Cincinnati's
POWEL CROSLEY
JR.

by ...

JOSEPH M. RICE

INDUSTRIALIST
Pioneer Radio Builder

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At a time when products of his manufacturing genius were already known to millions, Powel Crosley, Jr., boldly diverted his energies to the development of radio reception, then scarcely known beyond the laboratory walls.
I doubt that anyone in the history of this nation has lived the American dream as had Powel Crosley, Jr.

As I write this in the year 1976, people have become accustomed to the purchase of electronic home devices at "discount stores." Not only are the buying habits different, but a far different approach to merchandising and manufacturing is prevalent today.

We've had our goldrushes, oil booms, and thousands of persons have recognized opportunities as they have presented themselves, but seldom, if ever, has the American Dream been fulfilled as Powel Crosley's life exemplifies.

Once I read in a typing book that "There is no hope for the lazy, jaded individual who will not sell anything until the Esquimaux opens a boom market for ice machines or until the market for snow plows improves at the equator." Powel Crosley not only sold ice machines and snow plows, he made them!

His WLW became world famous and the sobriquet of THE NATION'S STATION was more than a fanciful appellation.

Powel was an innovator and a true intrepreneur. His mind was free-wheeling and unconventionally oft inspired. He never refused an inventor a hearing. He has sat down with hundreds of them. With their brainstorms and his own, the Crosley line has never lacked for diversity. Outstanding examples were his Xer-Vac, a hair growing machine and mechanical scalp exerciser, to which Crosley credited what hair he had. The Icy-Ball machine was the first refrigerator and his Koolrest was a canopy placed over a bed to keep the occupants cool during hot, humid weather. He built cars, refrigerators, ironers, automobiles (midgets) which were decades ahead of the trend. He pioneered the baby buggy and of course his radios and television sets.

In 1937 he had a system for reproducing a newspaper in the home which was called Facsimile. There were many, many, other items which hopefully this small book will uncover. He bought the Cincinnati Reds baseball team and installed the first lights for night games.

The name Powel (make that one L please) was an institution in the Cincinnati I knew. Across this vast nation it became a legend.

Joe Rice-1976
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I, like thousands of others who lived in Cincy came to accept the name of CROSLEY RADIO and TELEVISION and WLW as part of the American scene.

Somehow this is the story of a modern Horatio who overcame obstacles and became ensnared to hardship but persisted in every undertaking. Having been blessed with an inquiring mind and always taking the lead in his pursuits he became a true pioneer in every sense of the word.

Powel Crosley was an innovator, and make no mistake about that. I do not know of an instance where he mimicked anyone. He lead the pack. I think the Cincinnati Newspaper (Enquirer) summed it up when they stated on March 29th of 1961: "Powel Crosley, Jr., was much more than a man of immense and varied achievement. He was the embodiment of several great institutions."

It is certain that he was a very important part of the radio industry as well as the history of Cincinnati. It is equally certain he filled a vital place in America's history too.

The story of Powel Crosley, Jr., has been told in many places-in magazines, newspapers, on the radio. Yet there is no single story behind the life of this warm, intelligent, self-effacing and extremely competent man. He achieved a series of successes in life—he endured more than his share of tragedies. He was an industrial pioneer second to none. A thorough-going
I knew him only casually from working in his radio plant. Others knew him well. We wish everyone might have known him better. But in spite on all that he had done, all that he had accomplished, Powel Crosley, Jr., preferred to remain a quiet participant. He had no press agents. You did not hear from his lips what triumphs he had achieved.

It is difficult for me to more than merely suggest the breadth of Mr. Crosley's accomplishments. But the span of things he did, and furthered, ranges far around the world, and into innumerable households.

I sincerely regret that my literary expertise leaves a little to be desired and that I can merely suggest Mr. Crosley's deeds on the pages to follow.

I deem it important for future generations to know and understand what real "Free enterprise" is.

The story goes that Powel Crosley, Jr., had almost 500 different jobs before he was 25 years old. I'm told he made a vow to himself that he would never work for anyone again as long as he lived, even if he had to sell peanuts on the corner—he did that too!

Powel Crosley was born on September 18, 1886, in Walnut Hills in Cincinnati. Powel Crosley, Sr., was an attorney and was reputed to be a millionaire in his own right. In 1893 the family moved to College Hill. He was educated in the public schools of Cincinnati and attended OMI Institute in 1905. In 1906 he was enrolled in the Engineering College of the University of Cincinnati. He found no liking for engineering and having a restless mind he tried numerous jobs. He was married on October 17, 1910 and they had two children, Mrs. E. Kess and Powel Crosley the third. Powel Crosley 111 followed in the footsteps of his father and became the head of a marine company in Florida. It was here that the Crosley motorboat, a water cooled engine, was founded at Coral Gables. Powell Crosley 111 tested this motor at the foot of Ludlow Street in Cincinnati in the early part of 1941. The hull was made of weldwood and the boat itself weighed 700 lbs and was 15 feet long. In this same interval Crosley Jr. developed a 3-wheeled tricycle which was tested by the U.S. Army. Runs up to 2000 miles over sandy country were part of the tests and it withstood this punishment. The Army said "Most interesting."
Powel Crosley III died June 24th, 1948 in Florida. Powel Jr. was named trustee of the estate of his son. The will left one third to the wife, Mrs. Elizabeth Taylor Crosley, Coral Gables, and 2/3 to trust to his three children: Powel 4th who was 16 years old at that time, Houston, 13, and Thomas Edward 9. The children are to be paid from income until "21 years after the death of the last child." The Associated Press reported this in 1948.

Powel Crosley Jr. had an early interest in automobiles and when he was only 13 years old he had rigged up an electric car for his own use. In 1907 he built his first six-cylinder motor and had great interest in the Indianapolis Speedway and raced cars there. He owned an auto and advertising agency in 1908. In 1939 he built his first commercial car. It sold for $325 for the convertible coupe and $350 for the convertible sedan. It weighed less than 1000 lbs and had an air cooled engine delivering 12.5 H.P. at 4000 RPM. He ceased production of this car at the beginning of WW2 and resumed the Crosley car in 1946.

In 1938 I became acquainted with the salesman for Crosley, A.J. Valentine who had established a showroom at 8th and Race streets in downtown Cincinnati. He asked me to drive it for a test run by going to the orphan's home in Devou Park in Covington, Ky, across the Ohio River. I loaded up about six or seven boys ranging in age from about 8 to 11 years of age. As the Home was situated on a hilltop it was no effort to get down the hill in this car. My first impression of the car was that it resembled an oversized wheelbarrow! It was canary yellow with bright red wheels. It had the 2-cylinder engine and everything was built to scale. It handled easily.

All went well as we navigated downtown Covington and traversed the famous Suspension Bridge to Cincinnati. It drove well with all the boys in it through downtown Cincy too. I didn't have a bit of trouble until I tried to go up Gilbert Avenue. I had barely started up when I knew I was in trouble. It simply would not go up the hill with all those boys inside. Only answer was to let the boys out while I turned around. This we did, and with out further ado we came back to Covington.

On the final leg of our journey I found I could not bring the boys back to the Home without resorting to taking two up at a time! The car attracted wide interest where ever we went.
HERE IS THE NEW CROSLEY AUTOMOBILE

(Officials say motor will give 50 miles to gallon of fuel.) The place of manufacture is subject of conjecture. The auto was perfected in one of the Crosley plants here. However, it was learned from a reliable source that the large-scale manufacturing may be done in the State of Michigan.

CROSLEY, Jr., DWARFS HIS BRAIN CHILD. SHOWN HERE IN FRONT OF HIS 27-ROOM HOME IN CINCINNATI. (1947)

The first car was a very small job with wheels no larger than a good sized wheel barrow.

When Crosley resumed his normal operations after four years of War production in 1946 he built a new car with a water-cooled four cylinder engine. This engine delivered 26.5 H.P. at 5400 R.M.P. and weighed a little over 1175 pounds. It sold for less than $1000. The early type of Crosley cars were built in only two body styles. The later cars included models ranging from the sedan, business coupe, roadster, and the station wagon models in both the standard and the super line. Crosley trucks are made in
The family history on file in the new museum of the Warren County, Ohio, Historical Society traces the ancestry of Mr. Crosley back to yeoman origin between Lanchester and Yorkshire in England. There is still a town named Crosley near the Lancaster Valley. However, the family name has had a number of spellings. Some of Powell's cousins spelled the name Crossley and pronounced it as Crosleigh. As far back as the fourteenth century the name had progressed to "Crosley." Both names having a prefix of "del" on the records.

Richard Crosley lived in those parts back in 1545 and his descendants are said to own the same property and the male line was unbroken there until the death of John Crossley (new spelling) in 1864.

The Cincinnati Powel Crosley always told everyone "make that one "L" please." Richard's name is spelled three ways in the history, as Crosle, Crossie and Crossley. Irwin Crosley having come to the title in 1911 on the death of his father, It is reported that "This family descended from Crossley of Scaitcliffe and settled at Todmorden in the time of Edward III. The genealogy continues with a branch having won honors as a nobleman, Sir Kenneth Irwin Crosley having come to the title in 1911.

The genealogy was traced by a writer in a Warren County newspaper and continued with "The history states that the Crossley's started emigrating to America as early as 1660, settling first in New Jersey, several being in the Camp May area. They later were found to be living in Pennsylvania and later in Maryland."

"The first history states that the first to come to Ohio was the family of Moses Crosley, born in 1764 and died in 1843. He himself migrated first to Mason County, Kentucky (Maysville) and later to Warren County in Ohio. He had served in the Revolution from Maryland."

"He was placed on the pension rolls of Warren County in 1831. His wife was Rachel Powell and that name has been in the family ever since. Their son, William, born in 1785, is recorded as having migrated to Ohio from Kentucky in 1810. He located on a farm partially in Warren and the remainder in Montgomery County north of the Five Points corner."
William is credited with having been a manufacturer of gunpowder and attracted hunters from great distances. This is said to have enabled him to accumulate considerable wealth, at least by the standards of his day. He served in many township offices (being justice of the peace for 18 years) and removed to Montgomery County, near Centerville, in 1834. He later was a commissioner for the Dayton and Lebanon turnpike, which was completed in 1840. He was its president and treasurer because, as a descendant put it, "His word was as good as his bond."

The history also records that William served in George Rogers Clark's army in his Vincennes campaign.

Moses Crosley was born in 1811 and is listed in Beers' History of Warren County as having been Clearcreek township treasurer in 1825 so we assume his father was also Moses although the family history does not so state. William Crossley is listed as its treasurer in 1832, having been a trustee back in 1817 through 1823. He was treasurer for four years. The family is not listed in the biographical portion of the Beers' History.

Powel Crosley was a descendant of William and Rachel Powel Crosley and his father also bore the same given name as did his father according to information at hand.

The Crossley history, a typewritten manuscript, belonging to the County Society was compiled by Bertha Crosley Ball, who was the daughter of Rev. Marion Crosley, D.D. (1836-1917) who is credited with being (according to his daughter) the first student at the Normal School founded by Alfred Holbrook in Lebanon in 1855. He received his D.D. degree there, she writes, and was known as the "Boy Preacher" and "The Walking Preacher," in his youth.

He preached at Ft. Wayne and Muncie, Indiana, and at Utica, N.Y., before going to Glasgow, Scotland, for two years, and he preached there. He also studied at the great university there. He was a Universalist minister.

Upon his return to America he had pastorates at Portland, Maine, and Springfield, Mass. He followed this by establishing his ministry at Indianapolis, Indiana, where he maintained his home ever after. He spent much time building up rundown churches. He was a Mason and an Odd Fellow and was Chaplain for its various branches nearly everywhere he was located.

His daughter, Bertha, married Edmund Burke Ball who was a manufacturer of canning jars. He gave much time and money to numbers of worth-
while projects. He and his brothers gave to the State the college now known as Ball State Teachers College at Muncie, Indiana.

He fruit jar business rose from a yearly production of 25,000 jars in 1888 to a business that soon reached ten million dollars per annum (not inflation dollars either!). Mr. Ball left three and a half million dollars to the Ball Brothers foundation for charitable, religious, and educational purposes.

There were Crosleys in Warren County until recent years, probably the last to pass away being Milton Crosley who died during World War II, it was stated in the account in Warren, Ohio.

There was an inter-marriage with the Wheaton family at Five Points and an uncle, Clarence Crossley, was related to both the Wheatons and the Crosleys. The Wheatons are also all gone from Clearcreek Township.

When Powel Crosley, Sr., died in 1932 the Cincinnati Times-Star stated that Wednesday "Rites Arranged for Noted Attorney Here."

Powel Crosley Sr. was one of the first to recognize the future of radio. His funeral services were to be held in the First Universalist Church, Walnut Hills, Thursday of that week, at 2:30 p.m. Powel Crosley Sr. was 82 years of age at his death. He had resided at 5742 Davey Avenue, College Hill, Cincinnati, Ohio. At that time he was one of the oldest practicing lawyers in Hamilton County and the father of Powel Crosley, Jr., then President of the Crosley Radio Corporation and of Lewis Crosley, President of the Crosley Distributing Corporation. Crosley died at Cincinnati's Christ Hospital, September 13, 1932.

Crosley Sr. was born upon a farm in Warren County, north of Lebanon, Ohio, and lived there until he was seventeen. He was eleven when the Civil War broke out and, being a good reader, would oblige the neighboring farmers by reading newspaper accounts of the war to them. His two older brothers, William J., and Luken S. Crosley, served in the war. William was captured at the Battle of Fisher's Creek and was in Libby Prison.

After attending Springboro School, Crosley taught school, served as principal in Clarksville, Ohio; became manager of a commercial house in St. Joe, Mo., and then gave up business to study law. He was graduated from Ann Arbor Law School in 1876 and came to Cincinnati to begin his practice of law.
Frequently, when speaking of first coming to Cincinnati, Crosley would relate that the only man he knew in Cincinnati then was Editor Cantwell of "The Star Of The West." Then he would tell of being introduced to Judge Sage and Congressman Ben Butterworth and other prominent lawyers.

**HISTORIC LAW CASE**

The Times-Star said: "Later Crosley became associated with Butterworth in the practice of law and still later with Miller Outcalt and George S. Bailey. In the late '70s Crosley served as assistant City Solicitor and represented the City in the historic case against Silas Hoffman, then City Auditor, charged with embezzlement."

In the early 1900's Crosley became associated with John C. Rogers & Rummel. After the death of Rogers, several years ago, Crosley and Rummel continued their association. Many important legal cases were handled by Crosley and his associates, although he always was considered as the Chief Counsel.

In 1890, Crosley obtained from the Pike estate a perpetual lease, with privilege of purchase, on the Pike Opera House. He was in charge of Pike's Theater for a number of years, with Lou Ballenberg as manager. It was his lease that was taken over when the Sinton Hotel was erected upon the site of this old Opera House.

Crosley's first interest in Wireless and Radio, which since have taken the family name to all parts of the world through the two Crosley Radio stations, began at the inception of these two marvels of the age. Crosley bought some stock in Marconi's original company after the letter "S" was first flashed across the Atlantic Ocean.

His son, Powel Jr., then a boy and who became President of the Crosley Radio Corporation, became interested in radio when Powel Jr.'s small son Powel Crosley III, asked him for a toy radio. The first set was a costly machine, so Powel Crosley, Jr., bought parts and began building sets on his own. That was the beginning of the Crosley Radio Corporation.

Crosley Sr. was born Christmas Day, in 1849, and on the occasion of his eightieth birthday, in 1929, there was a reception and family reunion. Despite his advanced age, he had enjoyed good health until 1932 and daily he was in his law office in the Thoms Building, 5th and Main Streets.

Besides his two sons, Powel Jr., and Lewis, Crosley left his widow Mrs. Charlotte Utz Crosley, and a daughter, Mrs. Albert Chatfield, and six grandchildren, all of Cincinnati.
TRIBUTE TO PARTNER

The legal acumen of Powel Crosley, Jr., was praised as well as his integrity in the newspaper article.

Commenting on his many years association with Powel Crosley, Sr., in the practice of law in Cincinnati, Attorney G. Albert Rummel, said: "Powel Crosley, Sr., some fifty years ago, was a law partner of Ben Butterworth. Mr. Crosley was one of the few notable and brilliant surviving members of the 'Old School' of lawyers, and retained popular respect of the entire Bar of this City to the day of his death."

"He ranked with and was recognized as one of the best lawyers in Ohio during the last half century. He had the genius to see 'all around' and the common sense to consider all sides of a question of the law, made him remarkably successful in trial work, as well as mediation in having adverse interests unite in harmonious action."

"Mr. Crosley, Sr., was a legal fighter in every sense of the word, however, without relying on fury or sound for success. Exposing a cause he was mercilessly logical. His exact information gave him the strength of facts, and this combined with his prodigious legal knowledge and capacity, clarity of expression in unencumbered language and powerful arguments exercise a tremendous influence with both judges and juries in their verdicts and decisions of critical cases, in all of which he was always recognized as the 'leading Counsel."

"Mr. Crosley possessed a kindly humor to those who were privileged to know him best, expressing himself in ant comment rather than by anecdote. His manner of life was methodical and simple, increasingly so with advancing years. He was actively engaged in important matters and cases in the practice of the law until within a few weeks of his death."

