

UNITED STATES  
PATENT AND TRADEMARK OFFICE



## **“Did My [Great, Great] Grandfather Have a Patent?” How to Help Searchers with Historical Patent Information**

Tom A. Turner  
Patent and Trademark Resource Center Program  
Federal Depository Library Conference  
October 19, 2015



- One of the challenges, but also rewards, of working in government documents is that you sometimes get to assist library users with historical patent research.
- Today we'll look at sources that will help you and your customers save time and effort as they navigate the often murky waters of intellectual property information.



USPTO Headquarters in Alexandria VA

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## Patents

A U.S. patent is...

a property right granted by the Government of the United States of America to an inventor,

**to exclude others from making, using, offering for sale, or selling the invention throughout the United States or importing the invention into the United States,**

for a limited time,

**in exchange** for public disclosure of the invention.



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## Evolution of an Agency



**1788:** Ratified U.S. Constitution gives Congress the power “to promote the progress of science and useful arts by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries.”

**1790:** 1<sup>st</sup> Patent Law. Patents initially issued by a Patent Board with the administration of patent laws by **Dept. of State**.

**1802:** Patent Office becomes a distinct unit of the Dept. of State.

**1849:** Transferred to the newly created **Dept. of the Interior**.

**1925:** Transferred to the **Dept. of Commerce**, where it remains.

**1975:** Name changed to the Patent and Trademark Office.

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## Evolution as an Information Disseminator

**1840:** *Report of the Commissioner of Patents* annually issued to Congress includes Patentee Index

**1871:** Congress directs the Commissioner of Patents to have patent copies printed, some for free distribution to libraries and others for public sale.

**1872:** *Official Gazette of the United States Patent Office* begins as a weekly publication.

**1920:** Standalone *Index of Patents* begins; issued annually until 1997.

**1999:** All U.S. patents available for searching and viewing on USPTO website—[www.uspto.gov](http://www.uspto.gov)

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First published 1/3/1872. Weekly issues. Since 1/23/1872 published on Tuesdays.

New volumes initially every 6 months-by 1909 volumes would be monthly.

Official weekly record first included:

- List of all patented inventions issued that week with one claim, (later would have one drawing)
- Commissioner's decisions
- Decisions of the Courts
- Applications for Extensions / Extensions Granted
- Index of Inventions
- Index of Patentees



## Official Gazette Split into Separate Patent and Trademark Publications on 2/2/1971



**Official Gazette: Patents**  
Weekly  
Began February 2, 1971

Includes Office Notices



**Official Gazette: Trademarks**  
Weekly  
Began February 2, 1971

Includes Office Notices



**Paper**  
Ceased paper format  
September 24, 2002



**CD-RDM**  
Began July 2, 2002  
Ended Dec. 2011



**Web**  
Began July 2, 2002  
Current 52 weeks only



**Paper**  
Ceased paper format



**Web**  
Began July 15, 2003  
Current 52 weeks only  
searchable version since  
March 14, 2014

*Official Gazette: Patents and Official Gazette: Trademarks* are no longer in paper format, but remain available on USPTO website in weekly issues format for the most current 52 weeks. *Patent and Trademark Office Notices* are separately available and web searchable from 1995-current.

# Annual Report of the Commissioner of Patents

ALPHABETICAL LIST  
OF  
PATENTEES FOR THE YEAR 1873.

[Claims and drawings of Designs, Extensions, and Disclaimers are not carried into the Monthly Volumes or the Gazette.]  
[Trade-marks are in a separate index.]

Number.	Name, residence, and invention.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
144,724	Abbiati, E., New York, N. Y. Track-clearer .....	Nov. 18, 1873	479	163	4	540
145,323	Abbott, A. A., Chicago, Ill. Sleigh .....	Dec. 9, 1873	263	88	4	619
138,309	Abbott, E. L., and S. T. Gibson, South Bend, Indiana. Table-leaf support .....	Apr. 29, 1873	975	306	3	478
	Abbott, J. (See Hammond, Adler & Abbott)					
137,222	Abbott, J., Canton, Ohio. Iron front for stone piers .....	Apr. 29, 1873	899	281	3	471
142,547	Abbott, J. D., assignor to A. W. Smith, Manchester, N. H. Sectional horseshoe .....	Sept. 9, 1873	211	69	4	371
142,976	Abbott, J. K., Cincinnati, Ohio. Sectional steam-boiler .....	Sept. 23, 1873	685	199	4	322
135,056	Abbott, J. P., Cleveland, Ohio. Eaves-trough hanger .....	Jan. 21, 1873	536	170	3	77
139,848	Abbott, N. B., Brooklyn, N. Y. Composition pavement .....	June 17, 1873	387	121	3	663
134,864	Abbott, T., Blackburn, Great Britain. Machine for sizing yarn .....	Jan. 21, 1873	139	141	3	71
141,093	Abbel, F. H., New York, N. Y. Dumping-truck .....	July 22, 1873	696	234	4	93
	Abel, G. (See Pedder & Abel)					
138,972	Abell, J., Woodbridge, Canada. Adjustable chute for turbine water-wheels .....	May 20, 1873	467	147	3	550

