



# LITTLE KNOWN RADIO MANUFACTURERS NMRCC TOPIC NOVEMBER 2017

JPANTHES

## AIR-WAY TOLEDO TYPE-F (3 RHEOSTATS), 1924

**Air-Way**  
**SANITIZER**

Your way to a Cleaner, Healthier Home

Home Products About Contact

Central Vacuum  
Clean with Allergy Relief  
and Less Effort

[learn more](#)

**STILL IN BUSINESS**

# SINCE 1920'S INITIAL UPRIGHT VACUUM ADDS DISPOSABLE PAPER DUST BAG

# CANISTER VACUUM INTRODUCED IN 1937



Your Way to a Cleaner, Healthier Home

Home Central Vacuum Accessories Restora History Why Air-Way Healthy Home

## The "Air-Way" name has stood for quality since 1920



The Air-Way Corporation in Toledo, Ohio originated the early days of the vacuum cleaner industry. Air-Way patented the first disposable paper dust bag for vacuum. Way also created the first 2-motor upright vacuum as we "power nozzle" vacuum cleaner. Air-Way also was first to use the dirt bag and first to use a HEPA filter on a vacuum.

Although Air-Way originally manufactured upright vacuums, in 1937 the first Air-Way canister vacuum was introduced. It was the mainstay of the product line for the next 60 years. As a testament to the quality of the Air-Way line, many of the models are still running today!

Now, the Air-Way Sanitizer Corporation in Cincinnati, Ohio carries on the tradition of quality and innovative products. A new vacuum line was launched in 2009 and a line of high quality products was introduced in 2010. The new Restora line is for fine hardwood floors and stone or laminate floors.

For More Detailed Information on the complete early history...

The Air-Way Sanitary System - Looking back at models from 1941

By **TOM GASKO**, Curator of the Vacuum Cleaner Museum

<http://www.vdta.com/Magazines/NOV09/fc-GaskoNov09>

The Continuation of Air-Way - Innovative changes through the years

By **TOM GASKO**, Curator of the Vacuum Cleaner Museum

<http://www.vdta.com/Magazines/DEC09/fc-GaskoDec09>

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**YVONNE DE CARLO**  
*Starring*  
in "THE GAL WHO TOOK THE WEST"  
Color by Technicolor  
A Universal-International Picture

**AIR-WAY** ★  
*Starring* IN MODERN HOMES  
THE WORLD OVER!  
**SANITIZER "66"**  
WORLD'S MOST VERSATILE CLEANER

- ★ EXTRA POWER
- ★ EXTRA QUIETNESS
- ★ EXTRA LIGHTNESS
- ★ EXTRA VERSATILITY
- ★ EXTRA EASE OF OPERATION

**EXCLUSIVE** ★ "THROW-A-WAY" BAG  
(NO BAG OR CONTAINER TO EMPTY)

PRIDE OF OWNERSHIP, as only provided by a product of master craftsmen, is YOURS with this amazing new Air-Way! Ease of operation...velvety smooth performance...PLUS—uncomparable beauty! This thrilling triumph of engineering skill brings YOU faster, easier, more thorough cleaning—floor to ceiling! Why wait even a day to brighten your home, freshen your outlook, with the new and seasonally different Air-Way!

YOU HELPED PERFECT IT! It's true the new Sanitizer was built upon Air-Way's 29 years of engineering know-how, inventive genius and the field experience of thousands of specialists. But the constant wise and helpful counsel of millions of friendly housewives also has contributed immeasurably to the perfection of this master product!

