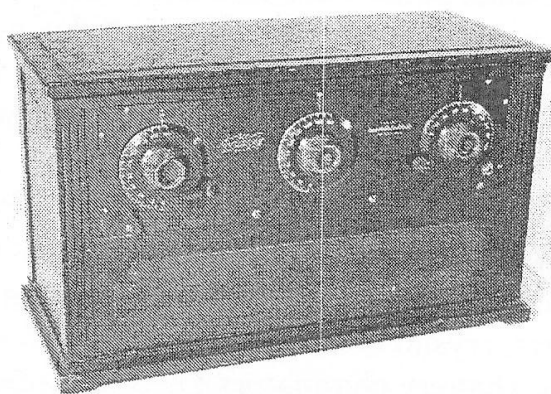




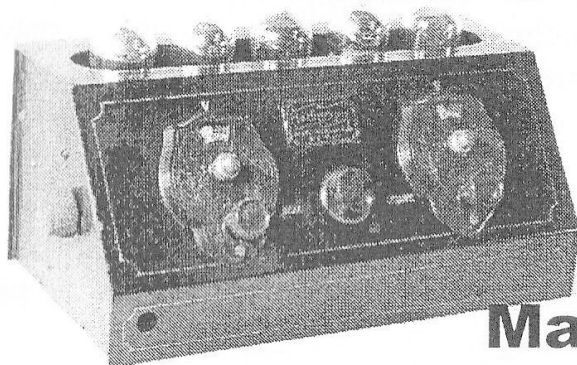
Wisconsin Antique Radio Club Newsletter

April 2008

**Western
Coil**



&



**Electric
Manufacturing
Company**

Officers:

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Western Coil & Electric Manufacturing Company

Submitted by: Dale Boyce

This is the first in a series of articles about Wisconsin Radio Manufacturers. During the 1910's, 1920's, 1930's there were at least 50 different Wisconsin companies "making" radios or radio components. Some were sold under their own brand names and others were sold under different brand names. Some of the companies were contracted by other companies to manufacture radios. Some of the local brands were made elsewhere.

Some of the early equipment was developed for ship-to-shore use on the Great Lakes. Wisconsin companies were involved with early radio making equipment such as: spark-gap transmitters, wireless receivers, crystal receivers, tube type radios, amplifiers, power supplies (battery eliminators), headsets (earphones), horn speakers, cone speakers, antennas, etc.

While some of the companies made complete radios, other Wisconsin companies made radio set components and accessories. Wisconsin made products include: fixed resistors, variable resistors, variable condensers, audio frequency (AF) transformers, radio frequency (RF) transformers, tube sockets, knobs, binding posts, batteries, cabinets, etc.

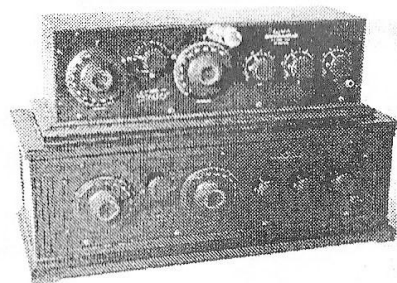
There were also several radio supply companies operating in Wisconsin. They provided ready-made radio sets and all of the parts for the do-it-yourself set builders.

The featured company in this issue is Western Coil and Electrical Company from Racine, WI. William Turnor Lewis and his father started Western Coil in 1915. In 1920 they made the Western Coil Type A crystal radio.

It was packaged in a small wooden Box with a hinged cover. The radio was on the right side and a compartment on the left side held the headset. It is similar in appearance to the Borchert-Manegold Mfg Co crystal Set, Westinghouse Aeriola Jr.

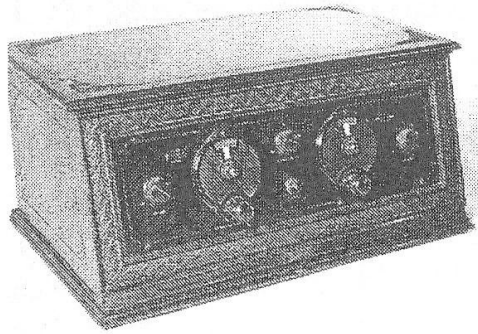
Crystal set and the Western Electric

44001 crystal set. It appears that it was manufactured prior to all of these other sets. (1).



Continued on next page

Western Coil & Electric Manufacturing Co. cont.



In 1922 Western Coil made the Lewis set. It is a large upright cabinet with 4-tube glass filled portholes (2).