to  
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***"I Believe My Great-Grandfather Was Granted a Patent, Can You Help Me Find It?"***



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## Common Misconceptions

- “My ancestor’s patent may still be worth something.”
- “Great-Grandpa said he invented X, before [famous inventor] stole his idea. Can I sue the company that made millions off of it?”



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## Reference Interview Disclosures

What does the customer know about his great grandfather?

- Full name or partial?
- Where he lived when he invented? Exact dates or decades?
- Did he invent the product for a company he was working for? Or independently?

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## Reference Interview Disclosures, cont.

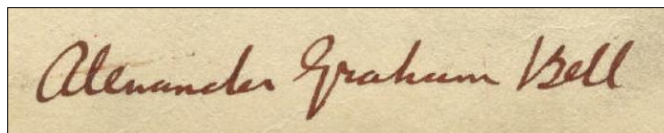
What does the customer know about the invention?

- How to describe it?
- Was it ever marketed? For which years?
- Is there a photo or any other evidence that it was produced by a company?

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## Searching by Inventor Name

A rectangular image showing a handwritten signature in cursive script on a light-colored, textured background. The signature reads "Alexander Graham Bell".

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## Inventor Name Searching in Free Patent Databases Online

With just a name and approximate date, it may be possible to find the patent, but if the name is a common one, it can be difficult to determine from a large number of results.

- **PatFT** (Patents Full-Text and Image) database on USPTO website allows searching of inventor names back to 1920.
  - <http://patft.uspto.gov/netahtml/PTO/search-bool.html>
  - Format is "IN/Lastname-First Name[or First Initial]\$" in Advance Search Form.
- **Espacenet Worldwide Database** from the European Patent Office allows searching on inventor names on U.S. patents back to 1920.
  - <http://worldwide.espacenet.com/>

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## Inventor Name Searching, cont.

- **Google Patents** (using USPTO data) allows inventor name searching back on U.S. patents to approximately late 1800's but may have OCR scanning errors.
  - [http://www.google.com/advanced\\_patent\\_search](http://www.google.com/advanced_patent_search)
- Patent and Trademark Resource Centers have unique access to **PubWEST/PubEAST** patent searching portals. They can access a historical file of U.S. patents with text scanned using OCR from 1836 to 1970. Likewise, there may be occasional OCR scanning errors resulting in skewed results.

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## Additional Information Can Be Helpful

Adding any of these could help narrow down search results:

- **Town(s) and State(s)** the ancestor lived in during career;
- **Company(ies)** ancestor worked for that might be listed as Assignee on Patent;
- **Full name** including middle name or at least middle initial.



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## Inventor Name Searching in Print Resources or Scanned Print Resources Online

- *Annual Report of the Commissioner of Patents* from 1837 to 1919 had an "Alphabetical List of Patentees" which included inventor names and assignees, patent number, issued date and inventor's town/state.
- *Index of Patents* split from the *Annual Report...* to become a separate publication from 1920 to 2001.

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## Example from List of Patentees in 1930 *Index of Patents*

Turner, George S., New Brunswick, N. J. Attachment for collapsible tubes. 1,765,114; June 17.  
Turner, Giles M., Milwaukee, Wis. Tiering means for elevating trucks. 1,742,788; Jan. 7.  
Turner Glass Corporation. (See Cohn, Ernest, assignor.)  
Turner Glass Corporation. (See Teague, Walter D., assignor.)  
Turner, Guilford S., assignor to T-Z Railway Equipment Co., Chicago, Ill. Washout plug. 1,776,341; Sept. 23.  
Turner, Hal, Tulsa, Okla. Index-cabinet slide. 1,787,344; Dec. 30.  
Turner, Harry W., Schenectady, N. Y., assignor to General Electric Company. Electrical winding. 1,756,892; Apr. 29.  
Turner, Henry, Kerry, Oreg. Mechanical pencil. 1,766,271; June 24.  
Turner, Horace W., Phoenix, N. Y. Heater. 1,776,892; Apr. 29.