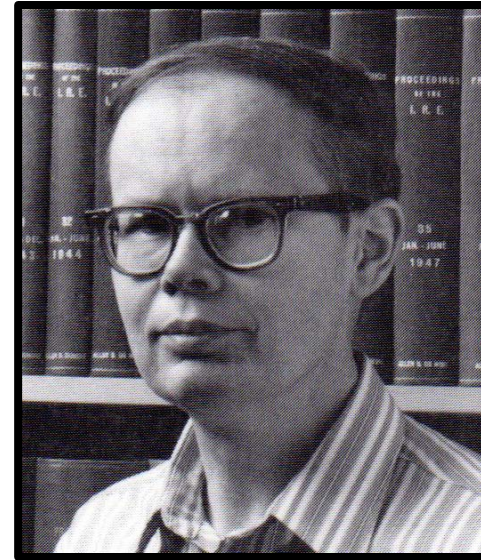
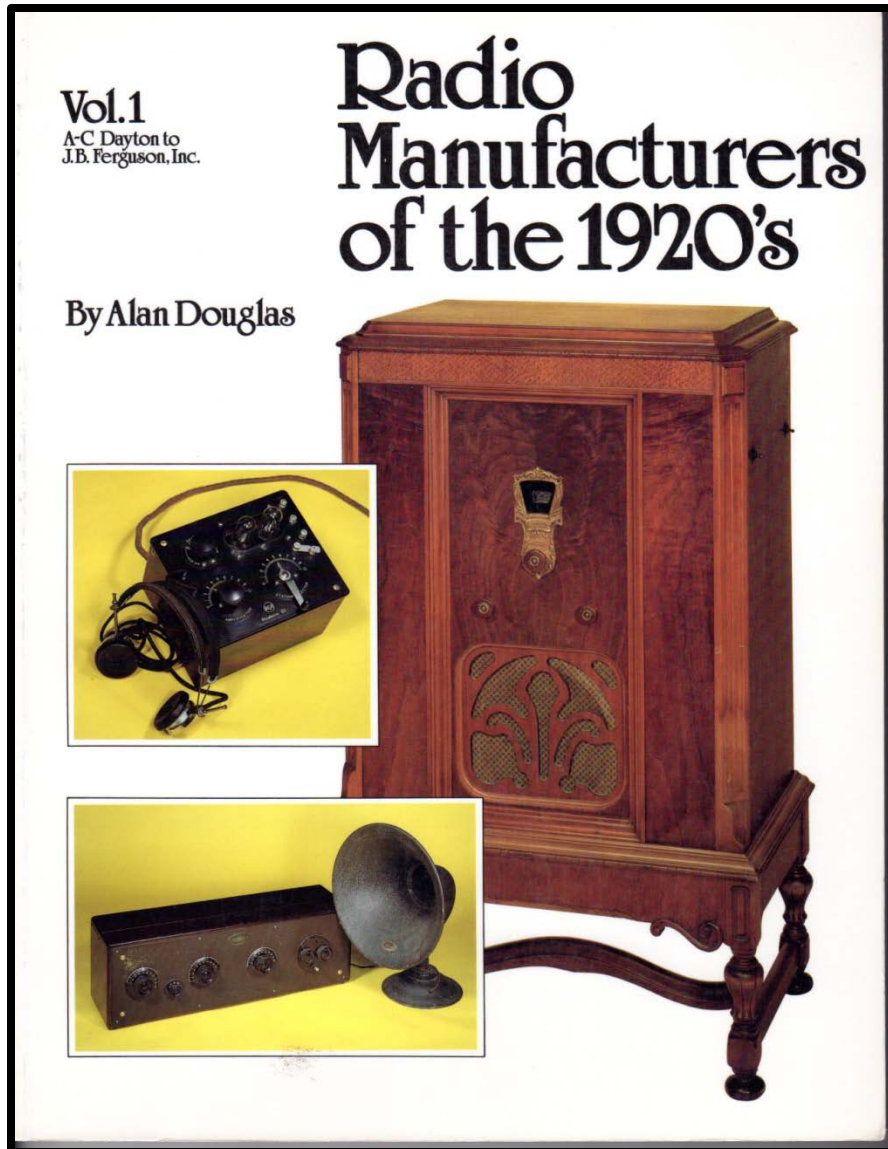
AIR-WAY — THE CLEAN WAY! Only the Air-Way Sanitizer has the Sanitary, Patented-Fiber-Paper, "THROW-A-WAY" BAG! No shaking out or emptying. No flying dust. No risk of spilling. When filled, just throw in trash burner. You never see, touch or inhale the germy-laden dust and dirt!

FOR SHOWING IN YOUR OWN HOME by an Air-Way Dealer, phone "Air-Way Branches, Inc.," your city, or write for name and address of Air-Way Dealer, Air-Way Electric Appliance Corporation, Toledo 1, Ohio.

FOR MORE THAN A QUARTER-CENTURY—THE FINEST IN HOME CLEANING EQUIPMENT

**Air-Way**  
TRADE MARK

# THE RADIO COLLECTING "BIBLE" OF EARLY RADIOS



Alan Scott Douglas, 72, of Pocasset died unexpectedly at home on November 16, 2015. He graduated from Bourne High School and Swarthmore College with a degree in Electrical Engineering.