The WC-Radiodyne series of battery radios was introduced in 1923 and

manufactured until at least 1927. They used the phrase "The Voice of the Nation". References indicated that the company manufactured radios into the 1930's and then made non-radio items until about 1978. (Some of the local WARC club members were present at a sale in Racine in the 1980's or 1990's in which new-old-stock radios, cabinets and components from Western Coil were sold at auction.) The early battery radios included model numbers such as WC-4, WC-5, WC-5B, WC-5-SW, WC-6, WC-10 and so on thru WC-22. It appears that some of the sequential numbers may have been skipped. Available cabinet styles included a compact wooden cabinet with a split hinged top, a couple of variations of slightly larger wooden cabinets with fully hinged tops (types A and E), a deluxe (ornamental) wooden cabinet (type G), and a console (type C). The model WC-15-Jr. was made in a compact black crystalline finish metal cabinet with all 5 tubes projecting thru the top. A tube cover was initially included but the tube cover is seldom seen. Western Coils also produced a speaker cabinet equipped with a Western Electric speaker. (3), (4), (5).

Western Coil and Atwater Kent. It is interesting to note that in 1923, Western Coil registered the "Radiodyne" trademark shortly before Atwater Kent attempted to register the same name. Since Western Coil was able to demonstrate that they had been using the trademark, Atwater Kent was not allowed to use it.

Western Coil & Electric Manufacturing Co. cont.

In the mean time, Atwater Kent had launched an extensive marketing campaign using the term "Atwater Kent Radiodyne – The Wonder Set". They manufactured and sold Model 10 No. 4340 breadboards with the "Radiodyne" trademark. They had to retool and change the transformer coil nameplates on later models. Apparently Atwater Kent was allowed to sell what they had made. Occassionally, AK "Radiodynes" show up for sale. (6).

Footnotes:

1. For photos of Western Coil Type A , Borchert-Manegold and the Aeriola Jr crystal radios refer to "Crystal Clear Vol.1 and 2", by Maurice L. Sievers. Photos of the Western Electric and Aeriola Jr crystal radios can be seen in "Radiola The Golden Age of RCA" , by Eric Wenaas.
2. To see a Western Coil "Lewis" radio on display, visit the Pavek Museum of Broadcasting in St. Louis Park, MN.
3. For additional WC information refer to Radio Manufacturers of the 1920's Volume 3 by Alan Douglas. This book contains ten pages of photographs and information about WC.
4. More WC information is available thru a series of 20 articles written by Eric Sanders and published in Radio Age. The Mid Atlantic Antique Radio Club (MAARC) has archives of the series of articles.
5. For tube compliments and additional descriptions refer to the Western Coil listings in the "Battery Set Compendium 1914-1929" by Greg Hunolt.
6. Information about the Atwater Kent "Radiodyne" breadboards is available in Radio Manufacturers of the 1920's, Volume 1 by Alan Douglas, The AWA Review Volume 12 published by the Antique Wireless Association and the book "A. Atwater Kent, The Man, The Manufacturer and His Radios" by Ralph Williams and John P. Wolkonowicz, edited by Donald O. Patterson.

Photos are from the authors' collection. Any additions or corrections to this info are welcome. The author is interested in communicating with others who have information or questions about Western Coil radios.

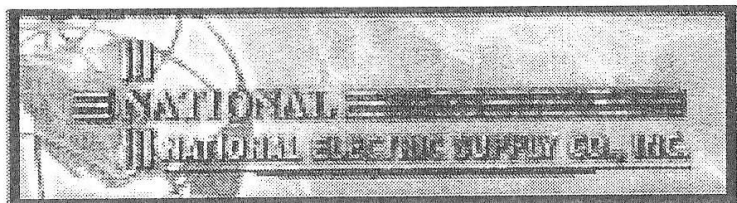
Dale Boyce, 

The Battery Set Compendium

Submitted by: Greg Hunolt, April 14, 2008

I bought my first old radio – an Atwater Kent model 42 – at a marginal antique shop in 1993, and within a few years I became seriously hooked on the radio-collecting hobby. I became most interested in radios of the 1920's, especially the battery powered sets from the earlier years of the decade (and before). While there are a number of excellent sources of information about 1920's radios, there is no one comprehensive source that either contains or points to most of the available information about them. My goal is to fill that gap with the Battery Set Compendium (BSC), to make the BSC the best possible 'first stop' source for information about early battery set radios and the companies that made them. As a 'first stop' source, the BSC is an easily searchable database containing as much information as is practical about the widest possible range of radios and companies, and pointing to but not duplicating sources of greater depth, such as the Alan Douglas "Radio Manufacturers' of the 1920's" books or Eric Wenass' new book "Radiola - The Golden Age of RCA, 1919-1929". The BSC is not a price or value guide.