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## Searching the Collection of Patent Indexes on Hathi Trust

Nearly all Patent Office annual indexes are full-text searchable as one collection or individually on Hathi Trust



The screenshot shows the Hathi Trust search interface. At the top, there are tabs for 'All', 'Recently Updated', 'Featured', and 'My Collections'. Below the tabs, there is a search bar with the text 'patent indexes' entered. A red circle highlights the search input field. To the right of the search bar is a 'Create new collection' link. Below the search bar, there is a dropdown menu for 'Sort by:' set to 'Collection Title'. Below the search results, there is a red arrow pointing to the 'Patent Indexes' collection. The collection description reads: 'Contains patent indexes from Annual Report of the Commissioner of Patents from 1842-1921 and Index of patents issued from the United States Patent Office from 1920-1974'. It also shows '167 items' and 'last updated: 06/17/14'. The owner is listed as 'Ilalwani (University of Michigan)'. A 'Reset' button is visible next to the search results. A 'FEATURED' badge is also present on the right side of the collection entry.

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**Direct Link to Patent Indexes Collection on Hathi Trust site:  
babel.hathitrust.org/cgi/mb?a=listis&c=503653486**



Search in this collection  Find

All Items (165)

Sort by: Title A-Z  25 per page  Previous 1 2 3 4 5

Select all on page  Select Collection  Add Selected

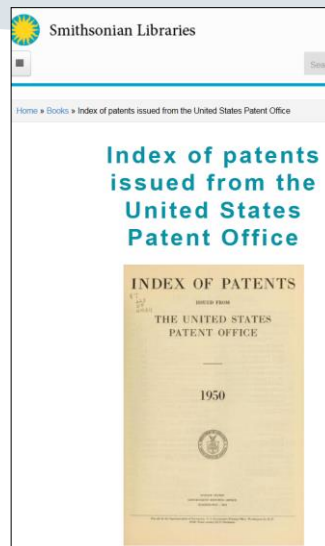
 Annual report of the Commissioner of Patents. 1962-1974  
by United States. Patent Office.  
Published 1790  
[Catalog Record](#) [Full view](#)

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## Searching Individual Annual Patent Indexes, Not as Collection

[library.si.edu/digital-library/book/index-patents-issued-united-states-patent-office](http://library.si.edu/digital-library/book/index-patents-issued-united-states-patent-office)

[library.si.edu/digital-library/book/annual-report-commissioner-patents-year](http://library.si.edu/digital-library/book/annual-report-commissioner-patents-year)



Smithsonian Libraries

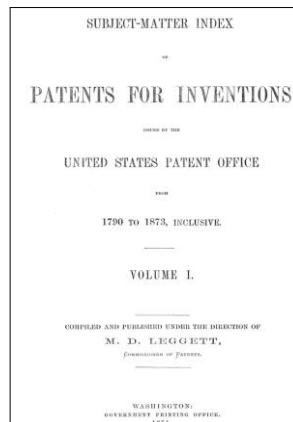
Home » Books » Index of patents issued from the United States Patent Office

**Index of patents issued from the United States Patent Office**

INDEX OF PATENTS  
1950  
THE UNITED STATES PATENT OFFICE

## Subject-Matter Index of Patents... 1790-1873

- In 1874, GPO printed a 3 volume *Subject-Matter Index of Patents for Inventions Issued by the United States Patent Office from 1790 to 1873, Inclusive*.
- You may have a print copy in your library. Some libraries may have a 1976 reprint by Ayer Company Publishers.



