

ATWATER KENT MANUFACTURING COMPANY

Following is a brief story of the Atwater-Kent Radio Co. No attempt has been made to go into detail about certain models or construction of the equipment-- all of which can be found in service manuals. Instead, the reader can learn a little about the founder and the history of the company -- one of the largest manufacturers of battery broadcast receivers in the world. FRANK ATLEE-- K2PI

Atwater Kent was born in 1874 and attended Worcester Poly Tech. In 1902 he opened a small electrical manufacturing business in two rooms on North 7th Street, Philadelphia where he made pocket voltmeters for use by Telephone Company employees. His business expanded so much that by 1912 he moved and occupied an entire building in the same neighborhood. By now he was making electrical parts for automobiles and in 1914 he was awarded a medal by the Franklin Institute for his invention of a device call "Unisparker" - - apparently an ignition distributor for automobiles of that vintage having two to six cylinders. Along about this same time he also developed a reliable ignition system for the Model T Ford.

With this background in electrical products it is not surprising that he turned to radio after the war (1919). For a short time the Atwater Kent Manufacturing Co. made both radio as well as his other products. Increasing business made it necessary to move in 1922 from the downtown address to a larger factory on Stenton Ave. (Germantown, Penna.) By now (1923) he was making a large variety of parts which could be assembled by the home constructor to make into complete sets.

In late 1923 Kent announced for the Christmas season the sale of a complete 5 tube receiver made up of parts mounted on a board. This was the famous Model 10. Shortly thereafter (Spring, 1924) he added the Model 9 -- a 4 tube set. Both, of course, were regenerative and were distinguished, as were all A-K sets, for beautiful finish and fine workmanship as well as excellent performance. Kent took a personal interest in the appearance of his products both inside and outside and insisted on perfection ! By the end of 1924 it became apparent that a cabinet model was desired by the public. The answer was the well known Model 20 -- a 5



A. ATWATER KENT

PRESIDENT AND FOUNDER OF THE

ATWATER KENT MFG COMPANY

Philadelphia

tube neutrodyne which was equally successful in sales.

Each year saw an increase in volume of sales and popularity of A-K's products with the peak year in 1927-28 when 900,000 sets were sold ! These consisted mostly of the A.C. Models 37, 38 and 40 which was in great demand by the public since they did away with the bulky batteries or the A & B eliminator if one were fortunate enough to have A.C. mains.

The year 1928 was also memorable because of a visit by Professor Theremin of Russia who attempted to sell Kent the patent and manufacturing rights to his electrical musical instrument The Theremin. Mr. K experimented with the device in his lab for sometime but was not convinced of a sales market. 1928 also was marked by another visitor -- Miss Helen Keller. Mr. K presented Miss Keller with a special made magnetic speaker which enabled her to enjoy music through her fingers by placing them on



Frank Atlee (K2PI) and his collection of A-K receivers. Others were added since the picture was taken.

the vibrating cone.

A-K did not wish to make console receivers since the company was primarily a manufacturer of metal and bakelite products, however, competition from Majestic in 1928-29 forced him to take some action. In 1930 he announced a console set with dynamic speaker which he called the "Radio with the Golden Throat". But times were changing - - the stock market crash of late '29 had greatly decreased the interest in high price instruments and with competitors beginning to make small table models at low prices with marginal profits, Kent no longer had the market...New sales management and streamlining of the organization did not help too much. Result: Mr. K lost interest in the business and spent more time with his hobbies of collecting grandfather clocks and antique automobiles. By June 1936 the plant was closed down for good, but not before the entire factory together with the name and goodwill was offered for sale at a price of eleven million dollars.