The scope of the BSC is early vacuum tube battery sets (kits as well as factory assembled sets) from roughly 1913 through 1929 (excluding automobile and 'farm' radios). The BSC includes early 'modules' such as tube control units, detector units, amplifier units, tuner units, etc., that were connected together in various combinations to comprise complete sets, as well as complete sets, providing a view of the evolution of the technology. Crystal radios are outside the scope of the BSC but references to crystal detector units used as components of a 'modular' receiver are included (and some vacuum tube radios included crystal detectors). I have also added some information on World War I sets built for the U.S. Navy by companies such as National Electric Supply Co. or Wireless Specialty Apparatus Co., and early sets from Marconi and Mignon, because of their important place in the history and evolution of radio in its early days.



The Battery Set Compendium cont.

As you will see in the tables that follow, my sources of information for the BSC include vintage radio magazines, radio company publications, AWA publications, antique radio club newsletters (e.g. the Antique Radio Gazette, Radio Age), Antique Radio Classified, books (e.g. the Douglas and Wenass books mentioned above), radio collectors guides (e.g. the seven editions of the Slusser and previously Bunis "Collectors' Guide to Antique Radio"). I am particularly indebted to other collectors who have loaned me information (such as radio magazines and company publications) and/or provided me with details on radios in their collections, notably Gary Alley, Merrill Bancroft, Dale Boyce, Dick Bury, Greg Farmer, Lou Lindauer, Steve Raymer and the Pavék Museum, and Steve Wallace.

The BSC currently contains information about 1,432 radio companies and 5,640 different battery set types. (For comparison, of these, 723 companies and 3,017 radio types are listed in the McMahon-Langley "Radio Collectors' Guide, 1921-1932" and 119 companies and 622 radio types are listed in the Slusser 7th edition "Collectors Guide to Antique Radios"). So far 35 states are represented and 291 cities. The completeness of the information varies widely; most complete for the most prominent companies (e.g. RCA, Grebe, Crosley, etc.), ranging to much less so for the most obscure – although odd details slowly turn up!



For Wisconsin, as of now the BSC contains the best information I have been able to find about 28 companies who produced battery sets in the 1920's, as listed in the table below ("active years" are in the range of 1913 to 1930 only). I would be very interested in information about any other Wisconsin companies you may know of, and their radios.

Wisconsin Radio Companies in the BSC

Company Name	City	Trade Names	Active Years	Radio Types
Allen-Bradley Co.	Milwaukee	None	1925-27	1
Badger Radio Company	Milwaukee	None	1922-22	1
Bates-Rugee	Milwaukee	Bates	1923-27	3
Bechaud Radio Labs.	Fond Du Lac	Master Dyne	1926-26	1
Breslauer	Milwaukee	Bresco	1926-26	0
Central Radio Laboratories	Milwaukee	Centralab	1925-25	1
Empire	Beaver Dam	None	1925-25	1
Empire Electric Manufacturing Co.	Milwaukee	None	1926-26	5
Fiske, L.C., Electric Co.	Beloit	Melo-Tone	1925-25	1
Globe Electric Co.	Milwaukee	Duodyne	1923-26	24
Goulding Manufacturing Co.	Milwaukee	Ultradyn	1925-25	3
Hansen Storage Co.	Milwaukee	Bird Cage	1923-25	6
J. M. P. Company	Milwaukee	None	1926-27	1
Klitzen Radio Mfg. Co.	Racine	Wolverine, Kent	1913-26	13
Lincoln (WI)	Milwaukee	None	1925-25	0
Nunn-Landon Company	Milwaukee	E. D. Nunn	1924-26	6
Plouff Radio Company	Oshkosh	Herital	1925-25	1
Plymouth Radio and Phono. Co.	Plymouth	None	1925-30	1
Richards, C. W.	Janesville	CWR	1925-25	2
Rodgers Radio Corporation	West Allis	None	1925-25	1
Sunlite Radio	Milwaukee	None	1924-24	1
Tholen Electric Co.	Milwaukee	None	1925-25	0
Webster Electric Co.	Racine	None	1922-23	3
Wells Mfg. Co. (WI)	Fond Du Lac	Arlington, ALKIRE	1922-26	14
Wengel	Madison	None	1925-25	0
Western Cable & Light Company	Baldwin	None	1925-25	3
Western Coil & Electrical Co.	Racine	Radiodyne	1919-30	31
W-K Electric Co.	Kenosha	Oriole	1924-27	13

The next two tables describe the content of the BSC's database. The first table contains information about radio companies, and the second contains information about individual radio types associated with each company (so the company ID is the link between the tables).