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## Searching Inventor Name in Subject-Matter Index

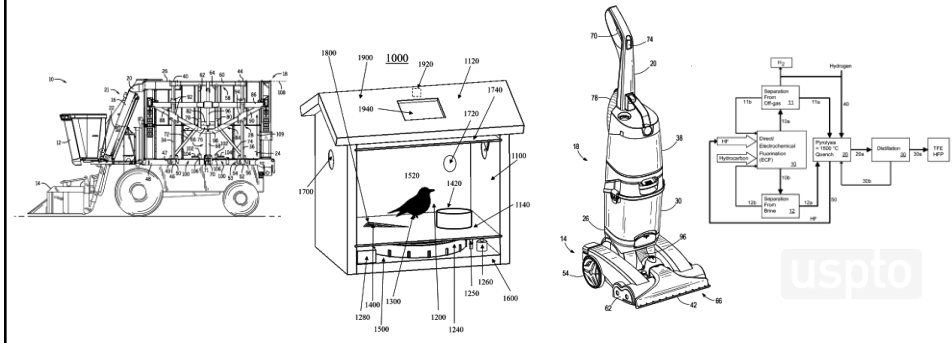
The Hathi Trust scanned copy allows one to search the pdf for inventor name using the “Search in this text” feature. A search for “Whitney gin” [AND is assumed default]:

Cotton-ginning machine.....	L. H. Moseley.....	Poughkeepsie, N. Y. ....	Nov. 25, 1837	486
Cotton-ginning machine.....	J. Stevens .....	Poughkeepsie, N. Y. ....	Nov. 25, 1837	485
Cotton-ginning machine.....	E. Whitney.....	.....	Mar. 14, 1794	.....

<http://hdl.handle.net/2027/miun.agl4739.0001.001>

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# Searching by Type of Invention



## A Chair by Any Other Name...

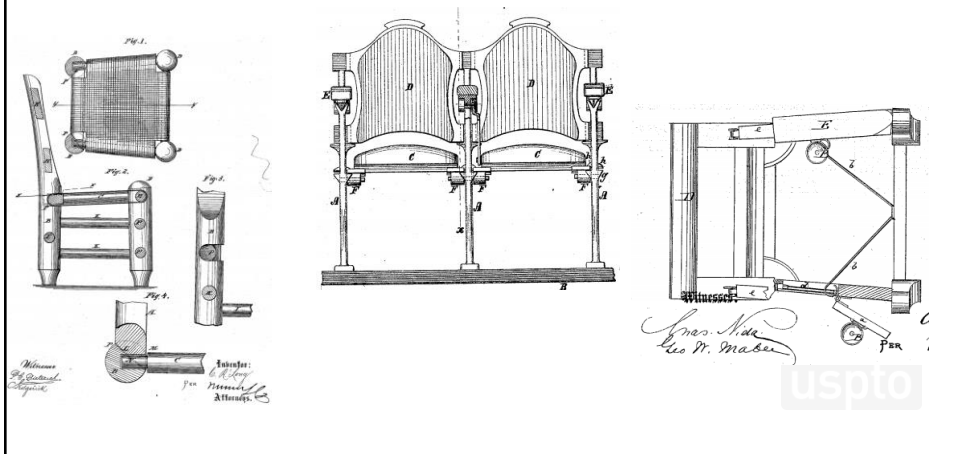
The name of the invention can be useful in searching early U.S. patents in Google Patents or other OCR scanned early patent databases.

- But outdated names for inventions can prove problematic in searching. You may not anticipate the dated name used for the invention in the patent text:
  - **Sad and fluting iron, Machine for twisting oakum, Shoe peg pointing machine, plow clod-fender, throstle-spindle.**
  - **Cottage chair, Harness-maker's chair, Invalid chair, Knock-down chair, Opera-chair, Posing-chair, Reception-chair, Sea-sitting chair, Spittoon-chair, Tilting chair, Tipping chair, etc.**
- Solution? Classification searching.

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## Can You Find the Spittoon-Chair?



## Cooperative Patent Classification

- USPTO has transitioned from U.S. Patent Classification to a new classification system based on a system used widely by patent offices worldwide.
- Cooperative Patent Classification has been used to classify U.S. patents since 2013. All pre-2013 utility patents back to 1832 have been retrospectively classified in CPC.
- CPC can be used to search US patents on the USPTO's PatFT (Patents Full-Text and Image) and the European Patent Office's Espacenet Worldwide Database.