The famed radio pioneer and industrialist, Powel Crosley, Jr. was said to possess the "Midas Touch" when it came to business acumen. The Saturday Evening Post said in their September issue of 1939 "Few men become a Mussolini, an Edison, a Lindberg or a Joe Louis. A man reaches that feathery eminence when the public credits him with powers transcending the merely human. Crosley appears to be growing toward such status, though his acceptance as yet is local. His slightly abashed home town knows him as something
more than the big noise of radio, a 'Handy-Andy' of the manufacturing business and the pulmotor of baseball. At the ripe crime of Fifty-two Crosley's career shows symptoms of taking on the legendary intimations of invincibility, and nobody knows this more acutely than Crosley Himself."

"Crosley's eminence in the fields of grimy and gaudy diamond goes almost without saying. Cincinnati is aware, twenty-four hours daily, that he commands the air waves. The snindling antennae which waft his type of entertainment whims and tidings of his wares from the Alleghenies to the Rockies, Fort Arthur to Mobile, and thence to echo in the Argentine, tower above the town. Similarly, the attenuated Crosley personally oversees an industrial grab bag embracing mechanical hair restorers, refrigerators, radio equipment, electric ranges, cameras and the new diminutive motorcar."

HISTORY OF CROSLEY'S MOTHER

The mother of Powel Crosley, Jr. was born in 1864 to Lewis and Elizabeth Wooley Utz. She died at her home 549 Hamilton Avenue of College Hill in Cincinnati. The death notice appeared on Saturday January 14th 1949.

She was educated in Cincinnati schools and studied art at the Cincinnati School of Design and also was a student at the Cincinnati College of Music.

Mrs. Crosley was a worker for The First Universalist Church of Walnut Hills and her grandparents founded this church. Her parents were pioneers and she became the wife of Powel Crosley, Sr. on October 8, 1885.

When she died the newspaper said: "Surviving besides two sons (Lewis and Powel) is one daughter, Edythe who was the wife of Albert B.C. Chatfield of 1528 Groesbeck Road, an investment broker. There were five grandchildren and seven great grandchildren. She was 85 years old."

POWEL CRO3LEY Jr & FAMILY

Powel Crosley, Jr. was married four times. The first marriage was to Qwendolyn Aiken who was the daughter of Dr. Walter H. Aiken, musical super-intendant of Cincinnati schools. Mrs. Crosley died in February of 1930. Crosley had two children, Powel III and Martha Page, and four grandsons.

In 1943 Powel Crosley, Jr. was married to Marrianne Richards. His third marriage, in 1952, was to Eva Prokaw who died in 1958. This marked the third tragedy in his life in a seven years interval. In June, 1958, his son by his first marriage, Powel Crosley III, died of a heart attack in Florida. In October 1950, his grandson, Powel Crosley IV, was killed in
Mrs. Eva Crosley was born in Cincinnati and attended Withrow High School and the University of Cincinnati, where she majored in English. She was a member of Delta Delta Delta sorority.

She was a member of Grace Episcopal Church in College Hill. Although she was active in numerous charities, she devoted most of her time to Children's Hospital, where she served in the Junior Co-operative society and the St. Elizabeth Guild.

Powel's fourth wife was Charlotte K. Wilson. They were married in Charleston S.C. on October 8th

POWEL CROSLEY, JR.

Powel Crosley Jr. was listed in the Cincinnati directory as early as 1908. He had an early interest in automobiles and when he was only 13 years old he had rigged up an electric car for his own use. In 1907 he built a 6-cylinder motor car and had great interest in the Indianapolis Speedway and raced cars there. He owned an auto advertising agency in 1908.

One of his accounts was for a carriage company that he had nursed from its infancy and for some reason they were about to appoint another agency. Powel said "The other agency had the promise of the account before I was aware of it."

Powel said: "I had always enjoyed playing around with new inventions, so when this old and well-known buggy maker brought out a new limousine top for a Model T (that dates this story) I was among the first to recognize its advertising possibilities. The top, an innovation in its day, was built as it could be fastened on the Model T body, which then had a waterproof textile top. With a few bolts and nuts loosened, the standard top could be removed and our limousine top bolted in its place. That made the Model T a limousine and a winterized car—one of the things Henry Ford had neglected to furnish."

Later in life, after Crosley founded the Crosley Radio Co., Crosley himself was to be called "The Henry Ford of Radio."

(Crosley came out in 1911 with a new type of tire which needed no air!)

(Crosley once broke his arm in cranking a Model T and this sparked another idea— a starter!)

Crosley was then the President of the American Automobile
accessories company, blue Rock Street and Hamilton Avenue. He tested with C.E. Kilgour, who became a Crosley research engineer, a hand-operated starter which worked by the driver pulling up a handle from the floor. You didn’t have to go around to the front of the car to crank with this method—and no broken arms either. The lever protruded from the floor board inside the car and, presto, your car started—sometimes.

Henry Ford made autos for the masses as did Crosley make radios for them. His first car radio was called ROMIO." Crosley later said: "We were out to make a lady out of lizzie and to offer the car-owner an opportunity to keep up with the Joneses with their Pierce Arrows, Stutz, Franklins, and Rolls-Royce cars." In 1939 he built his first small car. It sold for $325. In addition to these, Crosley made and developed a sturdy multi-purpose vehicle which was designed and built to serve the farmer both as a farm tractor and as a road vehicle. The "FARM-0 ROAD" was about 45 inches high, 48 inches wide, and 92 inches long with a wheelbase of 63 inches. It had a front and rear power take-off, useful in sawing wood, running generators, pumps, and other belt-driven farm equipment. It was equipped with a hydraulic lift to which may be attached all types of farm equipment, including plow, harrow, cultivator, sickle-bar mower, etc. The implements may all be attached with a minimum of time and effort and by one man.

When Crosley came out in April of 1939 with his car the public found it hard to believe it would give over 50 miles per gallon of fuel. It stirred up quite a bit of interests, but for some reason Crosley was again ahead of his time. The public was not then aware of the advantages of a small car.

Much discussion was overheard among auto dealers and in the financial district in Cincinnati following the announcement of the small car. Crosley displayed it at the Indianapolis Speedway on April 28th, 1939.

There were many conjectures as to the type of the machine, the cost and where it would be manufactured. The new car had been under construction for some time. Rumors at that time were to the effect that the Crosley concern would indeed enter the auto field.

At this time the name of Crosley Radio Corporation was to change its name to The Crosley Corporation. The auto was perfected in one of the Crosley plants in Cincinnati. Later it moved to Richmond, Indiana. When it was first shown there were 200 distributors invited to witness the demonstration.

During the month of October, 1938, Crosley said, in reviewing his life: "My father was rated a millionaire. He made money quite rapidly in land in the development of subdivisions in Cincinnati, Lima, in Ohio, and Duluth."
Mr. Cresley Sr. lost a large part of his fortune to the panic of 1893. Having most of his money invested in real estate development in Duluth, he continued with his law business and had a perpetual lease on the Old Pike Opera House on Fourth Street in Cincinnati.

When Powel Crosley Jr. was reminiscing about his childhood, he said: "During the formative years of my life my father virtually owned and operated the Opera House. I went to the theater quite often until about 1903, when The Pike Opera building burned. I acquired a fondness for the theater— which continued afterwards. I saw the first cinematograph in the Old Pike Opera house in connection with vaudeville which happened to be running at the time."

Mr. Crosley, Jr. continued: "Naturally we attended shows not only in our own theater, but at other theaters in town. From a very small boy until I was in the Ohio Military Institute—when the Pike Opera House burned—I went to the theater quite regularly."

After a pause he then said: "I had rather good opportunities to study shows from the front of the house— of course, and I never had access backstage—and from the standpoint of the business operations of the theater from hearing my father talk—he always had a manager in the house—hearing my father discuss what was good box office attractions, what the public did not seem to care for."

Early impressions, such as these, leave permanent ideas implanted in our minds, and Crosley was the first to say this in explaining his later attitudes.

In his self-effacing manner, he said, matter-of-factly: "I think that unconsciously this formed a groundwork that was helpful in later years in the broadcasting business in being able to direct or steer the type of programs that in a general way has made our broadcasting operations so successful." He finished this statement by saying "I've always felt that it has been valuable in that direction."

"While I have never gotten out and operated the stations or had contact in building the shows on stage, I have been able by keeping some perspective, to criticize when trends apparently were running too strongly in one direction and the programs were getting a bit out of balance one way or the other."

At the Old Pike Opera House Powel Jr. saw such shows as MONTE CRISTO, starring the actor James O'Neil.
There were many such Opera Houses in Cincinnati at the turn of the century. One of the famous buildings was the Hauck Opera House and stock company. It was said it had no equal for a theatrical group in the United States and none had a firmer hold on the affections of the public than this one.

In the Matter of the Pike House there were two terrible fires which completely destroyed the beautiful buildings. These were landmarks. It was on February 25th of 1903 that the whole south side of 4th street in Cincy was a mass of flaming ruins. The formal opening of the first Pike's Opera House was held on February 22, 1859. The first disastrous fire occurred on March 22, 1866. (just after the Civil War).

The City of Cincinnati has an illustrious heritage of being the musical center on this continent. During the "Gay Nineties" the Neill Stock Company held forth on 4th street also. The "The Third Street Theater" opened on July 4th of 1832 and featured "The Soldier's Daughter." Heard there was the comic opera song "NO SONG-NO SUPPER." In 1866, shortly before the first fire, the records show that the play "MIDSUMMER NIGHTS DREAM" played at Pike's.

In the interval of our Civil War the Opera House issued small paper money for the amount of 25¢ and in another musical opera house, "OLD DRURY" at 316 Sycamore Street featured Jenny Lind who sang there in 1857. This theater was named for the famous Old Drury in London, England. The audience was captivated by the singing of Jenny Lind and all agreed "..she sang with the sweetness of a lark."

Even earlier records show that John Robinson, the famous circus owner, owned an opera house in 1830 which was the forerunner of the Robinson's Circus. This was reputed to have quartered the lions, elephants, etc., in the basement of the house and drove the customers away.

The Grand Opera House featured string music mostly Mozart. In 1901 the newspapers said "The National Theater completed its 1500th consecutive performance that year."

Emma Reaume, whose home was in Cincinnati, was a niece of the late Mrs. Schuster-Martin who founded the school of acting and the arts in Walnut Hills near the Hotel Alms where radio station WKRC was to begin in 1925. Emma married Tyrone Power, the movie idol, of the 30's and 40's and who himself started as an usher in the Paramount Theater at Peebles Corner. Tyrone and Emma had a son, Tyrone Power, Jr., who played in the theater with Catherine Cornell—it was said in the year 1950.
It was in the year 1921 that the Dixie Terminal building was completed at the southwest corner of Fourth and Walnuts streets. This building is still standing and is a monument to beauty. With solid marble stairs and real brass hand rails it is a fitting entry into the City itself from Kentucky. Its high-domed ceiling is adorned with beautiful murals and the over-all decor stand strikingly against the harch modern structures which now reside next to it. It has a wide balcony, also brass-rail enclosed, and on the south side it has a huge picture window looking out at the Ohio River and Suspension Bridge framed within the skyline of Northern Kentucky. It presents a symmetrical appearance, as to height and general frontage, of all the completed blocks of Cincinnati business houses, and this after several rebuildings, due largely to fires, within the course of a whole century.

In 1921 the Cincinnati Enquirer said "Fifty-five years ago this month occurred the great fire that destroyed the first Pike's Opera House, and with it many other considerable properties. Some of the more prominent incidents of that historical event may be of interest now to hundreds who witnessed it in their younger days and to many thousands who often have heard about it from their seniors."

"A Midsummer Night's Dream was the play that night at Pike's. One of the most gorgeously beautiful of Shakespeare's conceptions, garbed with all the magnificence of scenic effect and spectacular display, almost unprecedented in beauty on the stage, was presented before the crowded audience which thronged the parquet, dress circle, and the balcony, of that superb auditorium," the newspaper said. "All was animation and pleasure. Thousands of eyes gazed with astonished surprise upon the scenes of fairyland into which the immense stage had been transformed, upon the silvery waters of moonlit lakes, in dells where fairysprites, 'The Queen and All her elves' were reveling, upon the magnificence of Duke Theseus's court and retinue and, finally, upon that most gorgeous of all transformation closing scenes."

"At times the curtain dropped, back of the imposing proscenium; the wealth of beauty and classic architectural design thereon concealed from view at times the imagery of
poet and painter in the play, and the eyes of the audience scanned it for a moment and the while that matchless orchestra filled the grand auditorium with majestic music, wandered over the imposingly beautiful dome and ceiling where all that is great in the imaginative world of mythology had place, in 'colors of such divinity,' over the ornamentation of gallery, balcony, and dress circle, and the elegance of proscenium boxes."

PIKE'S OPERA HOUSE-4th Street-Cincinnati

PRIDE OF THE BUILDER
(Condensed from newspaper account-with all its' beauty)

"Mr. Pike had constructed this beautiful temple through ambition to ornament the Queen City of the West and to identify his name with its history. He had succeeded; but the ambition having accomplished its design he had grown to love, in a measure far beyond it, this splendid portion of a great city's beauty. While managing other property and a business of great value this man of millions had made this temple his idol among earthly things, and to love it had become a portion of his nature. And on that fatal night, which was so soon to witness the destruction of a city's pride, he looked upon those scenes in common with the audience, and again gloried in his work."

"The hard-worked men of Athens had dispersed, proud Titania had bowed in love to Bottom of the asses' howl, Theseus and his court had retired, Oberon and the elfin Puck had mended their mistakes and made the lovers happy, the green baize curtain had fallen, the audience had dispersed-fortunately, Oh, how fortunately!"

"Samuel N. Pike, who made his fortune in the liquor business, began
building his first opera house in Cincinnati in 1856, right next door to the printing plant of The Enquirer newspaper. The fire that ruined it in 1866 caused the Enquirer to skip a day's printing.

Pike had built the elegant structure on Fourth Street between Walnut and Vine after being impressed by the singing of the Swedish coloratura, Jenny Lind.

Pike had constructed no ordinary opera house when he finished with it in 1859. Its enormous dome and magnificent decorations led many to call it the most sumptuous theater in America.

When fire came, it was on a scale as grand as the building's. On the evening of March 22, 1866, during a performance of Midsummer Night's Dream.

It was a candle inside a paper cheese box used for a moon that was left burning unheeded. The result was a blaze that gutted the entire theater.

Suddenly, the rear wall gave way and it set off an explosion in The Enquirer newspaper plant, destroying it.

However, since the paper had just moved to its present Vine Street address there was a paper on the following day.

Pike's Opera House in Cincinnati didn't stay demolished for long. In 1890, it was rebuilt as the Pike Opera Building by prominent citizens and became once more a principal ornament of the city.

During this time period was when Crosley senior owned this famous house. This too, was the playground, so to speak, of Powel Crosley Jr.

But the jinx on Pike's Opera House was just beginning. On February 25, 1903, the rebuilt opera house fell victim to flames. More than $1,500,000 in damages was done. After this holocaust, no one ever attempted to rebuild it again.

The Cincinnati Enquirer said of this: "The first fire caused by the candle did more than kindle the fire and caused another writer in the 1921 era to outdo himself with his fluent style of words."

For some beautiful prose, read this: "Nearly an hour passed when the fire leaped from behind that curtain up and along the scenes, out through the green baize, up along the rich ornamentation
of boxes, along richly gilded pillars, through cushioned seats and swiftly up and up to the beautiful ceiling and dome. Then sounds had changed as well as scenes. In place of symphonies and stirring melodies were the crackling and roaring tones of a great destruction; and the crash of cymbals and drums of the grand 'Wedding March' had given place to that of falling dome and walls, And within an hour the people of Cincinnati were to mourn, with a depth of feeling never exhibited here before over any local calamity, the total loss of Pike's Opera House."

The story about these events is best told by the person who witnessed it. The writer wrote about it in the next morning's newspaper. The events of March 22, 1866, were well told. "Cincinnati had never experienced their equal in loss of property by conflagration; never so great a financial loss shared at one stroke by so many firms and individuals; and never so general a depression in a sympathy over a sentiment involved by destruction of property, at least without loss of life."

"And this writer, to the best of his knowledge and belief, is the only survivor of the few who had opportunity to write of those events, he being on the original Commercial Newspaper, at the northeast corner of fourth and Race Streets."

The newspaper writer said later on: "The Enquirer office was destroyed that night, and the owners, Messrs. Washington and Wiley McLean and James J. Faran and such writers as G.M.D. Bross, J.C. Bellman, George S. Bennet, Fred Hunt and others of the staff, were relegated to dismal inaction. Now they were all gone. The Gazette people, over at the northeast corner of Fourth and Vine, were considerably hampered by the blistering heat that came to them; those there at that time who did write about that fire have all 'passed over.' I know of none left on the German papers or on The Times or Chronicle or of the Associated Press who are still living to say that they wrote about it from first view on the night of the disaster or on the following day."