Radio Company Information in the BSC

Item	Notes
Company Name and Aliases	Reflects name changes, etc.
Trade Names Used by the Company	
Manufacturer(s) of Radio Types Distributed by the Company	e.g. in cases like Montgomery Ward distributing Tri-City sets.
Distributor(s) of Radio Types Made by the Company	e.g. in cases like Tri-City making sets for Montgomery Ward.
Locations, City and State, Street Address	Currently two locations allowed.
Years Active in Radio	Earliest through 1930 as applicable.
Current Collector's Guide References (1,286 included to date – they overlap)	e.g. to Slusser 7 th , 6 th , Grinder 2 nd , McMahon, through 1930.
Vintage Radio Company Trade Directory References (1,994 included to date – they overlap)	e.g. to McGraw-Hill Trade Directories for 1924 and 1925, etc.
References to articles and books about the company (615 included to date)	e.g. to vintage radio magazines, AWA pubs, Radio Age, Alan Douglas, Wenass books, company catalogs / bulletins, etc.
Concise notes on the company, company history, including references to earliest advertising.	A brief summary, pointing to other sources for depth, e.g. Douglas, Wenass books, articles, etc.

The next table lists the information the BSC contains about each radio type.

Radio Type Information in the BSC

Item	Notes
Model Identification	Trade Name, Model Name or Number
Manufacturer	
Distributor	If other than the manufacturer

Year first sold	Usually the earliest ad
Cabinet Style	Table, Console, Breadboard, etc.
Control Configuration	Counts of Dials and Knobs
Stage Configuration (number of RF, AF stages, detector tube or crystal, superheterodyne IF stages, etc.)	Similar to Langley in McMahon-Langley
Tube Information (count, types, battery voltages as possible)	
Description and notes (brief description of cabinet and panel layout, etc.)	Similar to Bunis and Slusser, and other notes.
References to Technical Articles in Publications or Books (2,425 included to date)	e.g. to AWA pubs, Radio Age, Radio News, Radio, QST, Riders schematics, company catalogs / bulletins, etc.
References to Advertisements in Vintage Radio Publications (5,305 included to date)	e.g. to Radio News, Radio, Popular Radio, QST, Radio Broadcast, etc.
References to Vintage Trade Radio Set Directories (3,020 included to date)	e.g. to Radio News, Radio Retailing, Radio Industry Set Directories
References to Current Radio Collector Guides (5,912 included to date – they overlap)	e.g. to Slusser 6 th and 7 th , Grinder 2 nd , McMahon-Langley, through 1930.
References to Published Photographs (4,132 included to date)	e.g. to “Collectors’ Guide to Antique Radios” (Bunis - 1- 4, Slusser 5-7, “Vintage Radio”, Douglas, Wenass.

A collector using the BSC can in effect pose questions such as ‘which companies produced battery sets in 1924’ or ‘give me a list of the Wisconsin companies that produced battery sets’ or ‘how about a list of breadboard sets made from 1920 to 1925’. The BSC software then produces a display of the response that the user can look at and/or print. The responses are interactive; for example, if the user posed the Wisconsin radio companies question mentioned above, the response would be a list of Wisconsin companies (i.e., the table above).

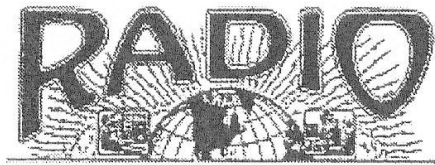
The user is then able to click on a company and see detailed information about the company, see a list of the radio set types made by that company, and/or see detailed information about one or more of the company's specific radio set types. Alternatively, a collector can begin by entering a word that might be, or be part of, a company name, trade name, or model name. The BSC will search in turn company names, trade names, and model names to find those that match or include the word, and at each step show the user a list of the names found and provide an opportunity for the collector to click on each of them to see the all of the available information on the particular company or radio type.

At the present time the BSC is an Excel application; to use the BSC a collector must have Excel, preferably on a PC. The BSC uses Excel's visual basic to implement the BSC's interactive search and retrieval capabilities.