CPC searching of older U.S. patents is an option with the Espacenet Classification Search tool (<http://worldwide.espacenet.com/classification>)

### Cooperative Patent Classification

Search for  Search

View section | [Index](#) | [A](#) | [B](#) | [C](#) | [D](#) | [E](#) | [F](#) | [G](#) | [H](#) | [Y](#)

« A47C A47C3/00 »

Symbol	Classification and description
★★★★★ <input type="checkbox"/> A47C 1/00	Chairs adapted for special purposes (features relating to vertical adjustability <a href="#">A47C 3/20</a> ; convertible chairs <a href="#">A47C 13/00</a> ; chairs or personal conveyances specially adapted for patients or disabled persons <a href="#">A61G 5/00</a> ; operating chairs, dental chairs <a href="#">A61G 15/00</a> )
<input checked="" type="checkbox"/> A47C 1/02	• Reclining or easy chairs (supports for parts of body <a href="#">A47C 7/36</a> , <a href="#">A47C 7/50</a> , <a href="#">A47C 7/54</a> )
<input type="checkbox"/> A47C 1/022	•• having independently-adjustable supporting parts <span style="float: right;"><a href="#">D</a></span>
<input type="checkbox"/> A47C 1/023	••• the parts being horizontally-adjustable seats; {Expandable seats or the like, e.g. seats with horizontally adjustable parts} <span style="float: right;"><a href="#">D</a></span>
<input type="checkbox"/> A47C 1/024	••• the parts, being the back-rest, or the back-rest and seat unit, having adjustable (and lockable) inclination <span style="float: right;"><a href="#">D</a></span>
<input type="checkbox"/> A47C 1/0242	••• (by electric motor)

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## Espacenet Advanced Search Form

Publication Number: US

Inventor(s): Lindroth

CPC: A47C1/02

Enter keywords in English

Title:

Title or abstract:

Enter numbers with or without country code

Publication number:   
US

Application number:

Priority number:

Enter one or more dates or date ranges

Publication date:

Enter name of one or more persons/organisations

Applicant(s):

Inventor(s):

Enter one or more classification symbols

CPC:

	<p>May 17, 1955 Filed Feb. 6, 1950</p> <p>G. J. LINDROTH RECLINING SEAT CONSTRUCTION</p> <p>2,708,474 2 Sheets-Sheet 1</p>
<p>1. Reclining seat construction</p> <p>★ Inventor: LINDROTH GERALD J</p> <p>Applicant:</p> <p>CPC: A47C1/02 A47C1/0324</p> <p>IPC: A47C1/02 A47C1/032</p> <p>Publication info: US 2708474 (A) 1955-05-17</p>	<p>INVENTOR: GERALD J. LINDROTH. BY <i>W. O. Bell</i> ATTY.</p>

***"We found this device in the attic.  
Has it been patented?"***

Are there clues imprinted on the device itself? Is there packaging remaining?

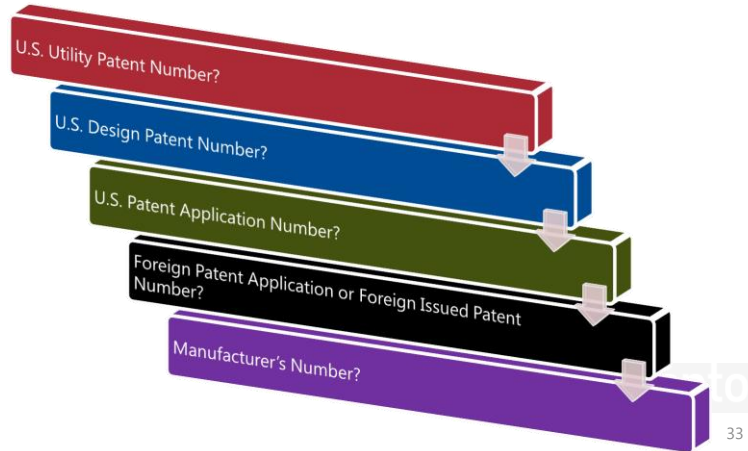


- "Patent 12345"
- "U.S. Pat. Office"
- "Aug. 11, 1878"
- "12345"
- "Patent Pending"





## Searching by Number Appearing on a Product



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## U.S. Utility & Design Patent Numbers

"Table of Issue Years and Patent Numbers for Selected Document Types Issued Since 1836"

[www.uspto.gov/web/offices/ac/ido/oeip/taf/data/issyear.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/data/issyear.htm)

- Design Patents may have a "D" before the number on a device or a "Des." or may simply not have any letter designation on the product.
- Enter the patent number in PatFT or other patent database.