# RADIO MANUFACTURERS of the 1920'S

## VOL. 1, by ALAN Douglas, page 17

**AIR-WAY ELECTRIC  
APPLIANCE CORP,  
TOLEDO OHIO, 1920  
MARKETED THE  
"AIR-WAY  
SANITARY SYSTEM"  
VACUUM CLEANER.**

**MADE RADIOS  
1923 - 1926.  
SHOWN IS MODEL  
1924 MODEL TYPE-F  
SOLD FOR \$50**

# AIR-WAY

Air-Way Electric Appliance Corp.

The Air-Way Company of Toledo, Ohio made vacuum cleaners in 1919, featuring inventor D. Ben Replogle's designs: a paper bag to catch the dust, and a valve to divert the suction through the hollow handle to accessories.

The Air-Way Electric Appliance Corp. was formed in July 1920, also absorbing the Toledo Screw Products Co., which had made shells during the war, and Arrow Manufacturing Co., suppliers of Air-Way's motors. Both companies were owned by the Tracy family, prominent Toledo lawyers and industrialists: Thomas H. Tracy and his sons Pratt E. Tracy, Newton A. Tracy, and Thomas H. Tracy, Jr. Pratt Tracy was president of Air-Way, Thomas Jr. vice-president.

Besides the "Air-Way Sanitary System," the company made fractional-horsepower motors, bell-ringing transformers, and then radios. But when profits disappeared from radio, Air-Way dropped out in June 1926 to return to its first love, sanitary vacuum cleaners, whose sales were steadily growing.

The Tracys all died in the 1930s. Surviving ten years of losses in the Depression, Air-Way made vacuum cleaners until 1957, becoming Lamb Industries in 1958.



Pratt Tracy



F Nov. 1923 \$50

# RADIO MANUFACTURES of the 1920's

## VOL. 1, by ALAN Douglas, page 18

AIR-WAY CATALOG  
 ADVERTISEMENT SHOWING  
 COMPLETE RADIOS PLUS RADIO  
 COMPONENTS.  
 OVER 1/2 OF ALL RADIOS IN  
 AMERICA WERE "HOME-BREW'S"  
 MADE BY RADIO HOBBYISTS TO  
 THE "CIRCUIT of THE MONTH"  
 INCLUDED IN PUBLICATIONS  
 (POPULAR SCIENCE, ETC) AND  
 MANY RADIO MAGAZINES.

SHOWN UPPER RIGHT IS TYPE-B  
 (TWO RHEOSTATS)  
 RADIO NEWS (OCT 1922)

### Each Instrument Guaranteed



**AIR-WAY MODEL "C" RECEIVING SET**  
 Here is a model, practical set with sensitive and low stage amplification. It is reliable for its long-range reception and its freedom of tuning.



**AIR-WAY MODEL "B" RECEIVING SET**  
 This set contains so many outstanding features that radio enthusiasts have wondered at the degree of accuracy of reproduction. Deflector and eye amplifier, with typical "AIR-WAY" evidence of workmanship.



**AIR-WAY MOULDED VARIOMETER**  
 A combination of the finest known insulating material with precise assembly and accurate winding—ensures AIR-WAY's manufacture—double effectiveness and reduces interference.

*Air-Way*  
**GREEN SEAL  
 RADIO EQUIPMENT**

The aim of the Air-Way engineers and the policy of the Air-Way Corporation are united in the production of Radio equipment which bears the unmistakable imprint of intelligent design, expert craftsmanship, and genuine quality throughout. In the Air-Way factory there is no compromise between quality and cost. Scientifically organized production by men skilled in volume manufacture of fine electric instruments and equipment is entirely responsible for the attractive prices at which Air-Way Radio parts and complete receiving sets are offered to the public. The Air-Way Green Seal Guarantee Tag attached to each Radio instrument is a symbol of quality that is known and preferred by experienced Radio buyers.

**Air-Way Electric Appliance Corporation  
 TOLEDO, OHIO**

Air-Way instruments appeal most to those dealers who are actively preparing to merit a successful and growing radio business by selling products of reputation and genuine quality at fair prices. Write for Air-Way Radio Bulletin.



**AIR-WAY GREEN SEAL FILAMENT**  
 A compact filament wound with non-oxidizing resistance wire over a substantial insulating ring. Trim, workmanlike, effective and durable.