The BSC package is available to collectors on request on CD or as an email attachment. It includes the BSC's Excel workbook, a Users' Guide (in Word and PDF), and a text "Readme file". The BSC is available at no cost to battery set collectors; in return I ask that collectors contribute their comments, criticisms, and suggestions for how the BSC can be made better and more useful. Feedback I have received from collectors so far has been very helpful to me, and I greatly appreciate it. I hope that collectors will also provide information about companies and sets that the BSC is missing, especially perhaps local companies that did not advertise in the national publications or otherwise become well-known.

If you would like a copy of the BSC, please email me at [REDACTED] or contact me at [REDACTED] or write to me, Greg Hunolt, [REDACTED] Plymouth, WI 53073. The 2008 edition of the BSC will be available by early June, copies of a preliminary 2008 version are available now. I will offer future updates to the BSC to any collectors who ask to be included in a list for that purpose. I have greatly enjoyed putting the BSC together and I would be very happy if other collectors who share my interest could find what I have done interesting and useful.

2008 Swap Meets!



Sunday March 30th, 2008

Sunday May 11th, 2008

Sunday July 20th, 2008

Sunday October 12th, 2008

Time: 7AM to 11AM
(All Meets)

Location: The Landmark 1850
5917 S. Howell Ave.
Milwaukee, WI
(Near Airport)

Questions? Call or E-Mail:
Bill Engaas [REDACTED]
[REDACTED]

We want to hear from you!

Have Photos, Ideas,
Tips you would like to
share with other
Antique Radio buffs?
Contact Ben Bensaid
[REDACTED]



Upcoming Events!

ARCI – Antique Radio Club of Illinois

6/8/08 DuPage County Fairgrounds 7AM

7/31-8/2/08 Willowbrook Holiday Inn 7PM-1PM

10/5/08 Outdoor Swapmeet 7AM-11AM

American Legion Hall- Carol Stream, IL

www.antique-radios.org



Michigan Antique Radio Club

Jul 10-12, 2008 EXTRAVAGANZA'08

Holiday Inn South Convention
Center in Lansing Michigan

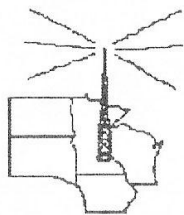
Nov. 8th, 2008 Michigan ARC

Kalamazoo, MI

www.michiganantiqueradio.org



NARC – Northland Antique Radio Club



6/6-6/7/08 Radio Daze 2008

Comfort Inn, Plymouth, MN

September 2008 - Annual Meeting and
Mini-Swap Meet

November 2008 - Annual Indoor Fall
Swap Meet

www.geocities.com/northland.geo



Milwaukee Radio History – WTMJ

Compiled from 620wtmj.com

May 1922 -- The Milwaukee Journal sponsored its first radio program on Milwaukee's first radio station, WAAK, which was owned by the Gimbel Bros. Department Store.

January 1927 -- The NBC "Victor Hour," starring Will Rogers, was broadcast from WHAD's studio's in the Milwaukee Journal building. It was the first local broadcast of a network program.

April 1927 -- The Milwaukee Journal bought radio station WKAF and built a new transmitter in Brookfield.

June 1927 -- The Federal Radio Commission assigned the call letters WTMJ, to stand for "The Milwaukee Journal."

October 1928 -- The Federal Radio Commission reassigned WTMJ to 620 on the AM dial. Listeners began encountering interference from radio stations that shared the frequency in other parts of the country . WTMJ engineers solved the problem by developing directional radio signals, a system that's still being used throughout the nation.

January 1933 -- WTMJ's studios on the second floor of the Milwaukee Journal building opened to live audiences for the first time.

1939 -- Gordon Thomas, a Milwaukee favorite, began hosting the successful "Top of the Morning" program. He would be WTMJ's morning host until 1961.

September 1941 -- In a special ceremony, the governor, mayor and other dignitaries helped WTMJ executives lay the cornerstone for WTMJ's new Radio City building at Capitol Drive and Humbolt. It was the first building in the nation constructed exclusively for radio and television broadcasts. WTMJ-TV would not go on the air until 1947.

Become a Member!

Membership Dues for 2008 will be \$15.00.

Selling at Swap Meets:

\$7.00 for members - \$10.00 for non-members.

Antique Radio Club-Wisconsin

2008 Swap Meet Dates Inside!

Appleton, WI 54911

John &
Elizabeth
5/10/57

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