Issue Year	First Utility	First Design	First Plant	First Reissue	First Statutory Invention Registration
1836*	1			**	
1837	110			**	
1838	546			RE00001	
1839	1061			RE00007	
1840	1465			RE00020	
1841	1923			RE00030	
1842	2413			RE00036	
1843	2901	D000001		RE00049	
1844	3395	D000015		RE00060	
1845	3873	D000027		RE00067	
1846	4348	D000044		RE00078	
1847	4914	D000103		RE00091	
1848	5409	D000163		RE00105	
1849	5993	D000209		RE00128	
1850	6981	D000258		RE00158	
1851	7865	D000341		RE00184	

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# U.S. Patent Application Numbers

"Filing Years and Patent Application Serial Numbers Since 1882"

[www.uspto.gov/web/offices/ac/ido/oeip/taf/filingyr.htm](http://www.uspto.gov/web/offices/ac/ido/oeip/taf/filingyr.htm)

From 1882 to 1914, patent application serial number were consecutive numbers with no series codes prefix. They did not appear in patents until 1886.

Since the "apn" field for Application Numbers is only searchable back to the early 1970's in PatFT, pre-1970 Application Numbers can be searched in a full-text (not fielded) search in Google Patents or the PubWEST/PubEAST OCR file (at a Patent & Trademark Resource Center). They were referred to as Serial Numbers in the patent specification.

Filing Year	1st Utility Application (approximate)		1st Design Application (approximate)		1st Provisional Application (approximate)	
	Series Code	Serial Number	Series Code	Serial Number	Series Code	Serial Number
1882	n/a	050,000	n/a	(see Utility serial numbers)	n/a	n/a
1883	n/a	084,000	n/a	(see Utility serial numbers)	n/a	n/a
1884	n/a	115,000	n/a	(see Utility serial numbers)	n/a	n/a
1885	n/a	152,000	n/a	(see Utility serial numbers)	n/a	n/a
1886	n/a	187,000	n/a	(see Utility serial numbers)	n/a	n/a

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## Searching for a Patent Application Number Using Google® Patents Advanced Search

**Google Advanced Patent Search** About Google

Find results with all of the words with the exact phrase with at least one of the words without the words

636322 100 results Google Search

Patent number Return patents with the patent number

Title Return patents with the patent title

Inventor Return patents with the inventor name First name, last name, or both

Original Assignee Return patents with the original assignee name First name, last name, or both

Current U.S. Classification Return patents with the current U.S. classification Comma separated list of one or more classification codes

International Classification Return patents with the international classification Comma separated list of one or more classification codes

Cooperative Classification Return patents with the cooperative classification Comma separated list of one or more classification codes

Patent type/status Return patents with type/status Any type/status

Date  Return patents anytime  Return patents between: Jan 1890 and Dec 1901 e.g. 1959 and 2000, or Jan 1959 and Dec 2000

Restrict date by  Restrict by filing date  Restrict by issue date

UNITED STATES PATENT OFFICE.

LOUIS ALLARD, OF OGDEN, UTAH.

WASHING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 640,167, dated January 2, 1900.  
Application filed May 6, 1897. Serial No. 885,821. (Ofs model.)

To all whom it may concern: Be it known that I, LOUIS ALLARD, a citizen of the United States, residing at Ogden, in the county of Weber and State of Utah, have invented certain new and useful Improvements in Washing-Machines; and I do hereby declare the following to be a new and exact description of the same, reference being made to the accompanying drawings, in which—

7, the latter being so disposed as to lie sufficiently away from the internal walls to provide the chamber S, designed to carry off the products of combustion and at the same time reliably hold the heat into engagement with the inner walls, with the result that the contents of wash-chambers may be brought

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## Foreign Patent Application or Issued Patent Numbers



- Sometimes numbers found on devices are not U.S. patent numbers at all, but foreign patent or patent application numbers. In an ideal world, these numbers would have country codes or abbreviations before them, but this is not always the case with older inventions.
- Two places you can search by publication number without requiring country codes: PubWEST Foreign Images Search (only at a PTRC) or Espacenet Worldwide Database publication number field (country codes are optional) in the Advanced Search Form.