The writer from The Commercial Tribune continued "There happened a very strange and extraordinary coincidence connected with that outbreak of fire. This writer, after witnessing the last act that night, lounging back in the foyer with Mr. Pike, had accompanied Mr. James Loucheim, an attache of the opera house, to a late dinner at an establishment at 171 Vine Street, west side, north of Fourth, where is now a great banking institution. In the company, after this dinner or lunch, were James A. Corry, a son of the first Mayor of Cincinnati, and his son, the late Frank Corry; also, Elias L. (Bolly) Lewis, John McKinnie and perhaps one or two
others. As they picked their teeth and smoked their cigars their conversation happened to reach the possibilities of disaster in event of a panic at the then Mozart Hall, in its great height in the Catholic Institution, where fine, large audiences were frequently gathered for theatricals or for operas."

"Said one of the group; 'Well, there may something of that kind happen, but I don't think it will ever come to Pike's Opera House.'"

"Just then, close on to 11:30, there came a strange, muddled, roar, followed by the clatter of horses and hacks from the stand alongside the postoffice, at the southwest corner of Fourth and Vine. The strange roaring noise was from an explosion back of the stage of the opera house."

"Loucheim, having a key to the small door within the main door of the front of the opera house, was swift to reach the scene of destruction within the place, accompanied by his companions of the last hour or two."

"The sparks of the fire were communicated to the scenery back of the stage, the immense mass of canvas, oil and paint were enveloped in a roaring blaze in a few minutes."

The above was included in the personal history of Powel Crosley, Jr. as a sort of "mind conditioner" of the culture of that era.

In 1976 we find the Music Hall edifice on Elm Street a reminder of the great past and the heritage of Cincinnati.

It may seem strange to a casual reader why I've put all these apparently unnecessary details into a history of the man Crosley. It has long been a pet peeve of mine that most history books only give dates, names, and geographical locations in their story and to my way of thinking these are meaningless unless they are related to surrounding history. In short, we must understand the customs and culture of the age we are trying to tell about. Our Mores' and habits change with time, and what is contemporary today, was unknown of a half-century ago.

Besides telling of a way of life which existed over a half-century ago, I am also anxious to tell about a business philosophy which built this great country. It is call FREE ENTERPRISE!

In the April issue of "Reader's Digest" for 1975 there was an excellent article entitled BIG GOVERNMENT AND OUR ECONOMIC WOES.
It was William E. Simon, Secretary of the Treasury who said: "In their eagerness to combat today's recession-inflation, more and more Americans are being seduced by the ideas of big new federal-spending programs and wage-price controls. Nothing could be more dangerous to our way of life."

Mr. Simon continued with: "For more than 40 years, we in the United States have turned increasingly to the federal government to solve our problems. Yet, as the government has enlarged its dominion over our affairs, it has become increasingly apparent that concentrating power in Washington, can be inefficient, wasteful, and ultimately destructive of our freedoms. Indeed, the forces of Big Government—however well-intentioned—bear significant responsibility for creating the woes we have in the economy today."

It is my opinion, as I stated in the beginning of this narrative, that Mr. Powel Crosley, Jr. personified the very nucleus of free enterprise and he operated within an environment which had not become hostile to an individual's freedoms especially to compete on the open market.

Mr. Simon concluded his story on big government: "OUR BASIC DECISION—Overall, the most critical economic decision we face is whether we want to leave our basic freedoms in the hands of private citizens. The nation has now reached a crossroads. In a very basic sense, we must choose either to restore a more competitive, more open society or to commit ourselves—perhaps irrevocably—to a society in which the large decisions about our economic and personal welfare are made by a central government."

HISTORY

"History surely teaches us that the system of free enterprise, despite its many flaws, is the system most compatible with the protection of rights and liberties as well as the one that is most productive of material goods. Equally so, recent history shows that government, despite its splendid intentions, is incapable of matching the vitality, the wisdom and the ingenuity of free men."

It is my sincere hope that Crosley's history will kindle a resurgence of the home-spun vitality that built America. It may also be indicative of our times (1976) for me to compare some rather basic concepts in ideology which existed then and now in 1976. The summation could simply be stated that in Mr. Crosley's day his only contact with the federal government was to buy a one-cent postage stamp! There were no social security, or any other governmental controls to hamper the natural growth. (until WW2)
In THE AMERICAN MAGAZINE for October, 1948, Powel Crosley wrote his own story while he was president of Crosley Motors, Inc.

50 JOBS IN 50 YEARS

by Powel Crosley, Jr.

"Every experience has its profit"...A "rolling stone" who wandered all the way from phonographs and radios to canoes and automobiles tells his own story of rewarding detours in a land of opportunity.

When I was 12 years old I decided it was about time for me to take a swing at the world. At the time, the automobile was the scientific but unpredictable wonder of the day, but, to me, its future was assured. So I determined to build one. Rather short on capitol at the moment, I borrowed $8 from my younger brother, Lewis, and, with his help, concocted a 4-wheeled wagon, powered it with an electric motor and a battery, and displayed it to my father as my "invention."

Father looked on it with dubious eyes. In fact, he thought so little of the contraption that he laughingly offered me $10 if it ran.

After the test—my "automobile" had traversed a whole block—I accepted the $10, repaid Lewis his $8 and $1 as his share of the profits, and gloatingly pocketed my $1, convinced that I had embarked on a great industrial career in the new mechanical age.

Nearly half a century has passed since then and I am finally manufacturing automobiles. But the road between has been as winding as the track of a snake on desert sands.

Before I got around to automobiles again I made such diversified products as phonographs, scalp massagers, refrigerators, bed cooling systems, radios, radio ornaments, canoes, car accessories, airplanes, and furniture. But, in in doing so, I learned more about industry than if I had limited myself to one venture. Every new product was an educational detour on the road to my ultimate goal. In every experience there was something gained. Only in America, where a man is free to put his hand to anything he chooses, is this sort of education possible.
By the time I was 27 I had worked at more occupations than there is room to list here, flitting from city to city, job to job, seldom holding one longer than a few months. I had been a youthful telephone repairman, a summer-vacation chauffeur, an auto salesman, an advertising and publicity man for a car manufacturer and an auto racing team, a $12-a-week president of a company which barely managed to turn out one car before it failed, a bond salesman, and head of an advertising novelty firm. In other words, it looked as if I might be getting nowhere fast.

So a well-meaning relative implied one night, after a 6-week siege of illness had reduced my finances to zero, said I was nothing but a rolling stone. When, he demanded, "are you going to settle down and make something of yourself?"

From this point of view he was right. But if I were a young man today, I would try to follow the same pattern. I'm convinced, as I was then, that a man must set a goal for himself, get a job as close to that goal as possible, then persistently drive toward it. When he can see the job's limitations to his future advancement it's time to quit and get a new one.

It doesn't matter how many jobs he holds, or, really, how far afield he wanders, as long as he keeps his sights on his objective and absorbs all possible worthwhile knowledge from what he is doing today. Like a bee buzzing from flower to flower, seemingly aimlessly, he extracts, from each, nectar to be stored away for future use.

In the bond business I learned finance. In car agencies I learned salesmanship. In attempting to develop new products I learned a lot about engineering and mechanics. Each experience contributed to my store of knowledge, which today has enabled me to realize my lifelong ambition to build a small car within the means of the average wage earner.

Today, thanks to our democracy, opportunities are much more plentiful then they were when I was young. They have multiplied because America had progressed as has no other country.

Not too many years ago there existed only one concept of capitalism—"Make a product as cheaply as possible and sell it for as much as possible." That meant cheap labor, suppression of individual rights, large profits for the few. Almost everywhere but in America that theory still seems to hold true. Elsewhere in the world profits are being used either to pay for the last war or to finance a new one. In many nations Mr. Average man, the fellow who deserves a break, is taxed far beyond even his limited capacity to pay for the greediness of warmongers, the conceit of dictators, the narrow vision of men who would destroy civilization to gain their own ends.
It is for these reasons that I long ago embraced the words of an unidentified commercial philosopher—those of sheer genius. It was his credo that "He who serves best profits most." I think every one of us should appreciate that adage. From a purely humanitarian standpoint it's perfect. From a purely selfish viewpoint it pays off in the kind of success most foreigners consider as typically American.

I was born with a silver spoon in my mouth. But it was jerked out before I could distinguish its taste from that of the common dime-store variety.

My father was a successful Cincinnati attorney, and a more than successful real-estate developer on the side. He made money as fast as the Philadelphia mint. Then he collapsed, with a lot of other men, in the panic of 1893. He remained, as a man, still strong and courageous—but he lost most of his money, probably to my advantage.

My father left me nothing in worldly things. Looking back now, I am much more grateful for his moral legacy: a philosophy of perseverance, a gratitude to a bountiful country, a knowledge that my future was my own to forge the way I would.

He paid my way through preparatory school, through one year of college and two years of law school; he gave me a very small—I thought inadequate—allowance. "If you want anything else, son," he told me, "why don't you earn it?"

Well, as I said before, I worked at more jobs than an itinerant printer, but always with the idea in mind that some day I'd get to manufacture autos.

After my illness I landed a job with a reputable advertising firm. As I progressed, I obtained some free-lance work on the side and developed a mail-order plan for the sale of a product called "gasotonic," the first gasoline fortifier. The owner of the product was in the auto accessories business and he sent for me one day.

"Crosley," he said, "can you figure an idea to sell re-liners made from old tires?" I came up with a mail-order plan to sell them through agents, with the trade name, TREDKOTE. This launched the American Automobile Accessories Company. I continued my as work as an item of major income.

That winter of 1916 almost got wired out of business, because in those days people with cars just put them away during poor weather.
So it came about that, by spring, the little company owed the backer $1,500, at the time a fabulous sum.

I was optimistic, however, so I bought out my backer for $1,500 worth of notes. We were just moving into World War I and the nation's patriotism was mounting to fever pitch. I designed a flag holder that clamped on an auto radiator cap. It sold like a cold drink in an arid desert. We made thousands of them, and thousands more of an anti-draft shield to be placed above the windshields of Model-T Fords to keep the wind out. And I devised the "Litl Shofur," a gadget which returned those same Fords to a straight line after they had struck a rock or a rut, a maneuver which would ordinarily set their drivers to wrestling with the wheel like a Kodiak bear.

The success of these relatively unimportant and inexpensive products convinced me that I should appeal to the masses rather than the classes, that my serving best—at the lowest possible cost to the consumer—I would profit the most. Because, before long, the profits from my growing business enabled me to branch out into phonograph production and allied fields, from which, in 1921, I grossed $1,000,000.

Despite a more than 10% profit, I still wasn't content with the progress we were making. The auto accessory business was slowing down, the phonograph business began slumping, and it seemed apparent that we would have to find another product to mass-produce for the "pocketbook trade." We tried oil burners—and lost $80,000. We experimented with canoes, with specialty furniture, custom phonograph cabinets, and several other things. None seemed to fill the bill.

One day my son visited a friend, and came home with glowing descriptions of a new "wireless" outfit. It had thrilled him so much that he begged me to buy him one. I tentatively agreed, thinking of it as an inexpensive toy, and we visited a Cincinnati radio store the next day. The proprietor offered me a one-tube set for $150. For a 9-year old boy that was a pretty expensive toy, so we walked out of the shop with a 25-cent book called The ABC of Radio.

I read the book, and it intrigued me. A couple of days later I returned to the shop and asked whether I couldn't buy the parts and assemble them myself. For something between $20 and $25 I returned home with headphones, a tuning coil, a crystal detector, a condenser, and other mystifying gadgets, and built a set.

The thing absolutely fascinated me. Although I could get lettle music—only local amateurs—I was sure it had a future. It was a costly belief. I went to another shop and had them build me a 3-tube set for something like $200. Next, I ordered a 20-watt transmitter and started sending out recorded music over the air. Before I knew it I had virtually forgotten about my regular business
in my intense interest in radio.

I hired a couple of young engineering students from the University of Cincinnati. We built the Harko receiver and were able to sell it for $35, which was cheaper than anything on the market. The idea—and the price—met with almost immediate public acceptance. I soon found myself in the radio business up to my ears, so much so that I was forced to suspend work on the automobile—seems like I was always working one one-with which I was then experimenting.

My son's desire for a radio set and the results of our early experiments started another business which became a multimillion-dollar corporation—eventually making several different products—solely because it was based on the principle of making available to the average man, at prices he could pay, the luxuries which, heretofore, only the rich man could afford.

I don't want to imply, even for a minute, that any of my enterprises have been one-man affairs, because that would be completely untrue. Single-mindedness in attaining an ambition is a praiseworthy and, usually, a profitable trait. I have always welcomed the ideas of other men. It has been said that every crackpot inventor—even those with perpetual-motion machines—has been welcome in my office. That's not too far wrong. Our business is not built on new ideas, but on the improvement of old ones. We must be willing to realize that, in ourselves, we are far from omniscient, that a single mind is worth only a single thought, that the mingling of minds is the basis of our prosperity.

I recall a man who came into my office one day with a revolutionary new idea for refrigerators in the country. But it seemed to me that his invention had merit. I made him an offer: 25 cents royalty on every refrigerator employing his device. "Nope!" he said. "I want $15,000 cash." I argued with him, fought with him, finally gave in to him. He got his $15,000. If he had accepted our offer he would have made more than $200,000.

But, contrariwise, another inventor turned up with a new loudspeaker for a radio. We offered him 3 per cent royalty, plus a salary during the development stage. His acceptance meant hundreds of thousands of dollars to him.

I credit our democratic way of life with making possible the opportunity for success through a meeting of free minds. Where else in the world can a man with a blueprint—and nothing else—find the
highroad to success? Where else can an individual with complete faith in his own convictions see them grow and bear fruit?

During the war—we were making proximity fuses and collaborating with the military on other developments at the time—we devised a revolutionary new engine which the Navy needed for generating systems on its ships. Instead of casting the block out of iron, as has always been the custom in reciprocating engines, we stamped 125 or so parts out of sheet steel, fixed them together, then brazed them into a solid piece through the use of copper wire and superheated ovens. It worked well, and it gave us the lightness which we sought. But some of the engines leaked. We had to have perfection in this matter.

Our engineers struggled with the problem for weeks. We called in outside consulting engineers, but they were of little help. One day I had a hunch, and called them together and said, "Let's galvanize the block." That brewed a storm which raged throughout most galvanizing shops in Cincinnati. The gist of the experts' opinion was, "It can't be done."

But I was still convinced it would work. So, after several more weeks of bickering, I asked a couple of the men to our experimental laboratory to take four of the engines to a local shop and get them back for submission to severe and comprehensive testing. Not a single one of the expert engineers could find a flaw in the process. It solved all our problems and gave us an engine which today is being used in automobiles, boats, and airplanes and as an auxiliary in buses and industry.

It may be that the refusal of others to recognize the worth of an idea acts as a challenge to many men. I always try to remember that many business successes are simply paradoxes—the accomplishment of something which, heretofor, people have believed impossible or impractical.

It goes without saying, though, that the principles and practices of democracy are the foundation stones on which such methods are possible. Personally, I feel that the debt I owe to America I can never repay, no matter how much I try.

I have two businesses which I firmly believe belonged to the public, never to me. Back in the days when I first started manufacturing radio sets it became apparent that, no matter how good the receivers, radio broadcasting must be improved if the public was to derive any benefit from it. In 1921 I secured an experimental broadcasting license for a 20-watt transmitter in my home. From that I progressed to a small commercial station.

It was a success, so much so that by 1935 the station, with a 500,000
watt transmitter, became the most powerful in the world. That station made money, plenty of it. But almost every penny it made was poured back into the station, increasing power, improving programs, and in general giving the public over the "free air" that to which it was entitled.

It seems to me that, through some such method within the bounds of our own abilities, we should give of our time, our experience, our knowledge, as much as we can possibly afford, to show our gratitude to America, to help our fellow Americans.

Nowhere else but in America would it have been possible for me to profit so greatly from experience, from my 50 jobs in 50 years, from the freedom that permitted me to move from job to job and still keep heading toward my ultimate goal.

Our efforts to ensure that freedom must be consistent and strong, so that our rights of individual advancement will not only be maintained, but will progress for the benefit not alone of ourselves, but for the less fortunate people of the world.

THE END

POWEL CROSLEY, JR-OCTOBER 1948

Powel Crosley, Jr. said ten years earlier than the above statements the following in October of 1938:

"I think I was brought up as a perfectly normal human being. We moved to the country when I was six years old. That was while my father's law business was in Cincinnati."

"My grandfather was in another business in Cincinnati. We lived on a simple country place and had an opportunity to see how things were raised from the ground. I always had my own little patch in the garden and was taught to plant the seed and keep the weeds out, which probably was done about as well as most boys do it," he commented laughingly.

"I liked to hunt as a boy and fish. I played football and baseball all through my years at school. My first football pants were made from some old 'stair pads' as I recall it, which my mother carefully sewed on a pair of my short trousers. I wasn't afraid in the lap of luxury because my father had lost a large part of his money, but I went through the public schools in College Hill. There I had three years as a day student in the Ohio Military Institute,
also in College Hill, where we lived. Military training and the athletics that went with it helped me to build up my physical side. I was abnormally tall and very slender. My military uniform more resembled something on a green string bean than anything else I can think of. Along about this time I acquired the nickname of Chick."

