

As an aside, just after the 1936-1938 movie dial era, Wards introduced a new model number format that is a boon to radio collectors. The format is YY-LL-NNNN where YY is the model year with its ones and tens digits reversed, LL is the initials of the manufacturer and NNNN is the unique model number. Examples:

1. 93BR-714B is: 1939 model year, made by Belmont Radio, radio unique model identifier is 417B
2. 04WG-1108A is: 1940, Wells Gardner, model 1108A. Interestingly, the catalog number for this set retained the form of P162C 1108. The A and no suffix versions can be found on-line.

Model suffixes:

1. The A and B suffix in the examples above look to be product change tracking. For example, the 62-417A and 62-417B models look the same in photographs.
2. The only case of a movie dial E suffix is found on models 62-270 & 62-270E. They appear in the Rider schematic page Mont.-Ward 14-96. The significance of the E may be telephone dial tuning shown as an option on the schematic. The 62-270 is a manual tune movie dial radio. No other information was found on the E model as of this writing.
3. Movie dial models 62-308 and 62-308X 14 are the same set except the X suffix model is equipped with a 25 cycle (HZ) A power transformer. The X suffix is used on multiple models for the same purpose.

Wells Gardner

Wells Gardner uses a system of letters and or numbers for their radio *series*. The designation *series* is the chassis number when used in client radios that have multiple configurations. The series number is the model and chassis number for a singular client cabinet model and when marketed under the Wells Gardner name. An example is the Wards 62-197 16 tube set (non-movie dial). It was sold under the Wells Gardner name and LaFrance^B brand as a Series 6F. The label in the Airline cabinet shows just 62-197.

W.G.24 is often on paper labels, metal labels and even in print. W.G.24 is associated with the licensing notice from RCA, Hazeltine, et al with their patent numbers. W.G.24 is often confused for the Wells Gardner series number when it appears on a standalone license label not associated with the radio model number and details such as tube layout. Therefore, it is logical that W.G.24 is the licensing information independent of presentation. The example below is a metal license



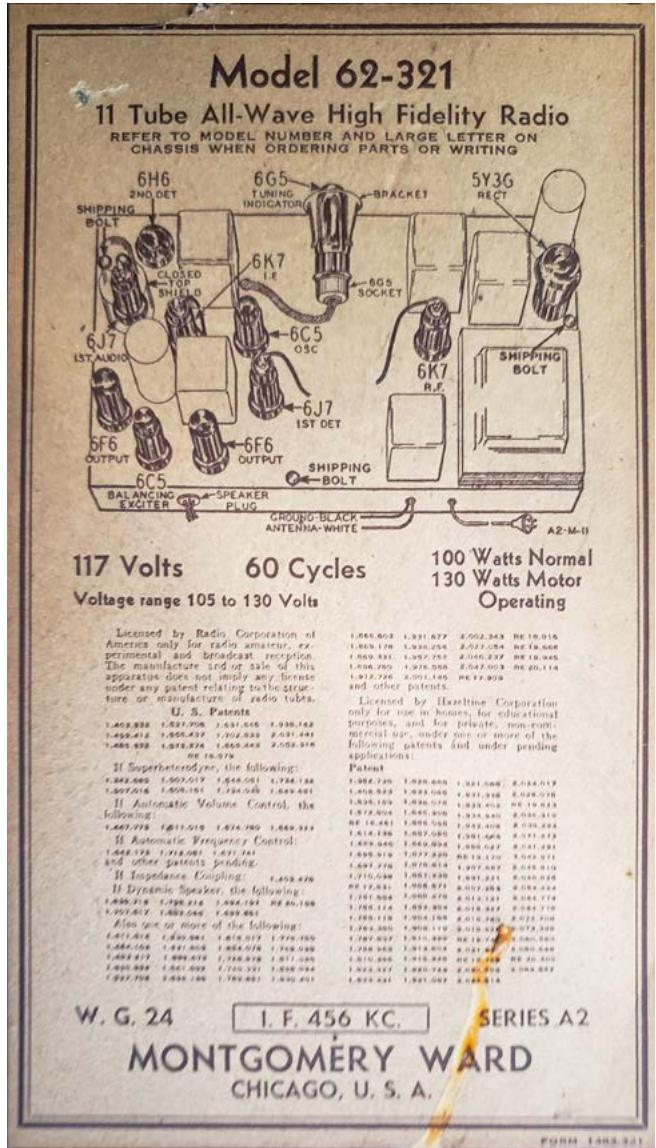
label from a circa 1930 Kimball model 60637 Cathedral made by Wells Gardner from their series 60 63. W.G. 24 is on lower left.