There were no takers. The employees

- - ABOUT OUR AUTHOR - -

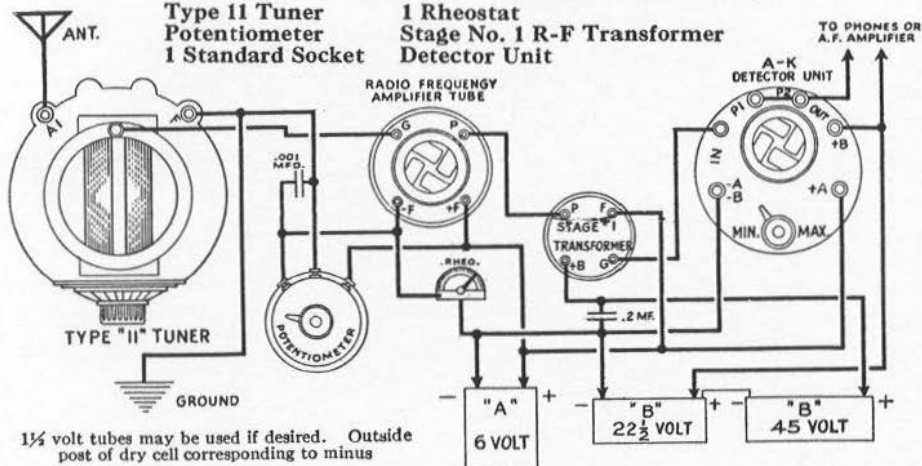
Frank Atlee, K2PI (ex-3FA) was employed by the Atwater-Kent Company from January 1923 until April, 1933. Frank is an active radio amateur and historian. He owns a fine collection of early radio equipment and in his spare time edits a local radio paper.

who had been with the company for many years were awarded several months pay and many found employment with Philco, RCA or one of the other radio manufacturers.

After closing the plant, Kent moved to Hollywood, California and bought a palatial estate where he soon became known for his lavish entertainment. In the fall of 1948 he became ill and was hospitalized with a virus infection and complications. He died March 4, 1949 at the age of 75. In his memory, he established the Atwater Kent Museum on North 7th Street, Philadelphia --- a museum primarily centered around marine history. Admission is free and is maintain-

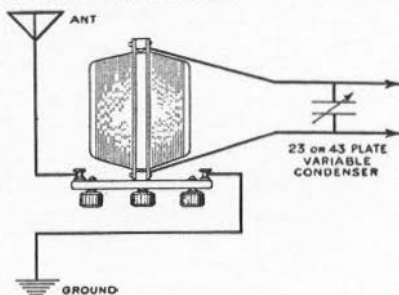
CIRCUIT USING ONE STAGE OF RADIO FREQUENCY AMPLIFICATION AND DETECTOR. ATWATER KENT UNITS EXCLUSIVELY

Type 11 Tuner
Potentiometer
1 Standard Socket
1 Rheostat
Stage No. 1 R-F Transformer
Detector Unit



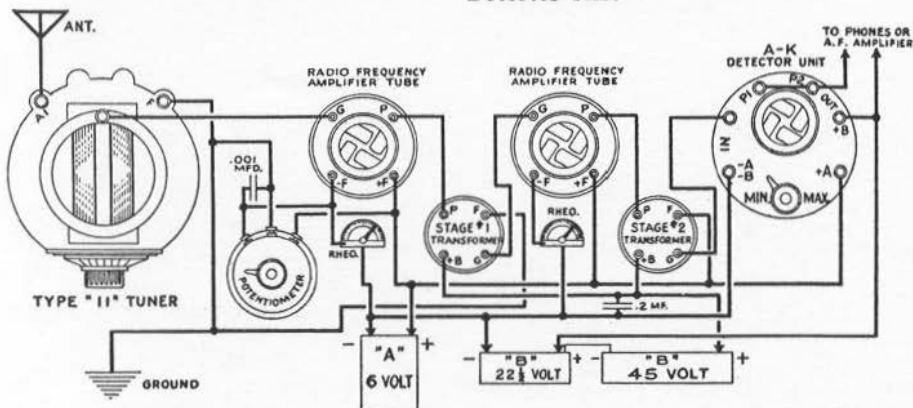
ATWATER KENT MOUNTED VARIOCOUPLER

When using a Variocoupler with radio frequency amplifier, this type of circuit is recommended.



CIRCUIT USING TWO STAGES OF RADIO FREQUENCY AMPLIFICATION AND DETECTOR. ATWATER KENT UNITS EXCLUSIVELY

Type 11 Tuner
Potentiometer
2 Standard Sockets
2 Rheostats
Stage No. 1 R-F Transformer
Stage No. 2 R-F Transformer
Detector Unit



ed by a fund he setup as a foundation.

A full column story concerning the closing of the business appeared in an issue of Time magazine, June 1936. So ended the career and business of a pioneer manufacturer. The radio collector can't help admiring the clean beautiful

sets made by A-K - - a credit to the founder....

