

HathiTrust and SFX

Finding e-books without loading
millions of objects



CALIFORNIA DIGITAL LIBRARY

[Advanced Search](#) | [Find a Library](#)[Search](#)[Cite/Export](#)[Print](#)[E-mail](#)[Share](#)[Permalink](#)[Add to list](#)[Add tags](#)[Write a review](#)

Rate this item:



Recherches sur les anciennes corporations ouvrières et marchandes de la ville de Rennes;

Author: [Armand Rebillon](#)

Publisher: Paris, A. Picard et fils; Rennes, Philon et Hommay, 1902.

Edition/Format:  Book : French [View all editions and formats](#)Rating:  (not yet rated) [0 with reviews - Be the first.](#)

More like this

Subjects

[Guilds — France — Rennes.](#)

Similar Items

[Borrow / obtain a copy](#)[Preview this item](#)You are connected to the **UNIV OF CALIFORNIA** network Hide local services for this item[UC-eLinks](#) | [OCLC FirstSearch](#)[UC-eLinks](#) Find a copy in the library



Search

Public Collections

My Collections

Title more »

Recherches sur les anciennes corporations ouvrières et marchandes ...



bookmark

Search in this text [Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

[Login](#) to make your personal collections permanent

Add to your collection:

Select Collection [UC-eLinks](#)go to # size 100%

rotate



RECHERCHES

SUR LES

ANCIENNES

CORPORATIONS

Ouvrières et Marchandes

DE LA VILLE DE RENNES

PAR

Outline

- HathiTrust background
- HathiTrust APIs
- SFX development
- Future development
- Rollout plans



CALIFORNIA DIGITAL LIBRARY

HathiTrust

- collaboration of the several universities to establish a repository to archive and share their digitized collections.



CALIFORNIA DIGITAL LIBRARY

HathiTrust Members

- Indiana University
- Michigan State University
- Northwestern University
- The Ohio State University
- Penn State University
- Purdue University
- The University of Chicago
- University of Illinois
- University of Illinois at Chicago
- The University of Iowa
- University of Michigan
- University of Minnesota
- University of Wisconsin-Madison
- University of Virginia
- California Digital Library
- University of California Berkeley
- University of California Davis
- University of California Irvine
- University of California Los Angeles
- University of California Merced
- University of California Riverside
- University of California San Diego
- University of California San Francisco
- University of California Santa Barbara
- University of California Santa Cruz

Goals

- To build a reliable and increasingly comprehensive digital archive of library materials
- To dramatically improve access to these materials
- To preserve the materials with electronic representations.



Goals (continued)

- To stimulate efforts to coordinate shared storage strategies among libraries
- To create a technical framework that is both centralized and open



HathiTrust numbers

- 5,742,251 volumes
- 926,233 public domain volumes
(approximately 16% of total content)
- 2,009,787,850 pages
- 214 terabytes
- 68 miles
- 4,666 tons



CALIFORNIA DIGITAL LIBRARY

HathiTrust APIs

- Rights API
 - deprecated in favor of the Bibliographic API
- Bibliographic API
 - query with a variety of standard identifiers (e.g., ISBN, LCCN, OCLC, etc)
 - returns bibliographic, copyright, and volume information (including permanent URLs)



HathiTrust Rights API

- Query using ISBN, ISSN, LCCN and/or oclcnum
- Returns
 - Biburl
 - Rights
- Information for only one item returned
- No longer supported



CALIFORNIA DIGITAL LIBRARY

HathiTrust Bibliographic API

- Returns bibliographic, rights and volume information associated with one or more standard identifier
- Record – description of bibliographic entity
- Item - physical volume that has been scanned



CALIFORNIA DIGITAL LIBRARY

id types supported

- ISBN
- ISSN
- LCCN
- oclcnum
- htid – the HathiTrust volume identifier
- recordnumber – 9 digit HathiTrust record number

API response

- Response
 - records
 - can contain multiple record since duplicates are always possilbe
 - Can include marc-xml record if requested in query
 - items
 - Can be multiple



records section

- 9 digit record number
- Titles from 245 and 880 fields
- ISSNs
- ISBNs
- LCCNs
- oclcnums
- marc-xml



items section

- orig
 - Originating institution
- fromRecord
 - 9 digit HathiTrust record number
- htid
 - Volume identifier



CALIFORNIA DIGITAL LIBRARY

items section (continued)