**AIR-WAY variable condenser**  
 A sturdy frame with insulating rubber rollers; sufficient accuracy to assure maintenance.



**AIR-WAY Amplifying Transformer**  
 Comes in any size to eliminate any other similar type. They give their own merit by comparison.



**Air-Way GREEN SEAL GUARANTEE**

**JOHN'S 1924 AIR-WAY TOLEDO  
TYPE-F (3 RHEOSTATS)  
PURCHASED MID-ATLANTIC RADIO CLUB  
2001**

**ORIGINAL RADIO  
COMPLETE**



**GUTTED  
W/TRANSISTOR RADIO  
INSTALLED**

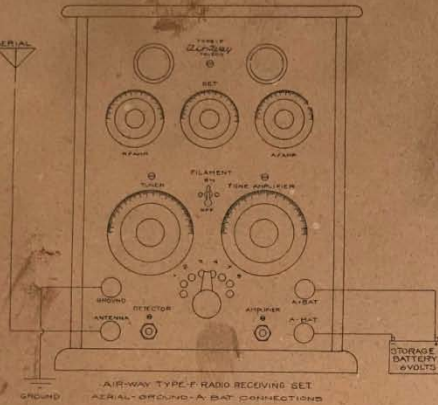




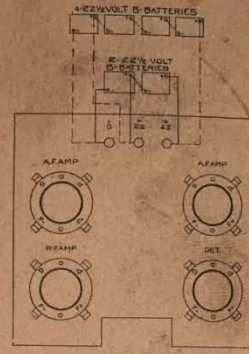
## Instructions for Connecting Up and Operating Air-Way Type "F" Radio Receiving Sets

The successful operation of any radio apparatus depends first on its being properly connected and second on the experience of the operator.

**AERIAL AND GROUND**—In the accompanying diagram we show plainly just how the Air-way type "F" receiving set is connected up. See that your aerial is properly constructed and thoroughly insulated from the building and all water or gas pipes and electric wiring. Next, see that you have a good ground. The best ground is made by connecting to a water pipe, which can usually be found in the basement. In connecting to a water pipe see that the pipe is thoroughly cleaned by either scraping with a knife, filing or rubbing with a piece of emery cloth. We recommend using No. 14 or larger, standard rubber covered wire such as is used by electric wiremen. Remove the insulation for a length sufficient to make twelve or fifteen wraps around the pipe. Be sure you have the wire thoroughly cleaned before wrapping around the pipe. Solder this wire on the pipe after you have it wrapped. If it is not convenient for you to solder, you can get good results by twisting this wire very tightly and binding tight around the pipe.



IF LOUD SPEAKER IS USED WE RECOMMEND THE USE OF SEVEN OR EIGHT BATTERIES CONNECTED AS SHOWN BELOW.



We recommend 150 feet of wire for the Aerial

**STORAGE OR "A" BATTERY**—We recommend the use of at least a 90 ampere hour battery, (the larger the better). The successful operation of any radio set depends on the "A" or storage battery being kept fully charged. Connect battery as shown in the diagram, the positive or plus terminal on the battery being connected to the binding post on the receiving set marked "A+B-Bat." The negative or minus terminal on the battery connected to the post on the receiving set marked "A-Bat."

**"B" BATTERIES**—Make sure that you have connected up your "B" batteries exactly as shown on this diagram. We recommend the use of two 22 1/2 volt 1,500 ampere-hour capacity "B" batteries for use with all of our sets where a loud speaker is not to be used. This will give 45 volts on the grid and plate terminals of the amplifier tubes which is sufficient for all ordinary use. Above diagram shows just how the two "B" batteries are connected to give 45 volts. You will also see the dotted lines showing the connections where four batteries are used, which give 90 volts on the amplifier tubes. This is recom-

mended for use with Magnovox, Thorphone or other loud speakers.