"After graduating from the OVI in 1905, I went to the University of Cincinnati and intended to take the course for preparatory law. I was influenced a couple of weeks before. I matriculated to take engineering. I had always been interested in engineering in things mechanical. I planned and played with electricity from the time I was a very small boy. I recall when I reached the age where I would have my own room, I took the back room in the house for a bedroom. It originally had a hand pump to pump water to the tank, from which water was supplied to this plumbing fixtures throughout the house. When city water became available it was piped directly to this tank in the attic and by means of a float attached to a valve it automatically supplied water. I attached various devices to this high pressure water line and, I remember particularly generating electricity for a few lights and an electric train. We had electric lights long before they were in general use."

"I built my first automobile when I was 12 or 13 years old, by acquiring an electric battery motor and taking some storage batteries secured from the electrician of the Pike Opera House."

"The use of electricity in the days of the Pike Opera House was in its infancy. As was the custom at that time, electricity for large buildings was generated in their own plants—not by a company. The work of the electrician responsible for the generation and use of electricity in this very large building naturally attracted the fancy of me. Having a vivid imagination and an inventive turn of mind I figured out a means of driving this motor by hooking up a number of small storage batteries in series which developed the necessary current and voltage to operate the automobile."

"My brother, Lewis, financed the adventure. He being two years younger than I was, he supplied the $8.00. We both worked that summer. My father believed in boys learning the value of money, so he helped each of us get a job. I was about 13. We earned $3.00 a week, out of which we paid our carfare and other expenses and bought our lunches. Our work was reconditioning some telephones and I was probably more extravagant than my brother because at the end of our working period during summer vacation, he had $8.00 and I had nothing. So the $8.00 went back into the development of this automobile which we built with the understanding that if it ran a certain distance we
would get $10.00 from my father. With the help of the village black-
smith we finished the car and got the $10.00 out of which I paid
my brother and we divided the two dollars equally as profits."

"In spite of my liking for things mechanical, I wasn't prepared
for an engineering course. I found chemistry difficult, having had
no high school chemistry. I realized that I couldn't make the grade
as an engineer so I quit before they let me out."

"Being very much interested—this was back in 1906—in auto-
mobiles, one winter and summer I demonstrated my early cars. The
next year, more in line with my law work, I advanced and renewed
leases for Phil Morton, the outdoor advertising man, for sign
locations and billboards. After two years of law I was very
anxious to get out and go to work. So I went with Rudolph Kleybolte
& Company, investment bankers, and sold bonds and other securities
for a year or two."

"I had the ambition to build automobiles, and left the
banking business to start my own automobile manufacturing company.
I interested some men with money in the venture and built a car
in 1907. There was a depression—it was difficult to finance beyond
the experimental car. This was rather a sad disappointment. I went
over to Indianapolis to get into the automobile business. First with
Carl Fisher for a while, and then I became assistant manager for
the Parry Auto Company. This was the old Parry Company who made a
new car at that time. This was followed by a connection with the
National Motor Vehicle Co., of Indianapolis, as assistant sales and
advertising manager."

As the editor, and sometimes writer, for this treatise on
Powel Crosley, Jr. I have reserved some rights to use my judgement
in the matter of whether to rewrite a story or to retain the words
of the original author. Such is the case now. I think it better
if the original writings are printed here in order to conserve the
flavor of the times they were written in.

A writer, Gerard Piel, wrote in February 17th issue of LIFE
Magazine for 1947 the following:

POWEL, AND OLD-TIME GADGETEER MAKES A BID FOR THE AMERICAN
MASS MARKET WITH A MIDGET CAR THAT IS LOW-PRICED, LIGHTWEIGHT
AND UNADORNED.

Powel Crosley Jr., the manufacturer of the low-priced, midget
Crosley automobile, is the kind of client advertising men try to avoid."

The writer continued"He likes to override their ideas with unconventional inspirations of his own. His latest is the ad for the 1947 Crosley, currently appearing in several national magazines. Instead of a full page, such as every other car manufacturer uses, it occupies the kind of little half-column space normally employed to advertise auto accessories, tabletop radios and trusses. 'Small Car,' says Crosley, in explanation of this breach of tradition, 'small ad.'

"Owners of full-sized Detroit cars are likely to argue that no tradition has been breached. The Crosley, they say, is not a car at all. It is a dumpy, dowdy little job which, however cute, can hardly enhance the owner's social status. But Crosley, who has sold practically everything except trusses through small ads, believes that there are buyers for his idea of what the U.S. family car ought to be."

"This buyer, as Crosley sees him, is the man who prizes unility above vanity and wants to know what is under the hood. If Crosley has read his mind correctly, the midget car may open up again the low-income mass market that Detroit has abandoned during the last 15 years to the used-car lots. 'For the first time in years,' he says, 'and family that can afford a car can afford a new one."

"People who have never heard of the Crosley or cannot distinguish it from imported competitors, such as the British Baby Austin or the little Italian Fiat, may identify Powel Crosley more readily as a manufacturer of kitchen equipment and tabletop radios, as owner of super-power station WNL, the loudest radio voice in the U.S. or, if they read the sports pages, as proprietor of the National League's Cincinnati Reds. Crosley himself prefers to be known as an automobile manufacturer. He brought out a preliminary version of his car in 1939 as a side-line to his other products. In 1945, however, he sold all his other enterprises and now proposes to dedicate the rest of his life exclusively to the Crosley car."

"Why he took such a radical course at the age of 60 can be understood only by men of equal years who remember how much they wanted to be what they did not become. Powel Crosley is already listed among the countless casualties of the auto industry. During his adolescence his native city, Cincinnati, was an automobile town, as was almost every other town in lower Ohio and Indiana in that period. The auto industry was still a Cherokee strip, and the columns of white dust rising from the Indianapolis Speedway marked the trail of the homesteaders squatters and claim jumpers racing bellmell
to stake a claim for immortality."

"The Crosley car had the low-income person in mind, but it also catered to the better-off families whose status had declined and, at a 11 times, to anyone who can afford a second car."

"The only real problem Crosley can foresee is that the demand for his product may get out of hand. If it should turn out to be the Model-T of 1948 or 1950, he is aware that he has no patent on the small car idea and that there are other auto-makers in a far better position to put it on a really mass-production basis. At his age he has ambition to make a million Crosley's a year. He would, however, like to be identified in the public mind as its inventor."

"For this reason it pained him deeply, after waiting a lifetime to get a Crosley car on the road, to see the first 5,000 1947 models leave the plant minus an essential part—the Crosley Nameplate. The supplier had failed him at the last minute. Until the owners of the new Crosley's get out the paint remover, however, there will be no doubt who made them. For the Crosley name is painted in bright red letters three inches high on the bumpers."

"Crosley anticipates no trouble in selling all the cars he can make. Discounting the present seller's market, he calculates that at least 150,000 of the 15,000,000 who buy autos every year would like to buy economy. He figures, furthermore, that the Crosley, as the lowest-priced U.S. car, is depression-proof."

And so the 1942 talk with an inventor of a sheet-steel, internal combustion engine paid off. It was under a Navy contract and development plan, with Crosley's chief engineer, Paul Klotsch, that he proceeded to hammer out the Crosley Cobra engine. With this engine in hand Crosley was sure he had an automobile. It was the Aviation Corporation's Victor Emanuel who turned up with an offer later to buy everything Crosley owned except the car and the Cincinnati reds. He knew that the hour had arrived. For the business that he had started on a $1,500 note, he got $12,000,000. (in cash!)

During the 1939 period the 5,500 prewar Crosles climbed swiftly up the social ladder to resale prices in excess of $1,150, three or four times the price at the plant. Making 120 to 150 miles on three gallons of gas per week during the rationing period of the war. They met the trains, went to market and took the children to school, with no detours via the black market which existed on anything to do with an auto during the war years between 1942 and 1945.
By the year 1947 they were saying: "U.S. citizens no longer have compunctions about wasting gasoline. But Detroit has some severe misgivings about the future of its present product. At $1,300 and up, the lowest-priced 1947 Detroit car is as far beyond the means of the average U.S. family as new housing. Even if it can get its base price down to $1,000, Detroit must still face up to the hard facts of household accounting. The depreciation and operating cost of a $1,000 car come to $45 to $60 per month. This is too big a chunk out of the $200 monthly budget of the average family. Furthermore, as the population disperses to suburban communities, the transportation charge looks more and more like cost of living and less and less like fun."

Even at its present much-too-high price of $849 F.O.B., the total monthly cost of the Crosley, including depreciation, is only $30 to $40. This price, based on an output of about 70 cars per day in a plant (Marion, Ind.) designed to produce only 40,000 cars per year, includes a profit that has already put Crosley motors, Inc. in the black. In his mental arithmetic, however, Crosley figures on arriving at a price closer to $500 at a production of about 150,000 cars per year. At $500, the Crosley might make the same kind of sound economic sense that sold 1,300,000 Model T Fords to the U.S. public in 1926. But Crosley, lacking the facilities of a River Rouge, is in no position to entertain any such grandiose notions. For the moment his objective is to sell all the cars he can make at a profit."

Crosley's memory of his early frustrations in the auto business is too fresh in his mind to permit him to take any ill-considered gambles on making too big a success in too big a hurry now that he has his foot in the door.

*CROSLEY'S BRAINCHILDREN*

If I could find all the different ideas, inventions, brainstorms, etc., of Powel Crosley I'm sure they would fill a book as large as Sear's proverbial catalog!

Some of the more outstanding, and successful, ones are now residing in the Jack Gray Wireless Museum at Mason, Ohio. Jack died in 1970, but three trustees were appointed to watch over the gear until such a time as it could find a permanent home. The trustees are: Charles Williams, of Western Southern Life Insurance; Phil Winters, Chief engineer of Kroger's outlets; and John Bruning, retired from D.H. Baldwin Piano Company. At this writing it looks like there will be a place provided in the new quarters of the Cincinnati Educational Station, WCET, at 12th and Elm Streets in Cincinnati near Music Hall.
It was in the field of the automobile that Crosley found a ready outlet for his talent as a gadgeteer. Some of his better ideas were inspired by the Model T Ford, which invited patching and improvement at many points. He devised, for example, a strip of material for calking draft leaks at the top of the windshield. He also marketed "TREDKOTE", a patch for auto shoes, "DRIKLENIT" an auto polish, and strayed outside of this field to take on the sale of phonographs and he built some under the trade name of "MARION." He conceived the idea of a walker for babys and called it "GO-BY-BY". This was a combination kiddy car and baby-stroller. This was later sold to Frank Walker out in Norwood where he built them, ties, and all the parts, and sold them under the name of "TAYLOR-TOT." I worked for him for quite a while myself.

About this time he conceived the germ of the present Crosley car. He watched his customers' struggles to keep their Model Ts in one piece long past the term of natural obsolescence, he concluded that they needed a really cheap, therefore small, car which they could afford to throw away after a few years. He made several operating models.

In my day we had the iceman and the ice box. Crosley wasn't happy with this so he devised the first refrigerator. The thing was shaped like a dumbbell used in exercising—but Crosley was no dummy! It had ammonia inside and when heated it formed a gas which cooled the upper part. Had small ice trays too!

The KoolRest was a later innovation. It had a small refrigerator and electric motor which cooled. Mounted in a separate box it had a flexible hose which ran under the cloth canopy to keep the bed cool. Sold like hot cakes!

Crosley later came out with the first SHELVADOR. This was the first time any commercial refrigerator used the door as a place to store food.

Crosley had the satisfaction of seeing his competitors shut their refrigerator doors in their ador, when they did leave them open they forgot (?) to show that they had no shelves!
The SHELVADOR kept all the competitive manufacturers in a state of suspension until the patent ran out 17 years later. There were mechanical problems which Crosley overcame. One of the chief obstacles to a true Shelf-in-the-door, was to not weaken the door structure. Another problem was to assure that the insulation properties were not impaired. As I write this in 1976 it is my believe that ALL home refrigerators are using this principle.

Crosley was in the woodworking business at the time the phonograph sales took a nosedive in 1921. He turned to the radio business about that time. Many, many ideas were incorporated in Crosley radios.

The Crosley plant suffered severe damage during the Ohio River flood of 1937. Gasoline storage tanks floated up to the plant and exploded. The refrigerator and cabinet plant was badly burned.

Crosley said "I believe in having a diversity of activities for the reason that if one gets hit the others will carry me along."

Crosley came out with a hair growing machine called X-ER-VAC. These were floor models with a cover, much like a hair dryer, that fitted over the scalp. They were frequent sights in barber shops in the mid 30's.

Crosley pioneered with a 31-40P7 VEHICLE which the Army used to haul sleds. Crosley radios appeared in every worthwhile magazine and dozens of new models were seen. He specialized in small table radios which we in the trade learned to call them THE ALL-AMERICAN FIVE, because they used five tubes. Previous to that he built every year what he called THE CROSLEY FIVER.

Crosley also built washing machines, dryers plus the kitchen equipment.

In a second series of articles which appeared in The Saturday Evening Post September 30th 1939 it was the writer Forrest Davis who wrote under the title:

THE CROSLEY TOUCH-AND-GO!

"The legend, founded on this magnificence, harks back, fittingly, to the improbable myth of King Midas. It pervades Cincinnati, a town which always has nourished its traditions and enjoyed an Old World atmosphere in which legends thrive. Whether you find yourself in a musty BIERSTUBE of Cincinnati's Over-The-Rhine section, or in the rarefied Queen City Club, you'll be almost certain to hear the phrase; 'Crosley has the Midas touch, everything he touches turns to gold.' The writer found "The mythmakers of Cincinnati only too willing to cite chapter and verse. Crosley, they maintain, ran a five-cent pamphlet into big business and millions for himself. With a kind of envious awe, a copner on Vine Street reported that Crosley had magnified a twenty-watt transmitter he made himself
in his own attic, into the world's most powerful radio station,
drenching the whole western hemisphere in melody, good cheer and
Crosley-edited news. A taxi driver observed, with a trace of
spite, that a pennant for the Reds would be worth a million
dollars to Crosley, meaning that the publicity accruing incidently
to the Crosley name might enormously enhance the sale of Crosley
products. One of Crosley's first acts upon taking over the Reds was
to change the time-honored name, Redland Field, to Crosley Field.

It was said that Powel was never one to overlook some small
incident which most people would pass over as not worth while.
Crosley saw at an early age, and stage, of radio that here was some-
thing that could revolutionize the world. He wasn't far wrong. Can
you imagine your world today without radio or television? If you had
lived in Crosley's age in 1919 would you have foreseen the immense
possibilities in radio? This is what the writer called "The Crosley
Touch." He seemed to have the uncanny ability to see things far in
advance of others.

The Precision Equipment Company built a radio station (1st in
Cincy) shortly after the ban on radio was lifted after WW1. It was
Harry Brekle, late of the Navy, who built this station, WMH, with the
help of Russel Blair. They made several models of radios also for
the public and sold parts to would-be hams. Located at 3437 Gilbert
Avenue in Walnut Hills, Cincinnati.

Crosley decided he too would begin manufacturing parts for
radios, for after all this was the only way to get a radio—do it
yourself.

As Crosley was already in the electrical supply business, it
seemed natural he should first make a porcelain tube socket for the
new vacuum tubes. Crosley made two models. One socket was made of
moulded insulating material, having high dielectric values, and the
other of porcelain, which also had undisputed electrical qualities.
The Crosley socket was well known, and was being used by thousands
of persons who were interested in the development of radio. One sold
for 40¢ and the other for 50¢.

Both sockets were made in one piece. The contacts were of
special, strong phosphor bronze, nickel plated, to
eliminate to a great degree
corrosion at the contacts.
The nuts and screws are brass, nickel plated. Both models are designed to prevent short-circuiting of high voltage "B" battery current across the filament contacts, thus eliminating the danger of burning out the filament through careless inserting of the tube. They may be mounted on a base or panel.

**KNOB AND DIAL**

Our new knobs and dials are unquestionably the most attractive on the market. They are of molded composition carefully and accurately made. The lines and figures are molded in the dials and inlaid with white enamel. The dials are three inches in diameter. Furnished with bushing for a 1/4-inch shaft. The knob itself is very large, giving a much better control for sharp tuning.

The tendency has been to control the dial for sharp tuning with the fingers near the circumference. The new knob provides the grip where it should by means of a much larger diameter. You can not appreciate the difference until you tune with this knob.

**HEADPHONES**

The Crosley 2,500 ohm Head Set, embodying all the features of a perfect receiver, was designed to give satisfaction under the most severe operating conditions—that of weak signals. Its sensitivity and matched tonal qualities make it the ideal receiver for commercial and amateur use. This head set incorporates beauty, comfort, ruggedness and lightness, weighing, completely assembled, only 14 ounces.

Bobbins are automatically machine wound, insuring proper number of ampere-turns. Balanced windings mean no tone distortion. Several pairs of phones may be connected together without loss of signal strength.

Permanent magnets are so designed to have correct diaphragm pull in a low-loss magnetic field. Headband construction insures comfortable fit. Shells are of polished aluminum, all other parts heavily nicked.

**BINDING POST**

The Crosley Binding Posts are now made in three sizes—3/8 inch diameter, 7/16 inch diameter, and 1/2 inch diameter. They are all of the same design, however, as shown in the illustration....5¢ each.
FILAMENT SWITCH AND TAP SWITCHES

The Crosley filament switch is easy to install and functions perfectly. After it has been added to the set, the operator may cut off the filament current and come back to the same station without retuning. The necessity of disconnecting battery clips is eliminated.