- itemUrl
 - url in pageturner interface
- rightsCode
 - Copyright status of the item
- lastUpdate



items section(continued)

- emuncron
- usRightsString
 - Textual description of rights for US-based users



rightsCode

- pd
 - Public domain
- pdus
 - Public domain is the US
- world
 - World viewable with print restrictions



CALIFORNIA DIGITAL LIBRARY

Additional rightsCodes

- ic
 - In copyright
- opb
 - Out of print brittle
- orph
 - Copyright-orphaned
- und
 - undetermined

SFX development

- New target in the Admin Interface
- New TargetParser
- New PlugIn
- New configuration file
- Additional values in attrib_local.config file



PlugIn

- Calls the HathiTrust Bibliographic API
- Passes all identifiers available
- Parses JSON response



CALIFORNIA DIGITAL LIBRARY

API call

- <http://catalog.hathitrust.org/api/volumes/brief/json/id:target;oclc:5638231>



CALIFORNIA DIGITAL LIBRARY

JSON response - records

```
{"records":{"006737478": {"recordURL":"http://catalog.hathitrust.org/Record/006737478","titles":["Southern wealth and northern profits, as exhibited in statistical facts and official figures: showing the necessity of union to the future prosperity and welfare of the Republic."],"isbns":[],"issns":[],"oclcs":["5638231"],"lccns":["06043712"]}}
```

records (unpacked)

- 006737478
- recordURL:
<http://catalog.hathitrust.org/Record/006737478>
- titles:[Southern wealth and northern profits,
as exhibited in statistical facts and official
figures ...]



records (unpacked)

- `isbns:[]`
- `issns:[]`
- `oclcs:[5638231]`
- `lccns:[06043712]`



CALIFORNIA DIGITAL LIBRARY

JSON response - items

```
"items": [{"orig":"University of California","fromRecord":"006737478","htid":"uc1.b3862954","itemURL":"http://hdl.handle.net/2027/uc1.b3862954","rightsCode":"pd","lastUpdate":"20090811","enumcrOn":false,"usRightsString":"Full view"}]
```

items (unpacked)

- orig:University of California
- fromRecord:006737478
- htid:uc1.b3862954
- itemURL:<http://hdl.handle.net/2027/uc1.b3862954>



items (unpacked)

- rightsCode:pd
- lastUpdate:20090811
- enumcron:false
- usRightsString:Full view



CALIFORNIA DIGITAL LIBRARY

SFX Plugin

- Saves in attrib_local.config:
 - rightsCode
 - orgin
 - htid
 - URL
- Returns ‘1’ if
 - rightsCode is pd, pdus or world



hathi_trust config file

- Contains a timeout value
- Controls how long the PlugIn will wait for API response



HathiTrust target

- Threshold
 - genre = book
 - PlugIn = yes
- URL
 - Constructed from
 - url in the parse param
 - htid saved by PlugIn



[Advanced Search](#) | [Find a Library](#)[Search](#)[Cite/Export](#)[Print](#)[E-mail](#)[Share](#)[Permalink](#)[Add to list](#)[Add tags](#)[Write a review](#)

Rate this item:



Recherches sur les anciennes corporations ouvrières et marchandes de la ville de Rennes;

Author: [Armand Rebillon](#)

Publisher: Paris, A. Picard et fils; Rennes, Philon et Hommay, 1902.

Edition/Format:  Book : French [View all editions and formats](#)Rating:  (not yet rated) [0 with reviews - Be the first.](#)

More like this

Subjects

[Guilds — France — Rennes.](#)

Similar Items

[Borrow / obtain a copy](#)[Preview this item](#)You are connected to the **UNIV OF CALIFORNIA** network Hide local services for this item[UC-eLinks](#) | [OCLC FirstSearch](#)[UC-eLinks](#) Find a copy in the library

OpenURL

[http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat
;genre=book
;title=Recherches%20sur%20les%20anciennes%20corporations%20ouvrie%CC%80res%20et%20marchandes%20de%20la%20ville%20de%20Rennes
;date=1902
;aulast=Rebillon
;aufirst=Armand
;id=doi%3A
;pid=%3Caccession%20number%3E4212246%3C%2Faccession%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E&](http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat;genre=book;title=Recherches%20sur%20les%20anciennes%20corporations%20ouvrie%CC%80res%20et%20marchandes%20de%20la%20ville%20de%20Rennes;date=1902;aulast=Rebillon;aufirst=Armand;id=doi%3A;pid=%3Caccession%20number%3E4212246%3C%2Faccession%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E&)

[<< Back to item details on WorldCat.org](#)[Close this Window \[x\]](#)

UC-eLinks

Title: Recherches sur les anciennes corporations ouvrières et marchandes de la ville de Rennes
Source: (1902)

Get It Online From

[HathiTrust Digital Library](#)

Digitized collections of some of the nation's great research libraries.