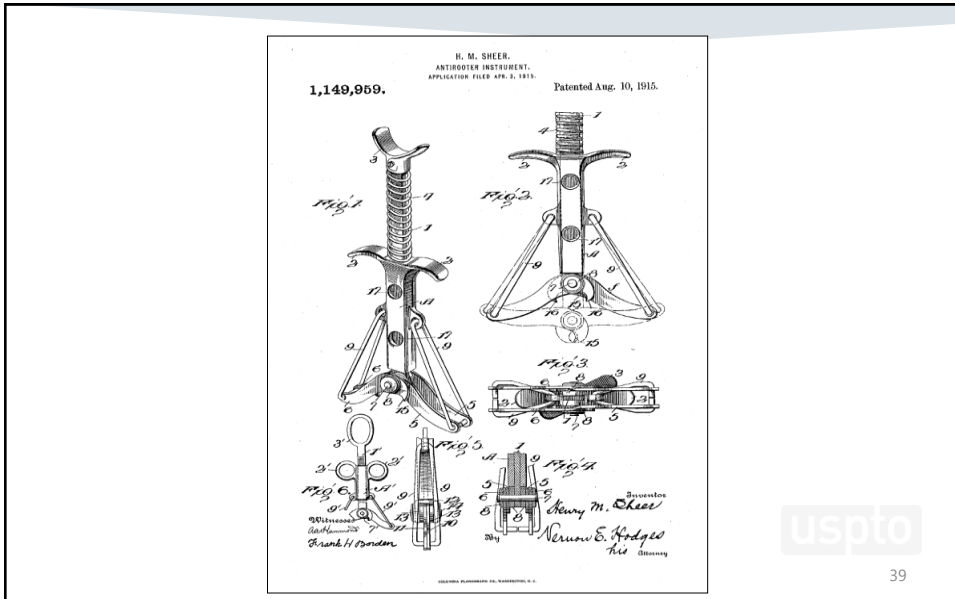
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## Searching by Date on a Device



This discovered tool has the imprint "Pat. AUG 10 1915."  
Here a patent date search in PatFT results in 865 patents issued on that date that can be reviewed for the tool's design. Or, if you have the print *Official Gazette* volume for that date, it can be manually reviewed. Many Official Gazettes are available on Hathi Trust.

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## Review

We provided Research Tips for helping a customer find an early U.S. patent if...

- **Inventor's Name is known;**
- **Type of Invention is known;**
- **Information such as Patent/Patent Application Numbers or a Specific Date are found on a device.**

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## For Further Exploration

- Comfort, Jan. "Finding Grandpa's Patent: Using Patent Information for Historical or Genealogical Research." *Science & Technology Libraries*. 22 no. 1/2 (2001): 39-56.
- Directory of American Tool and Machinery Patents. Accessed 9/28/2015. <http://www.datamp.org/patents/search/typeSearch.php> .
- Melvin, Thomas C. "Not Just for Inventors: Using Patents for Historical Research." *Documents to the People*. 30 no. 3/4 (2002): 22-27.
- Patent and Trademark Resource Center Association. "Historical, Regional and Specialized Patent and Trademark Research." Accessed 9/28/2015. <http://ptrca.org/history> .

## Questions?

[tom.turner@uspto.gov](mailto:tom.turner@uspto.gov)

**Patent and Trademark Resource Center  
Program ([www.uspto.gov/ptrc](http://www.uspto.gov/ptrc))**

(12) <b>United States Patent</b> Doherty et al.	(10) Patent No.: <b>US 9,123,340 B2</b>
(45) Date of Patent:	Sep. 1, 2015
(54) <b>DETECTING THE END OF A USER QUESTION</b>	7,983,906 B2 * 7/2011 Gao et al. .... 704/215
	8,190,431 B2 * 5/2012 Sannerud ..... 704/251
	8,457,966 B2 * 6/2013 Sannerud ..... 704/251
	8,793,136 B2 * 7/2014 Cho et al. .... 704/275
(71) Applicants: <b>Ryan P. Doherty</b> , San Jose, CA (US); <b>Nicholas Johnston</b> , San Jose, CA (US)	8,793,138 B2 * 7/2014 Cho et al. .... 704/275
	8,874,448 B1 * 10/2014 Kauffmann et al. .... 704/278
(72) Inventors: <b>Ryan P. Doherty</b> , San Jose, CA (US); <b>Nicholas Johnston</b> , San Jose, CA (US)	2002/0105575 A1 8/2002 Hinde et al.
	2003/0154084 A1 8/2003 Li et al.
	2003/0236663 A1 12/2003 Dimitrova et al.
	2009/0112590 A1 4/2009 Pulz et al.
(73) Assignee: <b>Google Inc.</b> , Mountain View, CA (US)	2010/0106495 A1 4/2010 Iwasawa
	2010/0161334 A1 6/2010 Kang et al.
	2010/0235341 A1 9/2010 Bennett et al.