Correlating Airline models to Wells Gardner series

Step one was to make a list of movie dial radio models. This was done searching www.radiomuseum.org – one publisher had a long list of movie dial sets in his listings - with publications listed in *references* below and Greg Van Beek's kind help. The subsequent list was vetted against Riders and on-line photos. Some sets are mis-identified both as movie dials and as not being movie dials in various publications. That is not to criticize the authors, as errors have been caught in this process and some have surely remained.

While digging into the various models of movie dial sets, the labels in the cabinets revealed their Wells Gardner series. Curiosity drove the process to correlate Wells Series to the many Airline models. There were a variety of methods used to match up Wards to Wells:

1. Look at physical set labels – only a few available in a timely manner



WARDS AIRLINE RADIO

Model 62-403

13 Tube All-Wave High Fidelity Radio

117 Volts
Voltage range 105 to 130 Volts

60 Cycles

200 Watts

Licensed only for radio amateur, experimental and broadcast reception. The manufacture and/or sale of this apparatus does not imply any license under any patent relating to the structure or manufacture of radio tubes.

U. S. Patents

1,403,932	1,573,374	1,936,182	2,086,884
1,425,412	1,621,444	1,949,640	2,092,093
1,485,332	1,702,933	2,031,441	RE 17,809
1,537,785	1,888,443	2,048,914	RE 18,916
1,588,437	1,920,342	2,082,316	

If Superhetrodyne, the following:
 1,454,608 1,908,181 1,734,030 1,740,331
 1,507,016 1,844,081 1,734,128 1,778,487
 1,807,017 1,849,851

If Automatic Volume Control, the following:
 1,447,779 1,810,888 1,811,015 1,874,760
 1,846,327 RE 20,442

If Automatic Frequency Control:
 1,456,179 1,712,081 1,774,908

If Dynamic Speaker, the following:
 1,838,713 1,798,216 1,884,197 RE 20,198
 1,707,817 1,832,048 1,890,861

Also one or more of the following:
 1,403,475 1,928,180 1,768,881 1,838,934
 1,411,814 1,148,017 1,778,758 1,851,312
 1,448,930 1,884,078 1,787,846 1,818,453
 1,527,762 1,888,348 1,788,038 1,848,178
 1,531,808 1,858,784 1,784,887 1,894,760
 1,598,678 1,712,036 1,811,099 1,807,470
 1,661,662 1,718,181 1,828,094 1,907,978
 1,972,689 1,728,878 1,830,401 1,931,477

Patent

1,889,738	1,838,078	1,843,468	2,041,281
1,408,823	1,849,808	1,881,869	2,042,871
1,838,108	1,888,085	1,898,627	2,048,910
1,878,804	1,887,080	RE 18,170	2,048,988
RE 18,461	1,889,094	1,807,887	2,054,424
1,818,128	1,877,828	1,991,221	2,064,774
1,889,848	1,878,814	1,907,283	2,064,778
1,608,916	1,881,232	2,013,121	2,064,779
1,897,778	1,888,871	2,019,327	2,072,476
1,710,038	1,888,376	2,018,780	2,072,768
RE 17,891	1,894,374	2,018,526	2,073,038
1,781,824	1,904,185	RE 18,764	2,072,248
1,783,114	1,908,118	2,021,892	2,080,885
1,789,118	1,910,289	RE 18,768	2,080,888
1,763,203	1,912,809	2,022,000	2,081,861
1,787,837	1,915,925	2,024,914	RE 20,445
1,788,862	1,920,743	2,024,017	2,084,447
1,810,355	1,921,087	2,026,078	2,084,758
1,823,327	1,921,588	RE 18,928	2,084,478
1,823,331	1,921,385	2,026,819	2,084,184
1,828,468	1,933,400	2,028,884	2,100,452
1,829,088	1,944,840	2,021,278	2,103,097

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W. G. SERIES A16

I. F. 456 KC.

MONTGOMERY WARD

CHICAGO, U. S. A.

Only the finest quality of parts are used in this radio. This cabinet is designed by Wards Bureau of Design. This model has been thoroughly tested and approved by Wards Bureau of Standards.

