local classes used in the domains and ranges. The model also includes partial imports from FOAF, SKOS, and Dublin Core, which are primarily used to relate people to their identities.

Workflow:

The workflow below is currently used at NIU to digitize dime novels. VU uses a similar digitization workflow, with slight variations (e.g. scanning equipment). Any significant differences will be discussed and resolved in the first quarter of the project.

- 1. Cataloging. All novels are first cataloged in MARC using RDA. Catalogers assign names from LCNAF and subjects/genres from LCSH. Local names, subjects, genres, and formats are also added, which are constructed according to RDA and maintained in dimenovels.org, serving as a local authority file. Story papers are cataloged at the series-level only.
- 2. Batch Processing & Tracking. Prior to digitization, a series is broken into batches of approximately 50 individual issues. Each item is triaged, with fragile items and those that require cutting, straightening, or special handling set aside for review and stabilization. Using a unique series name and number, a directory is created on the NAS at NIU for each title in the batch and added to an online spreadsheet. This spreadsheet is used throughout digitization to track each stage of the workflow described below.
- 3. Scanning & Image Processing. Staff in the Digitization Lab at NIU perform image capture on one of two Zeutschel (OS12000 or OS12002) overhead scanners. Master files are scanned as TIFFs at 400 dpi, with RGB color profile and a scale of 100%. Image cropping and straightening occurs in the Zeutschel software, with post-processing and correction done in Photoshop as needed and on a very limited basis. These images are assigned a filename using the parent directory name and the page number, e.g. wideawakelibrary_no56_001.tif. The TIFFs are then copied from the scanning directory to a separate location for staging. The original TIFFs and any accompanying files created by the Zeutschel software for the batch are maintained until digitization has been completed, in case an error occurs during staging for ingest.
- 4. Primary Quality Control: Scanning. Primary scanning quality control occurs after each novel has been scanned. The person responsible for scanning confirms that the final count of scanned images matches the page count; that the filenames are correct; that all images have been cropped, centered, and oriented correctly; and that the pages are in the correct order.
- Metadata Creation, Ingest and Data Migration. The following steps take place in a different order for story papers vs. dime novels due to differing requirements and available data.
 - **a. Dime novels**. This format follows a "metadata-first" workflow:
 - i. Metadata Creation. After scanning, the MARC records for the batch are retrieved from the local catalog via Z39.50. The Metadata Librarian adjusts and tests a <u>batch transformation script</u> for each series, transforming the MARC records into MODS 3.5 records. These MODS records conform with <u>NIU's data dictionary</u> and the <u>project's specifications for metadata creation</u>, which define required elements, their use, and appropriate values. This script also includes URI reconciliation for names and subjects, which is semi-automated by the cataloger who executes the batch script. New authorities and identifiers are created in dimenovels.org as needed.
 - ii. Preliminary Quality Control: Metadata. Records are moved to the appropriate staging directory by the Metadata Librarian, at which point preliminary metadata quality control occurs. This involves checking adherence to the project specifications, the completeness of the required metadata fields, and validating the record.

- **iii. Metadata & File Packaging**. After a batch has passed preliminary quality control checks, the Metadata Librarian executes a packaging script, which arranges and names files in a format appropriate for ingest using the Islandora Book Batch module. This script moves each TIFF into a separate subdirectory for each page, renaming files as necessary.
- iv. Ingest. After the ingest packages have been created, the Metadata Librarian executes a batch ingest script. During ingest, JPEG and JP2 derivatives at 400 dpi are created from the archival TIFFs using ImageMagick. Tesseract extracts OCR and HOCR, which are stored with the other derivatives in the repository and indexed with the metadata in Solr for full-text searching. Each TIFF is also run through FITS to extract technical metadata, which is attached to the object as a separate datastream ("TECHMD"). At the end of a batch, PDFs at 400 dpi are created for each individual page using ImageMagick, then combined into a single PDF for the entire book. When PDF creation completes, individual page PDFs are purged from the repository and the ingest packages themselves are moved to another directory for final review.
- v. Secondary Quality Control. After ingest, secondary quality control is performed by staff in the Digitization Lab, always by a person other than the original scanner. They confirm that all pages have been scanned and are in the correct order and note any scanning errors. Secondary quality control of the metadata also occurs at this time, which involves evaluating the completeness and accuracy of the description, as well as assuring that the metadata has been indexed correctly for search and display.
- vi. Migration to dimenovels.org. After a batch has been fully-digitized and secondary QC of scanning and metadata is complete, the MODS records are imported by the Library Technology Development Specialist at VU into dimenovels.org using automated software processes.
- **b.** Story papers. This format follows an "ingest-first" workflow:
 - i. File Packaging & Ingest. Same as above, using stub records derived from the serial record for the series.
 - **ii. Metadata Creation**. Staff at VU will examine digitized items and enter data into the dimenovels.org platform. Data will include issue-level description such as cover date as well as bibliographic descriptions of all constituent parts (serials, short stories, poems, etc.).
 - **iii. Preliminary Quality Control: Metadata**. Completeness checks built into the dimenovels.org platform allows the Metadata Librarian to quickly detect missing data and other anomalies in the staff-entered records.
 - **iv. Migration to Digital Repository**. The Metadata Librarian runs a script to transform data from dimenovels.org into a MODS record which can be used to replace the stub record created in step i.
 - v. Secondary Quality Control. Same as above.
- **6. Deaccessioning**. Once all errors have been resolved for a series, the physical items are returned to Rare Books and Special Collections and the TIFFs in the scanning directory are deleted. The TIFFs used for the batch are maintained for a period of 6 months before they are deleted.
- 7. **dimenovels.org QC/Enhancement**. After digitization of each series is complete, its data in dimenovels.org is reviewed, edited, and enhanced by staff at VU working from the Johannsen bibliography. This includes adding relevant relationships between parallel manifestations, related works, and authors. Data is made available in RDF through the platform's internal mapping from its native data model to the Dime Novel Ontology.