The unique construction of Crosley Tap Switches assures a constant tension and eliminates all possibility of the switch loosening and developing a faulty contact on the tabs. A stationary washer of our own design has a soldering lug, which makes possible a buss wire connection. All Crosley Tap Switches are furnished with a newly designed tapered knob and nickel-plated switch arm and bushing.

(Taps, nuts and stops also are furnished.)

Switch taps, brass nickel plated, complete with brass nuts, 2½ each.

RADIO CABINETS

Persons who are planning to build their own radio receivers desire beautiful and well-built cabinets and panels. Crosley cabinets are highly finished and strong enough to withstand the roughest handling. These come in various sizes. In fact, we have them to meet the requirements of any type of radio receiver. Our panels are of genuine formica (Cincinnati Co too)

<table>
<thead>
<tr>
<th>MODEL</th>
<th>PANEL SIZE</th>
<th>INSIDE DIMENSIONS</th>
<th>CABINET PRICE</th>
<th>PANEL PRICE</th>
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CRYSTAL DETECTOR STAND

The Crosley Crystal Detector Stand, which is sold separately, is especially well constructed neatly mounted on black base, covered on the bottom with green felt. All parts are bright nickel finish, complete with mounted crystal, binding posts, etc., manufactured under the following Pickard patents: Patented Jan. 21, 1908; Nov. 17, 1908.

PRICE.....$1.60

CROSLEY CRYSTAL RADIO RECEIVER

The Crosley Crystal Receiver Model 1 is particularly suited for reception of broadcasting stations at a distance up to 25 miles, but many reports have been received that under favorable conditions the range is much greater, in certain instances as great as 260 miles.

The set is sold complete with double head phone, antennae wire, insulators, etc.

PRICE.....$25.00
Maximum efficiency and minimum cost make up the Crosley book-type variable condensers exceptionally popular and in great demand everywhere. Changes made recently, including the adoption of molded plates, adds greatly to their appearance. Sharp and accurate tuning is desired by every receiving set operator, and there is no condenser that renders more efficient service along this line than does the Crosley Unit.

Body capacity effects are reduced to such an extent that they are scarcely noticeable, and no condenser on the market does more to eliminate static interference. The Crosley Condenser has been so designed as to provide direct positive metallic contact with the charging plates of the condenser, thus eliminating the serious contact resistance which is introduced by spring and friction contacts in the usual form of variable condenser. The internal resistance caused by imperfect contact between the plates and spacing washers of the rotary and stationary members of an interlocking condenser is entirely eliminated in the Crosley Condenser.

Not only has the Crosley type condenser many factors designed to improve the overall electrical efficiency but the arrangement of the plates is such that a minimum electric field is produced around the condenser. This condition is of most vital importance where condensers are employed in circuits which require very delicate and precise adjustments.

The Crosley Condenser depends upon a thin sheet of high-dielectric material as insulation between the plates. As there is no friction from the opening and closing of the plates, the insulation will last as long as the condenser.

Our tests have shown the maximum capacity to never be less than .0006 Mfd. This frequently runs better than .001 Mfd. We conservatively rate these at .0005 Mfd.

Each condenser is carefully tested to withstand one-thousand (1,000) volts before shipment. Try this on a regular air-type condenser if you never want to use it again!

**PRICE** $2.25

The Crosley Multistat, the success of which has been so phenomenal, is a universal filament control rheostat for all makes of tubes. In other words, it matters not what style of tube is used, the MULTISTAT will take proper care of the filament current. The wire is so arranged that it has a graded resistance, the low resistance portion being for the operation of UV 200, UV201, C300, C301, WD11 and WD12 tubes, while the higher resistance portion being for operation of UV201A, UV199, C301A, C299 or DV6A tubes. New Moulded cups are used to prevent possible loss of shape and resultant loose contacts. Total resistance exceeds 20-ohms. They are part of the standard equipment used by the Precision Equipment Company.

The MULTISTAT is as great a necessity to a receiving set owner as is a pair of headphones. With the many different type of tubes used today, the receiving set owner finds this rheostat a necessity as it will take care of all of them. This is essential, and this is exactly what the MULTISTAT does. Standard 6-ohm size at 75¢ and D-20 Ohm size at 75¢.

**PRICE** $0.85
Crosley had several slogans which appeared on ads which he ran in numerous magazines. One I remember was BETTER-COSTS LESS. And in the 1930's he came out with YOU'RE THERE WITH A CROSLEY.

Throughout the years Crosley was continuously innovating and coining phrases for his products. He sold batteries, both the rechargeable type and the ordinary dry cells. The "A" battery was nothing more than an ordinary car battery but it had the name of CROSLET on it. In the ad it stated:

Crosley batteries, both "A" and "B" are in great demand because of their wonderful service. The "A" battery with its 80-ampere hour capacity, provides excellent vacuum filament current.

"A" BATTERY PRICE....$18.00

In my own collection of memorabilia I have a "C" battery which Crosley sold in 1927. Strangely, the battery have never leaked and actually it still measures voltage! His ad said:

"Our "B" batteries are arranged for connecting in variations of voltage up to 22 1/2 volts. They have exceptionally long life. Size, 63/4 long, 1 1/4 wide and 3 1/2 deep. Their service is noiseless."

"B" BATTERY PRICE....$3.00

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HYDROMETERS

Because of the high-current rating of the early vacuum tubes and the fact that they were what was known as "directly heated" filaments they required a heavy "A" battery to supply the current. This meant the battery would have to be charged. At first the people took them to an auto service station but later there were several manufacturers who made chargers which people could use at home. The KODEL Electric Company on 3rd street made some.

Every home would make sure their "A" battery was charged in the time-tested manner by using a hydrometer. Crosley said of his: "Crosley hydrometers also are in great demand and are vital adjuncts to any radio receiving station. Solution in any storage battery must tell you when your battery is growing weak.

PRICE.............$1.00

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VARIOMETERS AND VARIO-COUPLES

It was Major Armstrong, of FM fame, who invented his first circuit which he called "A Regenerative Receiver. This worked on the principle that a small signal was injected into the one-tube receiver, and amplified, and then some of this energy was fed back to be amplified again. Thus fortified it made the so-called "l Lugger" set highly sensitive. This circuit required a third coil winding which usually was variable. It was controlled from the front panel of the receiver. These coils were known as VARIOMETERS. They had two stationary windings and the third one variable. It was possible to buy the coils already wound with wire, or without the wire for those who wound their own.

PRICE WITHOUT KNOB AND DIAL.............$3.00

"The Crosley Variocoupler is also sold unassembled for...$1.25
Price Rotor only.......................$4.00

"The Crosley Variocoupler was designed for efficient usage where any two circuits are to be coupled together. The coil is tapped in six places. The rotor is a varnished wooden ball, the leads of which are brought out by means of flexible conductors, and stops prevent their breaking.
RADIO FREQUENCY AMPLIFYING TUNER

Crosley combined his special bakelite knob with that of his book condenser and a "spider-web" coil to form this complete unit.

The Crosley (1922) R.F.A.T. consists of an inductance coil, and a Crosley book-type variable condenser. It can be tuned to any wave length from 200 to 600 meters, depending on its action on the infinite impedance principle. A newly designed inductance coil and anew condenser are used. The latter had moulded plates, which add to the appearance. These units have proven their worth and are in great demand.

**COMPLETE WITH KNOB AND DIAL....PRICE $4.25**

**TUBE SOCKET ADAPTERS**

As there were not standards on the pins at the base of a vacuum tube and no set diameters either, it sometimes became necessary to use a different type tube than what was originally used. This meant an adapter arrangement. Crosley made two types and both of these were available with either a flush mount or side mounting bracket.

Crosley said: "To meet the demand of those who desire to use vacuum tubes that do not fit in the ordinary sockets, we have perfected the adapters illustrated below. The one of the left is for UV 199 and C299 and the other for the WD 11 and C 11. These adapters also come equipped for panel mounting.

**PRICE.................60¢ each**
**PRICE(panel mounting)70¢**

**VARIND (trade name)**

The most efficient type of winding for RF coils is the spider web type. Crosley built these and in this unit he uses two mechanically coupled together so that the distance between them can be adjusted.

Crosley said of these units: "The Crosley Varind is arranged with a square shaft to prevent the connecting wires being broken, due to the rotation of the coils. All connections are made directly to the movable coil thus eliminating the resistance of sliding or bearing contacts. The particular winding shape has been employed so as to maintain a close magnetic field, thereby eliminating the energy losses brought about by stray fields. The extremely low high frequency resistance found in the unit makes it most desirable for introduction where sharp tuning is desired. This type of winding embodies a minimum of distributed capacity."

**PRICE......$2.00**

**CROSLEY MAGFON**

The word MAGFON is a contraction of the two words Magnify and phone. Meaning, of course, to amplify the sound. In the early days of radio the transition from headphone to speaker did not occur in one jump. At first the earphone was placed in a large bowl. Then a trumpet, such as an auto horn, was added much like the early acoustic phonograph horns.

**PRICE...$10.00**
Crosley said of his MAGFON speaker: No radio station is complete without it. Built in horn: amplifies signals, voice, or music, making head phones unnecessary except on weak signals. Uses one watch case receiver, any make; simply insert it in back of cabinet. Beautiful antique mahogany finish.

SHELTRAN TRANSFORMER

The Crosley Sheltron is a completely shielded transformer. The high-grade materials used in its construction combined with excellent workmanship, give it that high efficiency and attractive appearance so often lacking, except in the most expensive types.

We have incorporated in the design of the Crosley Sheltron all the characteristics, so essential and necessary to obtain the maximum amplification from the modern vacuum tubes used in radio work. These tubes, with their high amplification constant, operate most effectively at large fluctuations of the grid potential. The Crosley Sheltron is designed to accomplish these results, and tests have shown that the design is correct to insure maximum efficiency.

PRICE...$4.00

MUSICONE SPEAKER

Early 1925 saw loud speaker market entirely changed through advent of MUSICONE. New shape, idea, principle, revolutionized lagging end of radio. Musicone improved radio enjoyment more than 100%.

Latter imitators copied shape, color, size. Patented Crosley actuating unit balked them. Fastest selling piece of radio apparatus yet devised has maintained its leadership steadily ever since.

Now important improvements are announced. Earnest engineers after long study adopt new metallurgical discovery increasing vibration 10 times. Smoother, richer, more powerful tone results. Research develops moisture proof wire coating. Experience finds bakelite for bobbins impervious to dampness. Delicate adjustment easily adhered to by simple device.

PRICE...12-inch cone (1925 price $17.50) today... (1927) $9.75
16-inch Super-Musicone....$3.75

NOTE: CROSLEY HAD A 28-inch solid mahogany wood housing he called MUSICONSOLE-$32.00

MUSICONE

1927 CROSLEY ADVERTISING

Powel Crosley makes radio history, so said the magazine in 1927. Time magazine said in their September issue for 1927: "Last month the radio world waited, wondered, exclaimed when one Powel Crosley, Jr., President of The Crosley Radio Corporation, announced its acquisition of licenses permitting use of patents controlled

Shortly after Crosley engineers produced the new 6 tube Bandbox Receiver, shielded, balanced, sharp. Crosley distributors delighted, cheered, applauded with orders. Radio business looked rosy-$555 price staggered imagination. First samples performed amazingly. Glowing reports drifted in from all wholesalers.

Radio bugs sitting down to analyze this paramount Crosley Achievements found:

1. COMPLETE SHIELDING.
   Magnetic fields of coils prevented from interfering with on another by copper housings. Experts noted these features similar to those found on most expensive sets.

2. ABSOLUTE BALANCE
   Neutralization of the radio frequency stages under Hazeltine principle. Wiseacres quickly detected greater efficiency over common form of losser method.

3. AC'TIMATORS.
   Secondary tuning devices used only when air cruising. Far away stations and weak distant signals are brought to room filling volume by these ingenious features. Shrewd fans observed tremendous increased advantage of Bandbox over common one-dial sets which miss such signals entirely.

4. VOLUME CONTROL
   Enabling operator to cut loud and local stations down to a whisper without distoring sound.

5. ILLUMINATED SINGLE DIAL.
   For dark, corners, shadowy locations and twilight or total darkness operations.

6. CONSOLE PROVISION.
   Skillful planning makes removal of metal cabinet easy. Fitting into console cabinets is a simple matter. Any hands quickly remove several screws for escutcheon to cabinet panel and console radio stands complete.

7. AC OPERATION.
   In specially wired Bandbox receiver at $65 with Crosley Power converter for supplying A, B, and C current direct from electric light socket at $60.
   A. Use of new R.C.A. AC tubes attracted much attention. Keen observers checked UX-226 in radio frequency sockets and 1st audio stage-a UX-227 detector with indirectly heated emitter and UX-171 power tube in last audio socket. Radio wise predicted wonderful quality from such use of power and such tubes.
   B. Smart examiners marveled at simplicity of power converter-compared size with ordinary "A" storare battery as less than half-noted how snap switch shut down set completely and approved choice of 25 and 60 cycle models.
   C. July 21st many Croley dealers invited friends and neighbors into their stores to hear the Dempsey-Sharkey fisticuffs come in over the "BANDBOX" and MUSICONE. Reception pleased, enthused. Vividness of fight description so heightened by faultless reception that many individual's report of listening in was summed up in the exclamation- YOUR THERE WITH A CROSLEY."

8. IMPROVED MUSICONE

9. BEAUTIFUL CONSOLES.

Last month Powell Crosley, Jr., President of The Crosley Radio Corp. approved three cabinets intended to receive the Crosley "Bandbox" as console radios which are made by the Showers Brothers Co., and The Wolf Manufacturing Industries.
Crosley...is the first to make this new art available for demonstration and experimental purposes.

**A CROSLEY ENGINEERING TRIUMPH!**
**ANOTHER CROSLEY FIRST!**
**A PIONEERING ACHIEVEMENT!**

The year was 1937 when Crosley saw wide uses for this device which would print the newspaper right in your own house. He saw a promise for wide usage for quicker, more accurate, news and views printed on white paper.

He extended the marvel of radio to give visible impressions; readable, seeable PRINTED news and views of the world. **RADIO FOR THE EYES AS WELL AS THE EARS.**

Readers who didn't fully realize that we were not to have commercial television for ten years may not grasp the full impact of Crosley's idea. He foresaw the time when even television, which is transient and not permanent, would be supplanted by the printed page via radio.

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**WEATHER FORECAST**

(friday)

Cincinnati--mostly cloudy: colder.

OHIO--cloudy and somewhat colder preceded by snow flurries in east portion.

KY--generally fair and somewhat colder.

IND--possibly rain in morning, except rain turning to snow extreme north: some what colder except extreme northwest.

**SHIPPER'S FORECAST**
So the already famous trade-names of Crosley like, SHELVADOR AND MYSTIC OVEN RANGES, FARM RADIOS, XERVAC, SAVAMID WASHERS, SAVAMID IRONERS, ELECTRIC RANGES, KOLDRINK BOTTLE COOLER, HOME & AUTO ANTENNAS, RADIO TUBES, we now have READO.

The art of transmitting pictures and other material by radio will advance in the years to come. (written 1939) Nothing will hamper its growth. Pictures of world events, cartoons, comic strips, news flashes, weather maps, market reports, everything of a visual nature will soon be coming over the air. It is not anticipated that facsimile will directly compete with the newspapers.

It will unquestionably be and continue to be a source of flash news rather than detailed mass-printed material which can only be supplied by the newspapers and periodicals.

Facsimile does not directly compete with sound broadcasting. On a separate channel it will unquestionably be available as an augmenting service, providing a visual record of material other than music and sound being produced for your perusal whether you are present or absent.

Facsimile is an entirely separate art from sound broadcasting just as it is entirely separate from television which may or may not be generally available within the next few years.

Facsimile can be broadcast by any broadcasting station by the substitution of a scanning or pick-up device in place of a microphone.

Television requires entirely different setup and technique.

It seems unlikely that TV will be available from any station in the near future without the investment of at least one hundred thousand dollars per station for studio and transmission equipment. A wealth of material is available for facsimile at small cost.

Material can be printed on an ordinary typewriter and broadcast interspersed with photographs which are generally available.

Television, on the other hand, will require enormous production costs comparable to producing a moving picture in Hollywood. As TV receivers will be quite costly when it does come out of the laboratory the number of TV receiving sets in use will be comparatively small, offering to the advertiser such a small audience that it will be a long time before picture production costs can be absorbed.

Eventually we believe that every home will be equipped to receive sound, facsimile, and television.

The problems involved in facsimile broadcasting are simple. Even to the smallest broadcasting station facsimile is available. Present estimates indicate that in television with a primary cost of about one hundred thousand dollars to a broadcasting station that the production costs of suitable pictures would be at least a million dollars a year for only one hour of production per day.

SPECIAL HIGH FIDELITY TWO BAND CROSLEY PUSH BUTTON RECEIVER

Although this receiver is designed for sound broadcast reception, it incorporates special automatic features that make it most desirable for use with the Crosley Reado Printer. This set operates on 110 volt (60 cycle), AC. It is a conventional seven-tube receiver with
six-inch loudspeaker for sound broadcasting. A flick of the switch changes it over to facsimile reception when used in connection with the Reado Printer. In addition to the regular 540 kilocycle to 1570 kilocycle broadcast band, it incorporates a second band covering the high frequency range for facsimile and sound reception between 24 megacycles and 47 megacycles. The set has five push buttons for use in connection with sound broadcasting or facsimile on the normal broadcasting band. This set can also be used for facsimile printing from phonograph records where suitable phonograph pick-up unit is used.