FORM 1696-403

2. Look up all models on-line
 - a. www.radiomuseum.org – some had WG series listed that were later verified by schematic comparison, while others had pictures of their cabinet labels
 - b. Antique radio forums that listed specific period publications
3. Rider Mont.-Ward schematics sometimes have the WG series number

in small print on the lower left below the schematic. Rider used the manufacturers schematic as provided with their own augmentations. This was a welcome surprise found well into the process.

4. When no Wells Series numbers were available, Rider Mont.-Ward schematics were compared to Rider Wells-Gard schematics. Often the Wards schematic and its Wells schematic were in different Rider volumes.

The research resulted in a big spreadsheet of information. The chart below is the essence of those findings.

Wells Gardner series	Airline Model number	Dial	Cabinet	Tube count	Input power
2DL	62-293	Movie	console	13	AC
2DL	62-413	Movie	console	13	AC
7LL	62-226	Round	table	8	AC
7LL	62-228	Round	Table	8	AC
7LL	62-308	Movie	console	8	AC
7LL	62-308X	Movie	console	8	AC 25HZ
7LL	62-318	Movie	table	8	AC
7LL	62-318X	Movie	table	8	AC 25HZ
7LL	62-408	Movie	Console	8	AC
7LL	62-408X	Movie	console	8	AC 25HZ
7LL	62-418	Movie	table	8	AC
7LL	62-418X	Movie	table	8	AC 25HZ
7P	62-332	Movie	console	7	32 VDC
7P	62-432	Movie	console	7	32 VDC
7Q	62-273	Movie	console	8	6 VDC
7Q	62-283	Movie	table	8	6VDC
7Q	62-327	Movie	console	7	6 VDC
7Q	62-337	Movie	table	7	6 VDC
7Q	62-427	Movie	console	7	6 VDC
7Q	62-437	Movie	table	7	6 VDC
A2	62-321	Movie	Console	11	AC
A2	62-451	Movie	console	11	AC
A3	62-303	Movie	console	13	AC
A3	62-433	Movie	console	13	AC
A4	62-347	?	?	7	AC
A4	62-417	Movie	console	7	AC
A4	62-447	?	?	7	AC

A5	62-309	Movie	console	9	AC
A5	62-449	Movie	console	9	AC
A7	62-270	Movie	table	9	AC
A7	62-270E	Movie	?	9	AC
A16	62-403	Movie	console	13	AC
OEL	62-261	Movie	console	11	AC
OEL	62-311	Movie	console	11	AC
OEL	62-411	Movie	console	11	AC
OF	62-310	Movie	console	10	Multi battery
OF	62-410	Movie	console	10	Multi battery
OF	62-412	Movie	console	10	Multi battery
②	62-267	Movie	console	7	AC
②	62-277	Movie	table	7	AC
⑤	62-331	Movie	console	11	6 VDC
⑤	62-441	Movie	console	11	6 VDC
⑥	62-313	Movie	console	13	AC
⑥	62-314	?	?	13	AC
⑦	62-271	Movie	console	11	AC

Circled numbers are common chassis sets and unknown Wells series numbers

As the chart shows, 12 identified Wells Gardner series made 36 Airline models. This is smart engineering and manufacturing as peripheral changes to a common series make multiple models. That strategy is commonly used across many industries then and now; it keeps cost, complication, and cycle time down.

The same series radios were sold to other firms such as Western Auto as a Truetone brand and within the Airline brand the same chassis was used for a movie dial and a round dial table radio. Below are pictures of an Airline 62-418¹⁵ movie dial and a tired 62-226¹⁵ round dial. These Airline models and a Truetone model used the Wells Gardner FLL series chassis.

These Airline 62-418 and 62-226 (pictured, next page) are the same cabinet with different dials and grill variations, another smart business decision. Wells Gardener made private label radios for retailers as their primary business. Cabinets and chassis were reused across models within product lines and across product lines.

This is still a work in progress as evidenced by the chart. Primary data from Montgomery Ward catalogs and physical radios was used when available. Next best information came from in-period documents from John F. Rider and Hugo Gernsback. Hard proof of details has not always been found. In those



62-418



62-226

cases statements have been made with qualifying words such as *it appears*. In all cases when using this information, *Trust but verify* to borrow the quote from Ronald Reagan (who borrowed it from the Russian proverb). The objective is to understand product and company history as best we can by *looking through the rearview mirror*.