Get It Online From

[Google Book Search](#)

The entire book is viewable at Google Book Search

Find a Print Copy

[Check the UC Libraries Catalog: Next-Generation Melvyl Pilot](#)

[Check the UC Libraries Catalog: Melvyl](#)

Request It

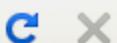
[Request this from another library, or from the campus document delivery service](#)

Add Citation to a Bibliography

[Copy & Paste Citation](#)

[Export into ISI Direct Export Tool \(EndNote/Procite\)](#)

Get Help



Search | Public Collections | My Collections

Title more » Recherches sur les anciennes corporations ouvrières et marchandes ...



Search in this text

[Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

[Login](#) to make your personal collections permanent

Add to your collection:

Select Collection

Add

[UC-eLinks](#)go to # size 100%

rotate

RECHERCHES SUR LES ANCIENNES CORPORATIONS

Ouvrières et Marchandes

DE LA VILLE DE RENNES

Home

Search

 Create lists, bibliographies and reviews:
[Sign in](#) or [create a free account](#)[Advanced Search](#) | [Find a Library](#)

Cite/Export Print E-mail Share Permalink

Add to list Add tags

Write a review

Rate this item:



A fearful responsibility : and other stories

[More like this](#)Author: [William Dean Howells](#)

Publisher: Boston : Ticknor, 1886, ©1881.

Edition/Format: Book : Fiction : English [View all editions and formats](#)Rating: (not yet rated) [0 with reviews - Be the first.](#)[Preview this item](#)

Borrow / obtain a copy

You are connected to the **UNIV OF CALIFORNIA** network Hide local services for this item[UC-eLinks](#) | [OCLC FirstSearch](#)

UC-eLinks

 Find a copy in the library

OpenURL

[http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat
;genre=book
;title=A%20fearful%20responsibility%20%3A%20and%20other
%20stories
;date=1886
;aulast=Howells
;aufirst=William
;auinitm=Dean
;id=doi%3A
;pid=%3Caccession%20number%3E11892764%3C%2Faccession
%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E](http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat;genre=book;title=A%20fearful%20responsibility%20%3A%20and%20other%20stories;date=1886;aulast=Howells;aufirst=William;auinitm=Dean;id=doi%3A;pid=%3Caccession%20number%3E11892764%3C%2Faccession%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E)

[<< Back to item details on WorldCat.org](#)[Close this Window \[x\]](#)

UC-eLinks

Title: A fearful responsibility : and other stories
Source: (1886)

Get It Online From

[Go](#) [HathiTrust Digital Library](#)

Digitized collections of some of the nation's great research libraries.

Get It Online From

[Go](#) [Google Book Search](#)

The entire book is viewable at Google Book Search

Find a Print Copy

[Go](#) [Check the UC Libraries Catalog: Next-Generation Melvyl Pilot](#)

[Go](#) [Check the UC Libraries Catalog: Melvyl](#)

Request It

[Go](#) [Request this from another library, or from the campus document delivery service](#)

Add Citation to a Bibliography

[Go](#) [Copy & Paste Citation](#)

[Go](#) [Export into ISI Direct Export Tool \(EndNote/Procite\)](#)

Get Help



Search | Public Collections | My Collections

Title more » A fearful responsibility : and other stories / by William D. ...



Search in this text

[Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

[Login](#) to make your personal collections permanent

Add to your collection:

[Select Collection](#)[Add](#)[UC-eLinks](#)[go to #](#)size [100%](#)

rotate

A FEARFUL RESPONSIBILITY

AND OTHER STORIES

BY

WILLIAM D. HOWELLS**AUTHOR OF "THE LADY OF THE AROOSTOOK," "THE UNDISCOVERED COUNTRY," ETC.**

Home

Search

Create lists, bibliographies and reviews:

[Sign in or create a free account](#)[Advanced Search](#) | [Find a Library](#)[Search](#)

Cite/Export



Print



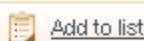
E-mail



Share



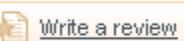
Permalink



Add to list



Add tags



Write a review

Rate this item:



Parnassus;

Author: [Ralph Waldo Emerson](#)

Publisher: Boston, Houghton, Mifflin and Co., 1881.