For satisfactory results we strongly recommend the use of this receiver in connection with the Reado Printer as it incorporates automatic control of printing level which is vitally important to true, even printing, and automatic operation.

ACCESSORIES FOR THE READO RADIO PRINTER

CROSLEY ELECTRIC TIME SWITCH

This was the first time anyone had come out with a clock to turn on or off any device at prearranged times. This clock fit directly into the READO PRINTER cabinet.

Crosley said "The proper hour of any sound broadcast can be set and when the time arrives the receiving set will go on and produce the sound or facsimile program."

"It is particularly desirable in early morning or late night reception, to set the receiver and printer to come on and receive Reado programs for a scheduled period. Simply set the clock for any predetermined broadcast. The Reado Clock will turn the receiver on at the beginning of the broadcast and off at its conclusion."

SPECIAL ANTENNA FOR THE READO RECEIVER

For best reception and reproduction of printing by radio, it is advisable to install a special antenna. Man-made static, such as produced from spark plugs of passing automobiles, is far more prevalent in the higher frequency bands than in the regular broadcast wave length. The special Crosley Antenna illustrated reduces such interference to a minimum, permits higher elevation, or provides for balancing the antenna to the receiver and also permits directional control for best results.

CROSLEY READO PAPER

Crosley produced special rolls of paper for his machine. These were available from his regular dealers. This paper was an exclusive Crosley development that presents a clean white surface. Reado Paper costs only $1.00 per roll.

CROSLEY READO TRANSMITTER SET

News and pictures are broadcast in much the same manner radio programs are broadcast. Where a microphone is used at the broadcasting station to receive the sounds that are to go out over the air as sound waves, a special device is used to visualize the pictures or printing that are to be transmitted.
The READO transmitter-printer converts radio waves into text and pictures on white paper. The transmission of printed matter and pictures is quite simple. Photographs or other printed matter are fed into the machine on a narrow strip of paper which are scanned by the photo-electric-cell, a line at a time, and this is converted into electrical impulses which are fed over the air instead of regular music or voice. This material goes out over the air as radio waves and the tiny dots (impulses) synchronized at the receiver, similar to those of a half-tone engraving. These dots are received by the Crosley Reado Printer at approximately the same size and at the same speed at which they were printed and transmitted.

PICTURES AND TEXT UNDER THE FINCH SYSTEM OF CROSLEY

Mr. Crosley said "At the present time there are 13 stations (1939) equipped to transmit pictures under the Finch system. Some of these stations are transmitting experimental programs at irregular intervals and some on regular schedule. At the present time at least, the range of transmission is not as broad as the normal range of broadcasting stations because facsimile broadcasting is more subject to static and other forms of interference. It is also caused by the normal characteristics of the higher frequencies used for facsimile transmitting."

"Under the Crosley-Finch system both transmitter and receiver are automatically synchronized on 60 cycles, 110 volts AC. This is the voltage and current most generally used throughout the U.S. It is not essential, however, that the receiving set be on the same power line as the transmitting set. With some systems this is necessary."

"Transmision of pictures on the normal broadcasting band, 530 to 1570 Kc, is now limited to hours between 12 P.M. and 6 A.M. Some stations on 25 to 47 megacycles which are available for daylight operation."

"The facsimile system used by the Crosley Corporation was developed by Mr. W.G.H. Finch over a period of many years in his laboratory. Licensed under the Finch patents, the Crosley Corporation manufactured the model used at the Central Trust Co. in Cincinnati."

"Powel Crosley, Jr. said later "Crosley Reado developments include an exclusive processing of the paper on which messages are received. A clean, white surface is presented which is in direct contrast with other systems requiring ink or wet chemicals and dark colored paper."

CROSLEY AND THE CINCINNAT REDS BASEBALL

The story of Baseball and that of Cincinnati are synonymous. Baseball was born in Cincy in 1869. There is more than a little of provincial pride in native Cincinnatians whenever baseball is mentioned. Not only was the game born here, but the league operations also. To top it all off night baseball under the lights had its beginnings in Cincinnati."

"Crosley said, when someone asked about his interest in baseball: 'My interest in baseball? I had no inclination or desire to get into the baseball business; but the ball club had got into difficulty and was in the hands of the Central Trust Co. in Cincinnati. It was not good for
the bank to run a ball club. Therefore, when Larry McPhail came here to run the club it was with the understanding he had to try to get someone to run the club. I happened to be "it." He came out to see me and he is a good salesman (said with a humorous insinuation). There apparently was no one in Cincinnati interested in becoming an angel for the ball club. After a considerable selling job he sold me on the idea of becoming interested. The one thing that sold me was the fact that there was grave danger that the franchise of the ball club would go to some other city. There were other cities who were interested at the time. I do have sufficient civic pride in my makeup to not want to see Cincinnati, the birthplace of major league baseball, become a minor league town. While Cincinnati is the smallest city in the big leagues the love of baseball is deep rooted."

When I went into the baseball business it was with a sincere desire of building a good ball club. I felt confident that if a good ball club could be produced the people in Cincinnati would support it. It takes time to perfect an organization. It takes time to build up a ball club. This cannot be done by going out and buying players. It has to be done from the ground up through a farming system. First under the direction of McPhail, followed by Warren Giles, we have built up a modest farm system that has produced some excellent ball players. Under the very able direction of Bill McKechnie whom we were very fortunate in getting this year. He is in my opinion one of the very best baseball managers in the business."

"He took the ball club up from a bad 8th to 4th place and had it in a contending position for the last half of the season. As a result the people in Cincinnati have appreciated the fact and have supported the ball club, and attended the games to an extent that our attendance this year has broken all records in the history of The Cincinnati Ball Club."

"1926 was the best year previously. The ball club has actually been in the black for the last three or four years. The club, however, is heavily in debt, but not dangerously. There is still a big mortgage on the plant. The club still owes me money, but we have been paying off the indebtedness ever since I came into the picture. I went into it without the hope of making money, but that I wouldn't have to spend too much either. But the ball club has been gradually paying me back and paying off its indebtedness, although it
will be some time before I get any money back out of it, before I get back what I had loaned to the club. I have found it very interesting. The ball club on the field belongs to McKechnie. The management of the ball club and everything pertaining to the business are in the hands of Warren Giles. Between Giles and McKechnie, they decide on the players they want. They go through the formality of asking me whether it will be all right to buy such and such a player and pay so much, but I have yet to veto any recommendation they have made."

"I don't know to what extent I have been able to contribute. I have made suggestions at times and have had something to do in a general way with policies that definitely had to do with the appointment of the management, such as Giles and McKechnie. Watching the ball games, having meetings with Tom Conroy, treasurer of the Cincinnati Baseball Company, Giles and McKechnie, and sitting in on matters of policy and advising. The rest of the time I put in is in just watching the games." So said Powel Crosley, Jr.

FIRST NIGHT BASEBALL

A newspaper reporter wrote in 1935; "Among those baseball magnets who knew the night game could do was Larry MacPhail who had put in arc lights at Columbus, Ohio, and who knew that attendance at Cincy could be stimulated by electric juice. In his first talk with Powel Crosley at luncheon one day, MacPhail described the remarkable therapeutic powers of night baseball and expressed the hope he could persuade the conservative major league tycoons to let him play nocturnally along the banks of the Ohio.""}

"When McPhail did propose that Cincy try night ball the reaction was violent. The horse & buggy witch doctors who ran the game the way it had been before the turn of the century couldn't see it at all."

"Because Cincinnati was in such perilous financial condition McPhail was granted the privilege of playing seven games at night during the 1935 season."

"The 1st night game in major-league history was scheduled for May 23, 1935, but had to be postponed 24 hours because of rain. Then it took place and it was it F.D.R., seated in the White House, who pressed a button that, by some long distance legerdemain, lit the 632 lamps that illuminated Crosley Field. Philadelphia was the visiting club that night and Ford C. Fricke, President of The National League, threw out the 1st ball."

"The attendance that night was fully 10 times greater than it would have been for an afternoon game with the Phils (20,422 fans)."

So a new era had been ushered in. Cincinnati, birthplace of professional baseball, was now the birthplace of postprandial baseball in the majors.
In the early 1940's it was my privilege to help cover the baseball games from Crosley Field for radio station WKRC. My duties were those of an engineer. The play-by-play was done by the former big-league pitching star, Waite Hoyt. I recall the row of Morse telegraph operators who transmitted the game to all the principle cities across the country. Crosley always provided a buffet style lunch for all those in the press box. During the "seventh inning" Stretch, the Findlay Market group would put on a show.

In the years since those, the invincible Red Stockings of 1869, began their first marvelous season, the world beyond the foul lines has seen boom, bust, war, and pestilence. Man has gone from the earth to the moon on a rocket.

The newspaper account said in 1974, "But within those foul lines, men still win as much rapt attention as they did more than 105 years ago. Going from first to third on a single, it's a measure of baseball, the institution, a monolith in a troubled sea, a constant in a variable world."

The park has been in many places and we find it now on the banks of the Ohio near where the first settlements were made in 1788. It is a circular structure, replete with artificial grass and modern in every respective. During Crosley's tenure of ownership it was at Findlay Street and Western Avenue.

A later writer said: "In 1884, Ulysses S. Grant died after writing his memoirs and the Reds moved into a new ball park. They were still there in 1969, playing the same game in a green oasis surrounded by a changed world...when the Reds celebrated their first 100-years."

"Ahh! 1919! What a year! Hod Eller's 'shine ball' was unhittable. Ed Housh and Heinie Groh, burned up the league. Kroger groceries were selling sirloin at 33 cents a pound and Congress spent $5 million fighting the flu and Kayo Mars was fighting in Music Hall. Young couples rode to Haberstumpf's Garden at the end of the Warsaw streetcar line, or danced at Crowe's Park. Daylight savings time and inflation were big issues and the Reds tore through the National League like a tornado, winning 96, losing 44. They set the town on its ear by upsetting the White Sox for the Pennant."

Powel Crosley, who dug for $200,000 and acquired control in 1934 at last announced in 1939 that $163,000 had been repaid him on account. A generous owner, he paid Bill McKechnie, team manager, and Warren Giles, business manager, $30,000 a year each.
In 1938 he staggered McKechnie by agreeing, after a brief telephone talk, to a $75,000 money-and-player deal for Bucky Walters, a Philadelphia pitcher. McKechnie dropped the receiver, wiping his brow.

"How long has this been going on?" he demanded of Giles. "I never knew an owner to let go of it that easy."

"Baseball experts credit the Reds great showing in 1939 in large part to Walters and, by extension, to Crosley's open-handedness. But, although the rise of the Reds has brought a long-delayed glow to the hearts of Red Fans-as critical if not so faithful a lot as their Brooklyn prototypes-these Rhinelanders have not exhibited any especial gratitude toward their benefactor. So,arily suspicious that Crosley's interest in their cherished Reds halts at the turnstiles, the fans resent his irregular attendance at home games." So said a writer in 1939.

The same writer said in an interview later...in 1939 when he was talking to a cab driver about Crosley: 'Think' bade the articulate hackman, 'What it is going to mean having Crosley Field splashed on the front pages of every newspaper in the country during a world series.'

"Expertly dodging a safety zone, the driver relaxed into reminiscence: 'O.K., he's a stem winder. So What? I knew him when he was chauffeuring for a private family around this town, trying to sell automobiles on the side. He grew up in College Hill. Local boy makes good. He was thin as a rail. Sure never thought he'd be a big shot.' He pulled up to the curb. 'I guess he has what it takes,' the hackman concluded. 'Everything he touches turns to...."

"The composite story of Crosley, as told in Cincinnati, blends the legend with a rags-to-riches saga. The town's verdict is by no means unanimous. Crosley evokes mixed feelings in a populace containing so many 'I-knew-him-whenners.' Opinions on him and his deeds are in violent conflict."

"One hears, for example, that, having acquired riches and a baronial seat, Powel sought social recognition, and took up polo as a short cut. It is his first public match, he barked, gruffly: 'Don't put my name in the papers—but if you do, remember to make it one L.'"

I doubt, seriously, even with all the wisdom and business acumen that Powel possessed, that he dreamed that one day he would be the czar of radio in Cincinnati and elsewhere.

"An empire was built because his 9 year old son wished to have a radio and Crosley built one to satisfy his whims."
The story goes that several Cincinnatians were becoming engrossed in the problems of radio manufacture. The Precision Equipment Co., on Gilbert avenue not only sold parts to build sets, but they also had several models in their store already built. Cincinnati had other companies such as Midwest Radio on Broadway who catered mostly to the mail-order trade by selling chassis and the customer fabricated or bought his own cabinet to fit it. There was the Cleartone Radio, Cino Radio and Kodel radio companies also.

Using his Hamilton Avenue phonograph factory, Powel Crosley, Jr., manufacturer of phonograph cabinets and automobile accessories, was making one-piece porcelain sockets for vacuum tubes and later complete parts for sets. Afterwards he designed and produced a variable condenser and a rheostat, and at length was manufacturing a complete crystal detector set. This apparatus, which sold for $15 was cheaper than any other device of its kind on the market. In the fall of 1921 Crosley proposed to his engineer, Dorman Israel, that they try building a receiving set without a crystal. Israel concocted something that included a coil with an old oatmeal box as its core. That night the two men sat beside this contraption at Crosley's home and tried to tune in Station WMH, at Peebles Corner, about seven miles away. Soon they heard sounds, and then an announcement, "This is Station WJZ, Roselle Park, New Jersey!"

Crosley and Israel were amazed. Nervously they turned the dial, hearing Pittsburgh, Detroit, Hamilton, and again WMH. Using the experimental set as a model, Crosley designed and soon was making Harko, Sr. Once more he was able to undersell competitors, and by the spring of 1922 the Crosley plant was producing five hundred radio receiving sets daily; it had become the world's leading manufacturer of small crystal sets.

Crystal did so well in 1922 that he bought a large building at Colerain Avenue and Alfred Street. Two years later, shortly after the business was incorporated as the Crosley Radio Corporation, the continued big demand for radios again overloaded the firm. A new building at Colerain Avenue and Sassafras Street was built in 1926, and an eight-story structure completed during 1929.

In 1938 the Crosley Radio Corporation plant, extending from Sassafras Street to Arlington Street on Colerain Avenue, and more than six hundred feet west on Arlington Street, housed not only the radio set manufacturing division, but also the studios of WLW, WSAI, and short wave Station W8XAL and the electric stove production units.
The book written by WPA writers in 1938 called "They Built A city" had this to say: "Although as early as 1911 a Cincinnatian was licensed as an operator of wireless telegraph, Cincinnati's interest in the new radio was purely amateurish until 1919. That year the Precision Equipment Company established an experimental broadcasting studio, using the call letters WMH, in a second-floor room at Peebles Corner. Several retail stores selling electrical products began stocking the crystal sets; and talkative people at social gatherings usually asked, "'Did you hear So-and-So?' This interest in radio was noted carefully by the manufacturers."

"As this interest was noted in 1920, less than six months after WMH went on the air, the first Cincinnati-made crystal sets were in use. The first regular broadcast of a national event came on November 12, 1920 from KDKA, Pittsburgh, which sent out the returns of the Warren G. Harding-James M. Cox Presidential election."

"About the same time the particular fate who guides industry was weaving a pattern of events soon to give Cincinnati what now is the World's most powerful broadcasting station, The young son of Powel Crosley, Jr., at that time a manufacturer of phonographs and automobile accessories, asked his father to buy a receiving set, and the elder Crosley, in order to satisfy a boy's whim, went shopping. Learning that the cheapest apparatus cost $130, far more than he wished to spend, Crosley made a compromise with the boy: he would build a set at home."

"While assembling this apparatus at a total cost of $35, Crosley came upon the idea of manufacturing moderate-priced receiving sets. Intensive experimentation followed, and soon he was able to sell a complete detector apparatus for $15. In 1921 Crosley began experimenting with radio broadcasting by operating Amateur Station 8CTI from the livingroom of his home. Later he transferred the station and transmitting equipment to his factory on Hamilton Avenue, where in March 1922 Station WLW first sent its call letters into the countryside."

"Beginning in 1922, progressive change in technical devices quickly made possible better reception of broadcasts. The phonograph loud speaker was adapted for use in receiving sets; condensers and other components were improved and circuits to bring true-fidelity were contrived; and more effective means of selecting programs were produced. Establishment of Federal regulations—since 1934 under the Federal Communications Commission, assigning regional channels virtually eliminated the 'drowning out' of broadcast by high-power stations."
ADOPTION of recently designed and highly efficient parts as standard equipment in the new Crosley Model VI radio receiver makes this set vastly superior to the former model, which is known to thousands and thousands of radio enthusiasts as "the best two-tube set ever manufactured." The new Model VI consists of one stage of tuned radio frequency amplification and detector, a combination that will bring in far-away broadcasting stations clearly and loudly.

The one stage of tuned radio frequency amplification not only amplifies the signal before it reaches the detector, enabling the detector to work more efficiently, but it also eliminates interference to a marked degree. For instance, in Cincinnati, within a distance of two miles of broadcasting station W L W, it is possible entirely to eliminate W L W to hear far-away stations. Local amateurs no longer cause the slightest interference either to local or distant broadcasting.