Check your connections carefully with the diagram to make sure they are correct. You will notice in connecting the batteries together, the minus terminal on No. 1 connects to the minus "B" battery terminal on the radio receiving set. The 22 1/2 plus terminal on battery No. 1 connects to the 22 volts plus terminal on battery No. 2. The 22 1/2 volt plus terminal on battery No. 2 connects to the 45 volt "B" battery terminal on the receiving set. These connections are when you use two "B" batteries. When four "B" batteries are used you will eliminate the connection of the 22 1/2 volt terminal on the second battery to the radio set and connect the terminal on the battery to the minus terminal of battery No. 3. Connect the 22 1/2 volt terminal on battery No. 3 to the minus terminal of battery No. 4 and then connect the 22 1/2 volt terminal on battery No. 4 to the "B" battery terminal on the radio set marked 45 volts. (You understand when you

connect two "B" batteries each of 22 1/2 volts, you get 45 volts on this terminal and when you connect four batteries you get 90 volts.) WATCH your "B" Battery Connections.

### TUBES

Be sure to get the detector tube (marked No. 200 on the Radiotron and No. 300 on the Cunningham tube) and the amplifier tubes (marked No. 201-A on the Radiotron and No. 301-A on the Cunningham tube) in their proper places. When you have the tubes in place turn on the filament switch and see that the tubes light up. Be sure you have the rheostats (the five upper dials) turned on. If the tubes do not light, check up on your "A" battery connections. See that the leads or wires are properly connected to the storage battery terminals and the other end making good connections to the two "A" battery terminals on the receiving set. When your tubes light up, you can, by placing the telephone receiver on your head, adjust the rheostat until the tubes oscillate. This will show you that your set is connected properly and you are then ready to proceed tuning in signals.

AIR-WAY ELECTRIC APPLIANCE CORPORATION  
TOLEDO, OHIO

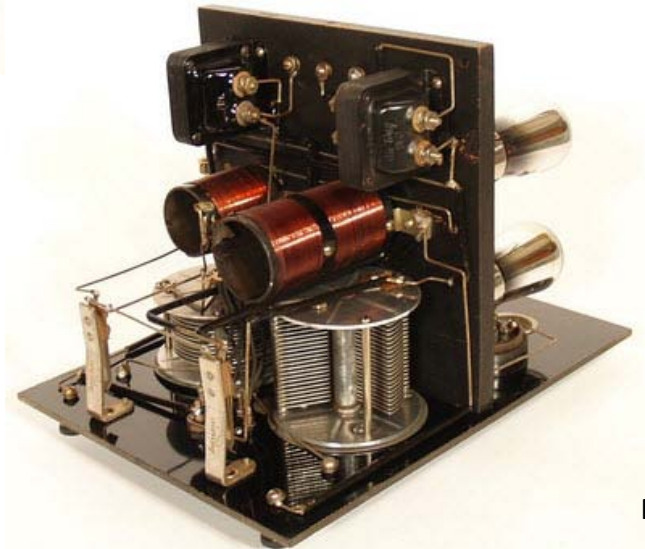


ORIGINAL AIR-WAY TYPE-F  
OWNERS INSTRUCTION

201A BRASS  
BASE TIPPED  
TUBE



# RECENT E-BAY SALE (OCT 29, 2017) US \$250 plus \$48 SHIPPING



## **Manufacturer / Brand: Air-Way Electric Appliance Corp.; Toledo; OH**

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Year: 1924

Valves / Tubes 4: [UV201A](#) [UV200](#) [UV201A](#) [UV201A](#)

Main principle TRF without regeneration; 2 AF stage(s)

Tuned circuits 2 AM circuit(s)

Wave bands Broadcast only (MW)

Power type and voltage Storage and/or dry batteries

Loudspeaker - This model requires external speaker(s).

from Radiomuseum.org Model: Air-Way Toledo Type-F [3 rheostats] - Air-Way Electric Appliance

Material Wooden case

Shape Tablemodel, Box - most often with Lid (NOT slant panel).

Dimensions (WHD) 10.5 x 13 x 10 inch / 267 x 330 x 254 mm

Notes The Air-Way Type F first appeared in November 1923 with two front panel rheostats and without on/off switch. After March of 1924 the Type F had three front panel rheostats and an on/off switch.

Price in first year of sale 50.00 \$

Collectors' prices

Source of data [The Radio Collector's Directory and Price Guide 1921 - 1965](#)

Mentioned in [Radio Manufacturers of the 1920s, Vol 1 \(Page 17\)](#)

Literature/Schematics [Radio Collector`s Guide 1921-1932](#)

[WWW.RADIOMUSEUM.ORG/R/AIR\\_WAY\\_TYPE\\_F.HTML](http://WWW.RADIOMUSEUM.ORG/R/AIR_WAY_TYPE_F.HTML)