Edition/Format: Book : English [View all editions and formats](#)Rating: (not yet rated) [0 with reviews - Be the first.](#)

More like this

Subjects

[English poetry.](#)[American poetry.](#)

Similar Items

[Preview this item](#) [Borrow / obtain a copy](#)You are connected to the **UNIV OF CALIFORNIA** network Hide local services for this item[UC-eLinks](#) | [OCLC FirstSearch](#)

UC-eLinks

 Find a copy in the library

OpenURL

[http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat
;genre=book
;title=Parnassus
;date=1881
;aulast=Emerson
;aufirst=Ralph
;auinitm=Waldo
;id=doi%3A
;pid=%3Caccession%20number%3E3620078%3C%2Facquisition%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E](http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat;genre=book;title=Parnassus;date=1881;aulast=Emerson;aufirst=Ralph;auinitm=Waldo;id=doi%3A;pid=%3Caccession%20number%3E3620078%3C%2Facquisition%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E)

[<< Back to item details on WorldCat.org](#)[Close this Window \[x\]](#)

UC-eLinks

Title: Parnassus
Source: (1881)

Get It Online From

[HathiTrust Digital Library](#)

Digitized collections of some of the nation's great research libraries.

Get It Online From

[Google Book Search](#)

The entire book is viewable at Google Book Search

Find a Print Copy

[Check the UC Libraries Catalog: Next-Generation Melvyl Pilot](#)

[Check the UC Libraries Catalog: Melvyl](#)

Request It

[Request this from another library, or from the campus document delivery service](#)

Add Citation to a Bibliography

[Copy & Paste Citation](#)

[Export into ISI Direct Export Tool \(EndNote/Procite\)](#)

Get Help



Search | Public Collections | My Collections

Title more » Parnassus; ed. by Ralph Waldo Emerson.



Search in this text

[Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

[Login](#) to make your personal collections permanent

Add to your collection:

Select Collection

[Add](#)[UC-eLinks](#)go to # size

rotate

P A R N A S S U S

EDITED BY

RALPH WALDO EMERSON

[Advanced Search](#) | [Find a Library](#)[Search](#)

Cite/Export | Print | E-mail | Share | Permalink

Add to list | Add tags | Write a review

Rate this item:



Southern wealth and northern profits, as exhibited in statistical facts and official figures : showing the necessity of union to the future prosperity and welfare of the Republic

Author: [Thomas Prentice Kettell](#)

Publisher: New York : G.W. & J.A. Wood, 1860

Edition/Format: Book : eBook : English [View all editions and formats](#)Rating: (not yet rated) [0 with reviews - Be the first.](#)

More like this

Subjects

[Southern States -- Economic conditions.](#)[Slavery -- United States.](#)

Similar Items

[Preview this item](#) [Borrow / obtain a copy](#)You are connected to the **UNIV OF CALIFORNIA** network Hide local services for this item[UC-eLinks](#)[OCLC FirstSearch](#) [Find a copy online](#)[Links to this item](#)

OpenURL

http://ucelinks.cdlib.org:8888/sfx_local?sid=FirstSearch%3AWorldCat
;genre=book
;title=Southern%20wealth%20and%20northern%20profits%2C%20as
%20exhibited%20in%20statistical%20facts%20and%20official
%20figures%20%3A%20showing%20the%20necessity%20of
%20union%20to%20the%20future%20prosperity%20and%20welfare
%20of%20the%20Republic
;date=1860
;aulast=Kettell
;aufirst=Thomas
;auinitm=Prentice
;id=doi%3A
;pid=%3Caccession%20number%3E**5638231**%3C%2Faccession
%20number%3E%3Cfssessid%3E0%3C%2Ffssessid%3E

[<< Back to item details on WorldCat.org](#)[Close this Window \[x\]](#)

UC-eLinks

Title: Southern wealth and northern profits, as exhibited in statistical facts and official figures : showing the necessity of union to the future prosperity and welfare of the Republic

Source: (1860)

Get It Online From

Go [HathiTrust Digital Library](#)

Digitized collections of some of the nation's great research libraries.