Every day we receive letters from satisfied owners of the Model VI. For instance, H. L. Williams, writing from Springville, N. Y., tells about hearing station W K A Q, at San Juan, Porto Rico, a distance of more than 2,000 miles. While we do not claim this set will bring in all stations within so great a radius, we do claim that under fairly favorable conditions it will bring in all powerful stations in the United States proper, and a few in foreign countries and provinces. Parts used in the Model VI are the same as those in the Models X J and X L. When the owner desires to operate a loud speaker, we recommend addition of the Crosley two-stage amplifier, illustrated and described below.

The Model VI also is made in a special cabinet, known as the Model VI Special. The receiving set itself is the same as the Model VI. However, it is installed in a larger cabinet, in which there is room for necessary dry cells and "B" batteries. This is a feature that appeals to the housewife who is opposed to having such accessories spread about the room.

Price of the Model VI Special is $35.00
Both the Model VI and the Model VI Special are sold without tubes, batteries or phones.

Crosley Model IV --- A Two Stage Amplifier

This is the new Crosley Model IV, a two-stage audio frequency amplifier. It was designed for addition to the Crosley Model VI receiver, but can be used in conjunction with any tube detector on the market. The Model IV does not produce volume; it amplifies it. In fact, the unit amplifies the volume of the Model VI, for instance, approximately 100 times.

When the Model IV is added to the Model VI the combined units consist of one stage of tuned radio frequency amplification, detector and two stages of audio frequency amplification.

In the Model IV there are Crosley Multistats, the universal filament control rheostats for all makes of tubes, Crosley molded sockets and the very highly efficient Crosley Shelter transformers. There also is a filament switch—a unique feature—permitting snapping of the tubes on and off without touching amplification not only amplifies the signal before it reaches the detector, enabling the detector to work more efficiently, but it also eliminates interference to a marked degree. For instance, in Cincinnati, within a distance of two miles of broadcasting station W L W, it is possible entirely to eliminate W L W to hear far-away stations. Local amateurs no longer cause the slightest interference either to local or distant broadcasting.

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Both the Model VI and the Model VI Special are sold without tubes, batteries or phones.

Crosley Model IV --- A Two Stage Amplifier

This is the new Crosley Model IV, a two-stage audio frequency amplifier. It was designed for addition to the Crosley Model VI receiver, but can be used in conjunction with any tube detector on the market. The Model IV does not produce volume; it amplifies it. In fact, the unit amplifies the volume of the Model VI, for instance, approximately 100 times.

When the Model IV is added to the Model VI the combined units consist of one stage of tuned radio frequency amplification, detector and two stages of audio frequency amplification.

In the Model IV there are Crosley Multistats, the universal filament control rheostats for all makes of tubes, Crosley molded sockets and the very highly efficient Crosley Shelter transformers. There also is a filament switch—a unique feature—permitting snapping of the tubes on and off without touching the multistats, changing the tuning or disconnecting the batteries.

Price quoted above does not include tubes, batteries or other accessories.
SOLDERING, TESTING, AND FINISHING RADIOS

CROSLEY PLANT - 1924
LCrosley adopted the assembly line method as much as possible in his radio production. For this inauguration he has often been called "The Ford of the Radio Business."\]

He reduced the manufacturing to the simplest process. A conveyor belt two miles long moves up and down the building, carrying radio in various stages of construction. Each article passes through thousands of hands, slowly taking form until, at the end of the belt, the product is complete. In 1938 the company was marketing what was said to be the world's largest set, having 37 tubes and six speakers. A modern radio receiving set consists of more than fice hundred separate parts.

LCrosley did most of the work within his own plant. There was a metal working plant where chassis were formed and even a plating bath where chemicals were applied to affect a rust-resist finish. There were tube socket holes to be punched out, holes for other components such as volume control and switches, tone controls, and power transformers mountings. At times special punches were employed to form "ears" on the chassis to solder to.

He had his own paint shop and coil winding machinery. The making of a radio was a tedious process. The engineering department would dream up a circuit, based on the new sets in vogue at the time, and various circuits would be tried and finally a bread board working model was tried. If there were no "bugs" in the system, it was then sent to a mechanical department where it was studied and a more practical layout was formed. Then drawings and more drawings, until the chassis was as near to the prototype model as practically possible. Then one set would be formed and built by one of the engineers and upon the final wiring it would be taken to the lab for an air check. Usually there would be many flaws show up such as certain critical parts mounted too close to another critical circuit. Changes would be made in the layout and again another air check. If it performed OK, then it was sent to the production department where it would be analized as to the easiest method of beginning the actual construction on a mass basis.

It would not be unusual to find problems after about a week of production. If this occured then modifications would be made. Jigs were built by the mechanical department to hold the chassis for different stages of manufacture. Test equipment, such as signal generators would be made in another department called "Test Construction."
It is not possible to tell even in general terms about all the hundreds and hundreds of different models which were produced by Crosley. He built farm radios, auto radios, portable radios, table models and consoles. Each to serve a certain need.

Most of the vacuum tubes were purchased from a company in Owensboro, Ky. The brand name of the tubes was KENRAD. Tubes that would retail for as much as $1.50 would cost Crosley, and other manufacturers about 5¢. The reason for this was that the tube makers knew that if they could place their tubes in thousands of different chassis then they would have a "captive" market for resale of tubes as the sets aged and needed service work. Although tubes would last a long time, there still was a turnover in replacements of about three whole sets of tubes during the life span of one radio.

Working toward a low-cost market, Crosley produced the famous Crosley "PUP" receiver. The one-tube regenerative circuit of the earlier Crosley sets was re-designed to fit in a 4-inch square metal box with the tube socket mounted on top. The "book" condenser was re-designed with the control knob mounted on a threaded shaft to actuate the moving plate. A small Formica (Cincinnati Company) panel mounted in an opening in the back carried grid leak and binding posts for the phones, ground, and antenna. Battery leads were marked on flexible leads. The Pup was usually operated with a type WD12 tube, 22½-volt "B" battery and a 1½-volt dry cell. The Pup sold for $9.75 plus tube, batteries, phones and antenna. This was the first cheap, practical, regenerative receiver on the market and provided radio entertainment for many low income people. Two singers on WLW sang "We are the Crosley Pups" to promote sales.

Another unusual receiver built by Crosley was a small, portable radio set. It was built to look like a book. It had black leather covering and the edges were real gold plated. It would begin playing upon opening the book. It used a 67½-volt "B" battery and a common flashlight cell for the "A" portion.

Crosley's first, and perhaps THE first, auto radio was called ROMEO. He also made the antenna to be mounted on the car. In those early days the car antenna hung under the running board. Crosley's auto set mounted on the fire wall and had flexible shafts to connect to the dial which mounted on the steering column.
It is an impossible task to even broach such an enormous job of writing about the hundreds upon hundreds of different model sets which Crosley Built in a period spanning 4 decades. Volume after volume of service data and pictures would be needed.

Powel left the production end of the business to his younger brother, Lewis, and devoted most of his time and energies to the broadcasting phase of his operations.

During the war Crosley built items for the U.S. Signal Corps. He built a complete field outfit comprising a battery radio receiver, tunable transmitter and even a unit run from a bicycle-type generator to be used independent of electric lines. He built giant transmitters for the Coast Guard and several models of devices to be used by the Air Corps. These all had to meet military specifications which meant environmental test of all kinds. Chambers had to be built to assimilate high-altitude conditions and ranges of temperature from minus 40 degrees to as high as 150 degrees. The gear much function under the most stringent conditions. The free-enterprise system did not apply at this time because all War Work was done on what was known as "cost-plus time" which simply means that Crosley would be paid for materials used and a small percent for using his facilities for the duration of the emergency.

After the WW2, Crosley got into the Television phase. His first sets were built under an agreement with the Dumont Corporation. He used their circuits and layout and built some of his first sets this way. He also copied the first 7-inch TV sets built by Sentinel. These were semi-portable sets and bore the name of Crosley on them.

This was only for a short period and the Crosley touch and imagination again came to the fore. He developed a console type TV which had the picture tube in a swivel. In this way a person could move the pix tube for the best viewing angle without moving the whole set. He was first with the vertical chassis type of construction. He developed and rade practical many types of tuners for TV. The list of accomplishments is again endless and a completely separate book, or books would be needed to tell this story.

I think it best to generalize on the subject and tell in round numbers the stages of change and flux which radio manufacturing had undergone. Nothing heretofore moved at so rapid a pace as radio did during the 20's and during the 30's it was a real race to stay ahead of the competition—which was sizeable.
The service work, which all radios needed at times, was farmed out to a separate company in all cities where Crosleys were sold. In Cincinnati the Company was known as MODERN DISTRIBUTING COMPANY.

The growth of radio receivers in Cincinnati can be traced under the following general classification:

1. Coheror detectors and chemical detectors.
2. Galena and Silicon detectors with emphasis on antenna and coils.
3. Galena detectors used with early tube for audio amplification.
4. Additional audio amplification to operate a loud-speaker.
5. The use of the vacuum tube as an amplifier or radio frequency energy. These were called RF amplifiers.
6. Combining RF amplifiers with AF amplifiers and these becoming known as tuned radio frequency stages abbreviated as TRF.
7. The use of the regenerative circuit which operated on the principle that if a tube amplified then some small part of this energy could be fed back to the input for further amplification. This was a milestone in radio history.
8. The use of the super-hetrodyne circuit which converted all radio stations to the same common intermediate frequency, which enabled greater selectivity.
9. Inventions of new tubes and circuits to achieve greater fidelity and better speakers and audio circuits with tone controls so that by the year 1935 we had almost gotten the ultimate in true high fidelity.

In the 1920-21 era we find radios built on a bread board. There were many variations on this theme and many different circuits too.

1921-22

The bread board was still used with square wiring called "Bus" wires used. The main addition in this stage was the use of a front panel with all controls mounted at this point.

1922-24

Additional circuitry so that many knobs were mounted on the front.
The addition of several tuned circuits with more knobs to turn. A person almost had to be an octopus to manipulate all the controls!

1924-27

First "ganged" controls, eliminating all the extra knobs: only one needed now. Speakers began to be enclosed in boxes where previously they were outside the cabinet. The early speakers were known as "morning-glory", so called because of its shape. The parchment paper cone with the actuating movement from an armature arrangement between two pole pieces. Radio networks beginnings in this same era.

1927-28

All sets before this were operated from batteries. AC operation ushered in. Speakers were improved and the "dynamic" made its appearance.

1928-31

Console becomes the standard but most sets still simple TRF models for economy. Automatic record changers coming on the scene at this time. Automatic volume control (AVC) in new circuits and "round top" midgets for first time. Tuning indicators demonstrated for first time to enable a person to tune exactly on the station. Some push-buttons (mechanical) on some models. Dials change from wavelength to frequency.

1931-33

Fantastic number of new tubes on market. Round top still popular and became known as "Cathedral Type", and introduction of first AC-DC sets. Short-wave converters. By late 1932 the shortwave bands were incorporated in the radio receiver itself. RF stages not too popular and costly.
1933-35
Mostly super-hetrodyne designs now. Consoles changing to modernistic and the start of "high fidelity". This is a transitional period. Receivers now what is known as "multiband" with several short-wave bands. A few round tops left but now the rectangular and square table models.

1936-38
The height of the "Golden Years" of radio with networks and soap operas in full swing. Many musical programs aired now. AFC circuit added to automatically tune by push button. First use of "audio taper" volume controls and bass-boost circuitry. Volume expansion circuits.

1938-42
Radio design on the downgrade. April of 1942 was last month of domestic radio production. RADIO HAD GONE TO WAR. After the war production began with all the original circuits and cabinets. All home appliances and automobile production resumed, but 1945 and 1946 was a repeat performance of the years before the war. Television experiments carried on from Carew Tower and production techniques worked out and Crosley plant converted to TV. Mostly table top radios produced and clock radios were very popular.

RECEIVER CIRCUITS
Crosley engineers were constantly studying the "competition" and also the trade magazines for new ideas. Circuits came out faster than you could write them down and study them. Many so-called "new" circuits were not new at all, but simply a rehash of old ones. It was difficult to discern "new" from "old." Circuit patents could be circumvented by the addition or subtraction of parts and even adding what we called "do-nothing parts!"

In the late 20's, a writer, Zeh Bouck,(pronounced Say Bough) wrote in RADIO BROADCASTING an article entitled "The truth about trick circuits." Mr. Zeh Bouck, an erudite thinker and writer, pretty well characterized the state of the art in this article and the editor of the monthly magazine summed up radio progress and pointed out the use of the word "new." Actually there is very little new under the sun, but man can surely sophisticate and camouflage his own contraptions so that they are barely recognizable to even the maker of the gadget!

This did not apply to Crosley, but it does show what he was up against.
I AM THE "NEW" CIRCUIT
by Zeh Bouck-1929

"I am the new circuit. I am as numerous as the hours. I am born and reborn whenever there is nothing of real value immediately at the disposal of the "gyp." Then there are the pseudo experts who feel the need of having their names appear in print."

"I am generally a complication of some discarded radio relic. My new clothes, though expensive, are usually of poor quality. They serve me well in my masquerading and aid in beguiling the inexperienced. My best friends are those who desire an immediate "clean up" with but little thought to the future. I am valuable in that my faults may be cited as the 'horrible examples' after knowledge of my cunning has been gained."

"I am subject of much controversy and usually a breeder of ill-will, suspicion, and doubt. My biographer, Mr. Bouck, knows me of old and has used me to serve two useful purposes at a single stroke. Under his pen I am disclosed as the prince of 'birdies' and the masked ancient posing as youth. I am the new circuit."

"Mr. Zeh Bouck continued: 'No, there are very few things in this world bearing the imprint of originality to such an extent as to justify the description "new" whether it be vitamins or radio circuits. But there exists a psychological attraction in scientific things called 'new' and if the lack of antiquity is made at all convincing, the public will do anything from nauseating itself with yeast cakes, to stretching its spine one half inch a day, or wasting solder and patience on misrepresented radio circuits.'"

"The only systems which have made their appearance since the Great War that embodied original principles not found in previous equipment, are the super-regenerative and the super-heterodyne. The reflex circuit dates back to the pioneer days of bulb reception, while the neutrodyne principle is a centuryold-though credit should certainly be given to Hazeltine, an original and talented experimenter, for adapting it to the conventional radio frequency amplifier. England, Round, Fiske, and Weagant experimented with four circuit receivers, in the early days of radio, and discarded them for more efficient circuits, as many over-credulous broadcast enthusiast are doing today. The so-called "new circuit" is a most inviting pitfall into which the broadcast enthused public is being willingly led by newspaper radio supplements (who must give their readers what they wish), pseudo-radio engineers and avaricious manufacturers."
It is a rarity for any of us, in looking backwards, to dwell on the complexities of life and what we have created. We tend to remember only the pleasant happenings and the simplest. Such is the case with me at this moment. After 40-years of working in electronics I find it is not the seemingly overwhelming complex circuitry and gadgetry which I recall at all.

My most vivid memory is when I was seven or eight years old and my father bought a crystal set. WSAL had just begun operations in June of 1923 and for me to hear music and voices coming out of nowhere, right in our home, was nothing short of a miracle. We had a wind-up victrola and one or two records. We played "My Mother's Eyes" over and over again. This was my first impression and an "open sesame" to beauty and illusion.

When the Cincinnati Amateur Radio Club helped in the celebration of WLW's 50th anniversary we set up a display in the lobby of the Cincinnati Gas & Electric building on 4th Street. WLW installed a giant U.S. Map which must have been at least 35-feet long by 20-feet high-in full color and with flashing, bright, lights, to assimilate the lightning fastness of radio. We had all kinds of old equipment on display, but the one item that caught everyone's eye was the simple Crystal Receiver in a glass case from Jack Gray's Wireless museum. Mr. John Murphy, the head of WLW operations, and I, were talking and the gist of the conversation was the basic axiom; only the simplest things are remembered.

Crosley's first receiver, which sold for $15, was the crystal set. For those who never experienced the thrill of hearing sounds come through the air with no batteries nor power of any kind really missed a great era. It will never occur again. The sounds snatched from the air with nothing more than some green cotton-covered wire wound on an old oatmeal box, the "catswhisker" and galena detector all added up to an aura of mystery to all of us. It just couldn't happen that way! Yet it did.

The most difficult part of the tuning operation was finding the most sensitive spot on the crystal with the fine wire which we called the "catswhisker." Crosley solved that by using a piece of a hack saw blade, mounted on his radio, and a small dry cell with wires attached so that we could run one wire over the hack saw blade while we found the sensitive spot. This saved a lot of time. Once this spot was found then we tuned for a station. The wire scraping along the blade caused a sparking conditions, or interference, which acted the same as a radio wave.

**THE SIMPLE CRYSTAL DETECTOR RECEIVER**
(There were many variations)

**NOTE:** To adjust xtal bring apparatus as close as possible to coil and move wire at "X" across blade while adjusting the CATSWISKER.
The history of WLW presents a story of American enterprise and ingenuity as colorful as any story in the world. It has been one of the most distinctive stations in the country and one of the very few which has approached the mega-watt class. WLW ran 500,000-watts from New Year's Eve of 1934 until 1939 with regular programs and even continued into the war years until 1943 when GIs throughout the world heard it in all parts of the globe.