Of interest to the radio amateur - - Clarence Tuska of A.R.R.L. fame was Patent Attorney for the Atwater-Kent Co. Tuska later became Director of Patents for RCA.

DESCRIPTIVE LIST OF ATWATER KENT RECEIVERS

Part No. Model No. Tubes

"Open" or Board Type Battery Sets

4052	..	4	Type "11" tuner, 1 stage fixed R.F., det. and 2 stage amp. unit, potentiometer control.
4066	..	5	Type "11" tuner, 2 stages fixed R.F., det. and 2 stage amp. unit, potentiometer control.
4340	10	5	Two stages tuned R.F., 3 variable condensers, 3 R.F. transformers, detector, 2 stage unit and potentiometer. Gray-green condensers.
4445	9	4	One stage tuned R.F. amp., 2 tuners and det. 2 stage unit, potentiometer control.
4333	5	5	Type "11" tuner, 2 stages fixed R.F., det. and 3 audio—all tubes in one metal container.
4600	10	5	Two stages tuned R.F.—3 var. condensers, etc., same as No. 4340, but different wiring.
4550	10A & 10B	5	(10B has 3 tap ant. switch.) Similar to 4340. Brown conds., with battery cable attached.
4560	10A & 10B	5	(10B has 3 tap ant. switch.) Same as 4550, but black variable condensers.
4620	12	6	Two stages R.F., det. and 3 stages audio—3 variable condensers, cable attached.
4700	10	5	Similar to 4340 & 10B 4550-4560. No pot. One R.F. rheostat only for both R.F. tubes.
4910	12	6	Similar to 4620, but with switch to control last audio stage, and no potentiometer.

Cabinet Type Battery Sets

4640	20	5	Two stages tuned R.F., large cabinet, 3 dials, 3 pt. ant. tap switch, 2 rheostats.
4880	19	4	One stage tuned R.F., large cabinet, 2 dials, 3 pt. ant. tap switch, 2 rheostats.
4920	24	5	Same as 4640, but in "deluxe" cabinet, with feet.
7570	20 Compact	5	Small mahogany cabinet, 3 dials, tap switch, battery cable attached.
7780	21	5	Same as No. 7570, but with sockets and rheostats for 3-volt dry cell tubes.
7960	20 Compact	5	Same as No. 7570, but with "UX" type sockets and other refinements.
8000	30	6	One tuning dial, small mahogany cabinet, two rheostats, 3 stages R.F.
8100	35	6	Metal cabinet, tubes inserted from bottom—one dial, one rheostat, ship-type name-plate.
8270	32	7	Long cabinet, one dial, two rheostats—4 stages R.F. double R.F. transformers.
8930	33	6	Small mahogany cabinet, one dial, ant. adj. knob, two rheostats, double R.F. transformers.
8500	50	7	Large deep mahogany cabinet, several metal shielded compartments inside, one dial, antenna adjusting knob, 2 rheostats.
9840	48	6	Similar to Model 30, but gold panel.
9860	49	6	Similar to Model 33, but gold panel.

A.C. Sets—Using "A.C. Tubes"

9390	36	6 and rect.	Small mahogany cabinet, same as Model 33; Type Y (metal), A.C. power unit goes with Model 36 set.
9500	37	" " "	Metal cabinet contains set and power unit, 3 stages R.F., 1 dial, 1 volume control knob, ship-type nameplate.
9400	38	7 " "	Same as Model 37, but double R.F. transformers and 4 stages R.F. amp., 1 dial.
9800	40	6 " "	Same as Model 37, metal cabinet, but black dial and volume knob and other minor differences; modernistic nameplate.
9850	42	" " "	Same as Model 40, but with automatic voltage reg., ball feet, dial in 5 divisions.
9900	44	7 " "	Same as Model 42, but with double R.F. transformers, 4 stages R.F. amp.
9930	52	6 " "	Console type—metal stand, speaker in base, antenna and ground leads supplied; set chassis same as Model 42.

Direct Current (110-Volt) Sets

9910	41	7	Metal cabinet contains set and power unit, 3 stages R.F., detector, 2 stages A.F. (last stage "push-pull" type, 2 tubes, one mounted on right-hand side of power unit). Filaments in series. Chassis similar in appearance to Models 37, 40, 42 and 52.
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ATWATER KENT