Get It Online From

Go [Google Book Search](#)

The entire book is viewable at Google Book Search

Find a Print Copy

Go [Check the UC Libraries Catalog: Next-Generation Melvyl Pilot](#)

Go [Check the UC Libraries Catalog: Melvyl](#)

Request It

Go [Request this from another library, or from the campus document delivery service](#)

Add Citation to a Bibliography

Go [Copy & Paste Citation](#)

Go [Export into ISI Direct Export Tool \(EndNote/Procite\)](#)

Get Help



Search | Public Collections | My Collections

Title more » Southern wealth and northern profits, as exhibited in statistical ...



Search in this text

[Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

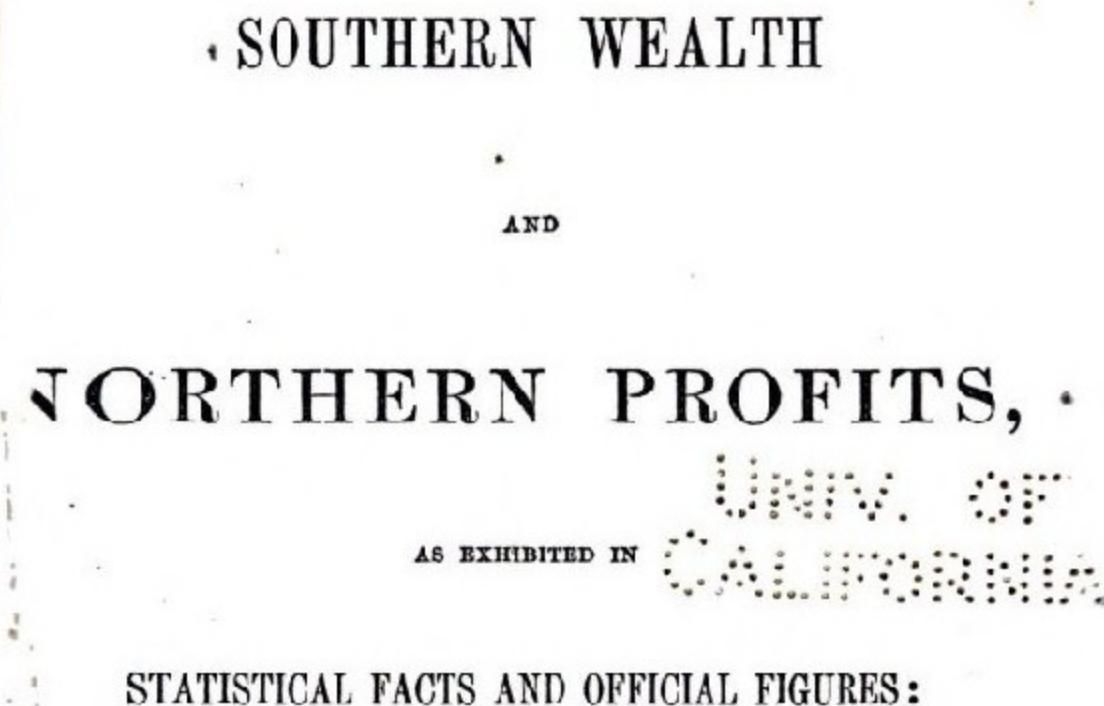
[Login](#) to make your personal collections permanent

Add to your collection:

Select Collection

[Add](#)[UC-eLinks](#)go to # size

rotate



AS EXHIBITED IN

Sources for testing new target

- Worldcat
 - Public (.org)
 - FirstSearch



CALIFORNIA DIGITAL LIBRARY

HathiTrust statistics

- Production release April 21, 2010
- 119 clickthroughs 4/18-4/24
 - ‘afterglow’ from public announcement to UC
- 7 clickthroughs 4/25-5/1
- 13 clickthroughs 5/2-5/8



GoogleBooks statistics

- 40 clickthroughs in 2009
- 3 clickthroughs 4/18-4/24
- 1 clickthrough 4/25-5/1
- 4 clickthroughs 5/2-5/8



Near future plans

- Enhance Aleph Source parser to capture oclcnum and lccn
- Thanks to UC Davis and Karl Kocher!