Mock-ups:

1. <u>Example dime novel</u> as viewed in the Internet Archive book viewer, which includes full-text search, OCR display, full-screen display, and zoom. "Pages" tab allows individual pages to be viewed and downloaded.



2. Item-level metadata as it appears beneath the book viewer. Includes PDF and cover image download links, as well as social media services. Links under "Browse related editions" collocate parallel manifestations and related parts, using <u>linked data from dimenovels.org</u>.



Digital Preservation and Discoverability Plan

Digital Preservation

Northern Illinois University is committed to the long-term preservation of its unique and varied digital assets. This commitment is formalized in the Libraries' Strategic Plan, which was reviewed and updated in 2015, and in its Digital Preservation Policy. The latter defines categories of commitment, levels of preservation, and key stakeholders. The Preservation Committee is currently developing a plan to implement this policy for all digital assets for which the Libraries are responsible. Much of this work is informed by NIU's experience as the lead institution on the IMLS leadership grant, <u>Preserving Objects with Restricted Resources</u> (Digital POWRR). The digital preservation plan for the Johannsen Project is as follows:

During ingest, MD5 checksums will be generated for every datastream, including the digital master TIFFs and all derivatives stored in the Fedora Commons repository. Using Islandora Checksum Checker, a cron job will verify every checksum on a monthly basis, recorded as PREMIS events in the object's metadata. An alert will be sent to the Metadata Librarian via email when a mismatch is discovered. The TIFFs will also be processed through Islandora FITS during ingest, which will include file format identification and the extraction of technical metadata. This technical metadata will be stored as a separate datastream with every page object ("TECHMD"). After ingest or modification, page and book objects may be exported from the repository as Bags, with files for each datastream in the bag's data directory, which will also include a PREMIS record. The PREMIS records consist of the object's audit log and extracted technical, descriptive, and rights metadata, as well as Agent, Event, Object, and Rights entities.

The Fedora datastore will reside on Amazon S3, which is archival-grade storage with 99.9999999% durability. Data is stored redundantly across multiple facilities and multiple devices in each facility. S3 also includes ongoing checksum calculations on all traffic and automatic self-healing.

Data in Amazon EBS volumes is replicated across multiple servers to prevent data loss from failure of any single component. In addition, daily snapshots will be taken of the EBS storage and stored for one month in Amazon S3.

Daily backups of the production site database will also be stored for one month and weekly code and temporal file snapshots of production will be stored for two months.

NIU will assume primary responsibility for digital preservation at the conclusion of the project. However, NIU and VU are also interested in investigating ways in which they might collaborate on both dime novel digitization and preservation. This investigation will involve the possibility of storing copies of digital masters at each institution or centrally in a single repository. A formal partnership on the Johannsen Project will provide the context for these conversations to begin.

Migration

Staff involved in the project have extensive experience with data migration. In 2011, the NIU team undertook the task of migrating multiple digitization projects funded in the 90s and 00s to Islandora, including Lincoln-Net and the Southeast Asia Digital Library. This was a multi-year project that involved extensive data transformations, format conversions, and data transfers. This experience drove home the importance of using open formats and standards, routinely

assessing format obsolescence, and using a single digital asset management system. Lessons learned during this migration inform many of the decisions in the Technical Plan of this proposal. Should a migration of the Johannsen Collection become necessary, the Metadata Librarian will work with the Discovery Garden to develop an appropriate migration strategy to ensure data integrity and continuous access. The Bag export described above is one possible method, but the migration path will largely depend on the target system.

Discoverability

All of the dime novels digitized in this proposal will be made freely available, without restriction, on <u>Nickels and Dimes</u> (dimenovels.lib.niu.edu). Once the project completes, NIU is committed to providing ongoing public access to the website and dime novels through hosting on Amazon Web Services, with support from the Discovery Garden The long-term goal of NIU is to move all of its digital assets into AWS, with the Johannsen Project serving as a pilot.

Metadata will be aggregated at <u>dimenovels.org</u>, including links back to the digital collection for every edition. This will serve as a gateway for a number of digital dime novel collections, including those at Villanova University and the University of South Florida, allowing researchers to search across multiple dime novel collections in a single place. At the conclusion of the project, MARC records will also be derived from the MODS records for all dime novels in the collection. These records will be bulk loaded to the local catalog and the CARLI union catalog, in addition to WorldCat, which is where the majority of our users discover items in the Johannsen Collection today. Finally, an OAI-PMH static repository will be available, serving Dublin Core and MODS records for harvest by service providers. This will enable DPLA to harvest metadata from the project when NIU joins the Illinois Hub in 2016/2017.

After a series has been digitized, cover images will also be uploaded to the image sharing site, Flickr. These images will include basic metadata, as well as links back to the full dime novel on *Nickels and Dimes*. Because Flickr has a much wider reach, this will draw more traffic to the site and interest in the project.

Finally, *Nickels and Dimes* automatically updates an XML sitemap any time a new dime novel is added to the collection. This is submitted to Google (and other search engines) for indexing, in order to improve discoverability through search. Google indexing is routinely monitored for any problems or errors via the Google Search Console by the Metadata Librarian.