CALIFORNIA DIGITAL LIBRARY


[Sign in](#)
[End Session](#)
[Getting Started](#)
[My Account/Renew Books](#)

Search for

in Harvest Catalog

[SEARCH](#)[Ask For Help](#)

Harvest Library Catalog

[My E-Shelf](#) [Search History](#) [Results](#) [Preferences](#)
[Full Catalog](#)[Reserves](#)[Journals & Serials](#)[E-Journals](#)[Special Collections](#)[More](#)

SEARCH OPTIONS

[BASIC](#)[BROWSE](#)[ADVANCED](#)[COMMAND](#)
[Add to My e-Shelf](#) |
 [Booking](#) |
 [UC-eLinks](#)

Full View of Record

Choose format: [Standard format MARC tags](#)

Record 1 out of 1

[Previous Record](#)[Next Record](#)[Print View](#)[Save/Mail](#)**Author** [Cromer, Evelyn Baring, 1841-1917.](#)**Title** [Abbas II / by the Earl of Cromer.](#)**Published** London : Macmillan and Co., 1915.**Description** xxviii, 84 p. ; 23 cm.**Record format** BK Book**Check Availability** [All items](#)**Call no.** Shields Library DT107.6 .C8 Regular Loan**Bibliography** Includes bibliographical references.**Per.Sub.** ['Abbas II, Khedive of Egypt, 1874-1944.](#)

[report a problem](#) [view menu](#) [hide frame](#)

Source: Abbas II / Cromer yr:1915

 HATHI TRUST Digital Library[Login](#) [About](#) [Help](#)[Search](#) | [Public Collections](#) | [My Collections](#)Title [more >](#) Abbas II / by the Earl of Cromer.

bookmark

Search in this text [Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

[Login](#) to make your personal collections permanent

Add to your collection:

[UC-eLinks](#)

A B B A S I I

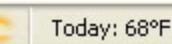
BY



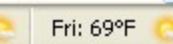
Proxy: None



Now: Fair and 62°F



Today: 68°F



Fri: 69°F


[Sign in](#)
[End Session](#)
[Getting Started](#)
[My Account/Renew Books](#)

Search for

in Harvest Catalog

[SEARCH](#)[Ask For Help](#)

Harvest Library Catalog

[My E-Shelf](#) [Search History](#) [Results](#) [Preferences](#)
[Full Catalog](#)[Reserves](#)[Journals & Serials](#)[E-Journals](#)[Special Collections](#)[More](#)

SEARCH OPTIONS

[BASIC](#)[BROWSE](#)[ADVANCED](#)[COMMAND](#)
[Add to My e-Shelf](#) |
 [Booking](#) |
 [UC-eLinks](#)

Full View of Record

Choose format: [Standard format MARC tags](#)

Record 1 out of 1

[Previous Record](#)[Next Record](#)[Print View](#)[Save/Mail](#)**Author**[Vasey, George.](#)**Title**

[The agricultural grasses and forage plants of the United States; and such foreign kinds as have been introduced. By Dr. Geo. Vasey; with an appendix on the chemical composition of grasses, by Clifford Richardson.](#)

Edition

A new, rev. and enl. ed.

Published

Washington, Govt. print. off., 1889.

Description

148 p. incl. tables. 114 pl.

Record format

BK Book

BI Books with illustrations

GV Govt Publication

Check Availability[All items](#)

[report a problem](#) [view menu](#) [hide frame](#)

Source: The agricultural grasses and forage plants of the United States; Vasey yr:1889

[Login](#) [About](#) [Help](#)[Search](#) [Public Collections](#) [My Collections](#)Title [more »](#) The agricultural grasses and forage plants of the United States; ...Search in this text [Catalog record](#)[Find in a library](#)[Permanent Link](#)<http://hdl.handle.net/202>

[Login](#) to make your personal collections permanent

Add to your collection:

[UC-eLinks](#)

U. S. DEPARTMENT OF AGRICULTURE.
BOTANICAL DIVISION.
SPECIAL BULLETIN.

THE



Proxy: None



Now: Fair and 62°F



Today: 68°F



Fri: 69°F

Next Steps

- Multiple records/items in JSON record
- Serials/multi-volume monographs
- Support for other OPACs
 - Voyager
 - III



WorldCatLocal

- HathiTrust e-books
 - oclclnum have not been indexed in Hathi
- SFX target will work for print editions



CALIFORNIA DIGITAL LIBRARY

CDL and Hathi rollout plans

- CDL in production
 - Tracking usage
 - Load on HathiTrust API
- Hathi consortia member
- eCommons for other SFX customers



Contact information

Margery.Tibbetts@ucop.edu



CALIFORNIA DIGITAL LIBRARY