The growth of WLW was constant and it operated on different wavelengths until 1927 when it stabilized at 700 kilocycles, and then in 1928 it was among the first to be authorized a power increase to 50,000-watts.

There is no doubt that Powel Crosley was an innovator. He was forever trying new things. On the previous pages have been told some of the outstanding contributions Powel made to industry.

As he was in the electrical and radio supply business, among other ventures, it can safely be said he grew up with the business. He began manufacturing tube sockets for the new industry and numerous other components for those who built their own radios. To tell the truth, that was the only way you could have a radio in those embryonic years.

Crosley and his engineer, Dorman Israel, designed the famous "book" condenser, which upset the radio community as it was the first of its kind. Crosley had vastly simplified this basic tuning device from the maze of complexity which other companies were entwined.

Crosley was taught the fundamentals of radio broadcasting by Hamilton Fordyce, who had a radio parts store on 12th street near Music Hall. His partner was Russell Blair who for many years was one
of Crosley's engineers. The spring of 1921 found Mr. Crosley deep in experimental research, testing dials, trying new tubes and circuits for amplifiers and adding to his knowledge of radio that eventually led him into the far-flung operations that were to include his several TV stations, facsimile, short-wave plus an international experimental station. Crosley broadcasting became a vast empire in later years, including such cities as Cincinnati, Dayton, Columbus, in Ohio and other states also.

[It was March 22, 1922, that the call letters of WLW were first sent out into the countryside. Crosley had bought out the Precision Equipment Company on Gilbert Avenue just shortly after that. The station call letters were WMH which later was re-built on the roof of Hotel Alms and eventually became WKRC in 1925.]

Progress at WLW epitomizes that of radio in general. In 1921 Powel Crosley Jr., declared "If people were to buy radio sets it would be necessary to furnish listeners with entertainment." Pursuing this idea he built a small experimental station, using 20-watts of power and the call letters of 8CR. It was the custom in early days for stations to just use their own initials for call letters providing they indicated which district they were in. That's the reason for the figure 8 in 8CR.

Nightly in his living room of his home Crosley played again and again a victrola recording of Rimsky-Korsakoff's Song Of India, and asked all who heard the broadcast to telephone him. The answers were few, but they did suffice to convince him that he should go ahead with his experimenting. At the time what few broadcasting stations in existence operated "hit or miss" programs on an irregular schedule. All the stations were on the same wavelength of 309 meters. When voice announcements were made, in particular, weather and stock reports, the station had to move to another wavelength. Stations were required to only transmit 15 minutes at a time and then to listen for distress messages from ships. On some nights when WMH, WSAI and WLW were all on the air, it was a bedlam. On other nights they were all off the air and this was called by the avid radio listeners, "Silent Nights," because they could then listen for out-of-town stations. A far cry from anything resembling radio broadcasting today in 1976.
In 1918 World War 2 came to an end but an influenza epidemic was to kill 20,000,000 throughout the world with 548,000 dead in this country alone. A subway wrieck in Brooklyn killed 97 persons 2 leading communists founders of the Spartacus Party were shot and killed as they were being taken to prison.

The Peace conference opened in Paris on January 18, 1919. Sacco and Vanzetti accused of payroll holdup found guilty in 1921. In September of 1920 Wall Street experienced a $2,000,000 damage by bomb explosion killing 30 and injuring 100. Congress declares peace with Germany and Austria on July 2, 1921, and The limitation of armaments Conference met in Washington on November of 1921. The roof of the Knickerbocker Theater movie collapsed leaving 98 dead in January of 1922. The Facist marched on Rome, Italy, and Mussolini's power began.

The first sound-on-film was shown at the Rivoli Theater in New York and the Beer Hall Putsch in Munich where Adolph Hitler became embroiled in a street clash where several were killed and he was imprisoned at Landsberg, Germany where he wrote Mein Kampf.

Floyd Collins died in San Cave in Kentucky and John T. Scopes found guilty of teaching evolution in a high school in Tennessee.

By July of 1919 in Cincinnati, many Cincinnatians joined in the demonstration against the Ohio "Dry Act." Distilleries and beer and liquor dispensaries locked their doors and a National recession in manufacture and wholesale and retail trade was beginning to be felt. Locally the stringency of unemployment caused by the cancellation of war orders and the closing of alcoholic beverage plants became more acute as soldiers were demobilized. They had left during a period of prosperity; they returned to find industry furloughing workers. This condition let to considerable unrest; through it all ran the resentment towards employers for failing to rehire workers who had gone to "save the world for democracy."

This was the world that Powel Crosley lived in. We owe a debt of gratitude to Crosley and others of his ilk who went boldly ahead when all the signs were wrong. It was L.B. Wilson, who founded another 59,000-watt radio station in 1929 (depression years) under the same economic pressures that Powel Crosley began under. This to me is the American Spirit. They met a challenge head-on and won. It takes daring, and an abiding faith in yourself to accomplish anything, especially under hostile conditions. This bravery is largely responsible for building this great country.
It was the noted author of "Waldon Pond", Henry Thoreau, who said: "There are some who march to a different drummer, and hear a different beat." Such a person was Powel Crosley, Jr.

The recession following WW2 was broken in 1921 by the automotive trades and by radio broadcasting. In soaring to success they proved helpful to other units, especially steel production and transportation; and the pickup in commerce and trade was a spur to lagging industrial activity.

On the occasion of the 40th anniversary of WLW in March of 1962 WLW celebrated by airing some of the old recordings. Let's tune in and relive those ol'-time shows.

"I'm Jack Qvyn, let's forget the present for the moment. The year is 1938, you have just switched on your radio, it's Saturday evening and 7-o'clock--WLW, THE NATION'S STATION and the high fidelity transmitter of The Crosley Corporation of Cincinnati, Ohio (voice of Del king)--seven slow bongs of the automatic time-chime----So why not travel on to Avalon, the lyrics said---Good Evening, Good Evening, this is Del King saying welcome to Avalon Time with Red Foley and the entire company, but first, tonight we bring you that fast comedian, and by fast, we mean his sponsor's haven't caught up with yet, Red Skelton."

That was the start of the actual broadcast in 1938 as Avalon Time with and up-and-coming comedian was originating from the Nation's Station. To check radio reception in those days, WLW engineers made such recordings at distant points from Cincinnati. "And so, tonight, through these and other recordings, we are going to hear some wonderfully nostalgic sounds of days gone by. The occasion is the 40th anniversary of WLW radio which we are celebrating today, March 22, 1962. And now we move in memory back through the years...music..."Through the years"...1922, 40-years ago, an eventful year...old record "The Flying Machine"...the lyrics said 'Come Josephine"...something to be identified with the songs, were those times...spectacular are the headlines reporting the flight of Lt. James Doolittle from Jacksonville, Florida, to San Diego, California, in 21 hours eighteen minutes...in ten hops...Abie's Irish Rose opened on Broadway and the reviewers say it will never get off the ground...a spindle-legged, paunchy youngman comes from Boston to join the New York Yankees: the name? Babe Ruth. Biggest movie hit of the year...'Blood and Sand' starring Rudolph Valentino...banjo music and fade for...but to those who love her best, the month of March of 1922 has a special place in our hearts, for in that month, in the City of Cincinnati, was born WLW, weighing exactly 50-watts...soft violin and fade for...Powel Crosley foresaw the tremendous market for radio. He had become interested in radio a year or so earlier. At that time radio was a novelty, and he called in the neighbors to hear the miracle of
sounds snatched from the air by a cat's whisker, a fragment of crystal, and a few turns of wire wrapped around an oatmeal box. But more and more people began listening to the few broadcasting stations then on the air."

It was Powel Crosley, Jr. who foresaw the tremendous market for receivers. As I had stated by the spring of 1922 he was turning out over 500 radios per day in his plant. The largest Radio manufacturing plant at that time. Supplementing the receiver experiments with research in broadcasting he finally received a government license for a 50-watt transmitter. And that fateful day in March of 1922 Mr. Crosley stood in a curtain-draped room, like a velvet tent, and speaking into a phonograph horn, a megaphone about eight-feet long and with an opening about three-feet wide, he said "This is WLW," and there followed a few minutes of piano music, songs by a tenor, some static, and an interruption as a train went by the building.

And over loudspeakers in the City's Fountain Square, people listened to the "Mayor" welcome this new thing called radio. The voice of WLW was crackling across the countryside with a range of about 50-miles. This was the start of untiring efforts by Mr. Crosley, and others, to make the benefits of radio available to more and more people in the rural sections of the midwest.

The official dedication program was on September 22, 1922, at the Crosley Radio Company's plant at Colerain Avenue and Alfred Street.

Shortly before that, on May 10th, 1922, the newspaper said: "Music by radio to be the subject of an address to be delivered by wireless by J. Herman Thuman, manager of the College of Music, at the radio broadcasting station of the Crosley Manufacturing Co., Northside, Thursday evening. Mr. Thuman known far and wide as an authority on music and also an ardent radio-fan, had promised to explain how these two forms of entertainment are working hand-in-hand, how one benefits the other, and of the interest musicians are taking in the broadcasting of musical programs."

Then on May 12th of 1922 it was Powel Crosley himself who said: "I've received a request from Secretary of the Republican National committee for information on broadcasting outfits and his opinions in regard to their use in political campaigns."

It was Miss Rose Boden who was born and raised in Clifton and whose father operated a downtown art store, who was the first singer on WLW. She sang three consecutive numbers on a program which lasted
The first studio-draped like a tent-carbon mike with a large megaphone on a wooden stand-1922

two hours all together. An audience of about 200 watched the first show, a 15-piece orchestra played for it and the many performers sat far back of the microphones except those who sang and they almost had to crawl inside the mike!

Miss Boden sang two Puccini numbers and Coote's "To Be Near You." The late William F. Wiley, a former Enquirer publisher, gave an address on the show, according to a newspaper advertisement.

Miss Boden was called among others from the two schools that now make up The University of Cincinnati's College Conservatory of Music to sing. She returned to Cincinnati in 1930, eight years later, and made an appearance, as a guest, on WLW and several more until about 1945.

In those years the emcee of WLW shows was Fred Smith. It was Miss Boden's father who put on the first Christmas seals campaign ever in Cincinnati. His sister was an operatic star in Paris-known as La France-and this led him to inspire his daughter into show business. Miss Boden isn't awed by the difference in radio in comparing her 1922 stint and nowadays. "It doesn't shock me," she said, "I just take everything for granted, you have to go along with the times."

Professionally, she sang with a Cincinnati Native Nellie McBreen as the Bernardi Sisters group, after that auspicious first radio program. Her favorite memories were dates at New York City's Capitol Theater and Jimmy Durante's "one-time-club."

On May 5th of 1922 the newspaper listed these programs for WLW. "The Aeolian concert company, Oscar Koelker singer, and the East High School Jazz Orchestra will provide the music for the WLW broadcast program tonight. The orchestra is composed of Earnest B. Daulton of the Conservatory of Music, George Mandeville, banjoist, Thomas Williams, Saxaphonist, and Gilbert Garvin, as saxaphonist."

Notice that WLW was only on the air a few hours a night. Several nights later, on May 9th, WLW said they will radiate the following program at 8 O'clock in the customary 360-meter band:

Time after Time....solo by Miss Ivy Buchtman
Souvenir...........Violin solo by Leo Weimer
Valse Op. 34 No.L...Violin solo by Leo Weimer
Powel Crosley, Jr. published a small booklet in 1923 called "The Simplicity of Radio" in which he said: "Radio is no longer the plaything of the child. The progress and improvement of radio equipment has been so marked. Through broadcasting, we may expect a new democracy of thought and the culmination of plans for a universal language. The magnitude of the radio audience is such that there can be spread ideas of culture and universal contact that will affect more people than have ever been reached by any agency with the possible exception of the printing press."

"Although theories about radio engineering depend upon scientific and technical laws, it is not necessary to attempt to master these to be able to receive broadcast concerts and news in your own home. It is through the efforts of radio engineers that modern apparatus has been made possible and so simple that it is little more difficult to operate a radio set than to play a phonograph record. Radio takes its name from the word "radiate" which means the giving off of energy in all directions, just as the spokes on a wagon wheel protrude from the hub to the rim."

"You are familiar with the electrical energy sent over the wires which supply current to light your home, and the electrical force used in radio is similar to that. The difference between sending electricity energy through a wire and into the air is that the path of the former is limited to its wired lines, while the latter is unlimited, radiating in all directions."

"Radio broadcasting in this country has reached a point far in advance of that in any other country, a condition brought about to a great extent by the broad and far-reaching policies adopted by our government. Our Navy was the first agency to grasp the tremendous importance of wireless communications, and then when the great wave of interest swept the country, our generous government set up no barriers of restrictions to dwarf this new art and new industry in its infancy."

"Three short years have seen a fairy like development in radio broadcasting. Beginning with sending out into the unknown, concerts of reproduced music from phonographs and player-pianos, the studio work has evolved into something very distinctive for it is now possible to arrange and produce performances of two and three hours duration that continue without a break. The large stations have for their theatre the entire continent, with occasional reaches to the other hemisphere. The better studios put on performances of brass
bands, orchestras, instrumental and vocal solos, readings, speeches and plays. The entire business of broadcasting is still in a state of development, with a constant process of elimination and eventually, one of the greatest factors in our general life. A microphone placed in any theater, church, or auditorium, and connected by telephone line to the broadcast apparatus enables anyone with a receiving set, tuned to the station, to hear the performance."

"But the real development of broadcasting will be evolved in the studio itself. Already the drama has been transformed into the radio-play, or "Radio-Play," and this in turn will form the nucleus of the bigger and more definite radio programs. Besides this, the utility of radio will constantly increase because of its quick transmission of news, its business and market reports, and its dissemination of education and culture."

WLW was BIG TIME. There were other large stations as time progressed but none produced so many "Live" radio dramas. Certainly WLW, and Cincinnati, must have been the home of soap operas.

Once upon a time the newspaper said: "Radio history has it that the Amos n' Andy show ran for better than 5,000 consecutive programs, without a miss. Cincinnati also began a series that was to run for 6000 before its demise. The 'father' of Soap-Opera was Bill Ramsey who was the director of radio for Proctor and Gamble. William Ramsey much preferred the name 'Daytime Serials' for his productions instead of Soap Opera. But the colloquial name won out and became as familiar to radio dialers as apple pie. These weekday tear-jerkers began with the selection of a cast in 1933. There were a grand total of 13 of these sudsy dramas going at one time. They swep the ratings with the first ten places in popularity."Charlton Wallace said in his column April 8, 1955 "Bill Ramsey is considered the individual most responsible for all this. The lachrymose and grateful housewives of America should erect a statue in honor of 'The Father Of Soap Operas.'"

When "Na Perkins" made 6,000 broadcasts without a miss in August of 1957 it was Greg Olberding, publicity director of WKRC-TV who wrote an excellent article on this program.

In the matter of the early radio plays, or Radio-Play, I think that WLW could qualify as the FIRST TO RECOGNIZE AND PRODUCE RADIO PLAYS.

It was Lawrence W. Lichty, now of WHA, Madison, Wisconsin, who wrote his Ohio State thesis on this subject who is the real authority of early WLW plays. WLW also published a weekly paper called CROSSLEY RADIO WEEKLY. It was Fred Smith who began to work for WLW in August, 1922. He listened to the radio
and got ideas for programs. He wrote WLW's owner, Powel Crosley, Jr. and after a two hour talk with Mr. Cosley in his office Fred Smith walked out as WLW's "station manager."

It was said that the first dramatic work written especially for radio was broadcast in England on January 15, 1924. The play was "A Comedy of Danger" by Richard Hughes. Mr. Hughes's claim to that distinction has apparently not been challenged before — but it should have been according to Mr. Lichty.

Fred Smith inaugurated a regular five-times-a-week daytime schedule including market reports, financial news, weather, and musical programs. WLW never played a phonograph record until about 1935 and even that was just brief interludes for sound effect purposes. Everything was live. Staff orchestras were available in the 30's and 40's and even up until the 1950's.

It was November 24, 1922, that WLW broadcast its first real dramatic program. The play was "Matinata" by Lawrence Langer and was presented by permission of Stewart and Kidd, the publishers.

The Crosley Radio Weekly said:

We realize the radio play can only be made effective if it is put over in such a way that it may be readily visualized by the radio listener. With this end in mind, we are, for the present, having some of the parts taken by those of the Crosley staff who are accustomed to talking over radio, and who can work in effects which would not occur to professional players.

The FIRST DRAMA WRITTEN ESPECIALLY FOR WLW

compiled by Lawrence Kichty

"On February 6, 1923, a play written by Mr. Froome and starring himself and his student Emil Lewis was broadcast from WLW. Another original drama written by a Cincinnatian, Belle McDiarmid Hitchley, was given in the same month. It is not known whether these plays were written especially for the radio and for presentation over WLW or whether they were merely adapted for WLW. Either might qualify as the first plays written especially for presentation on radio."

"In any case, on April 3, 1923, "When Love Wakens" (note the W-L-W), an original play written especially for WLW by station director Fred Smith, was broadcast."

It was in September of 1922 that Mr. Smith of WLW said:

...we began to think of plays for radio. But we were always of the opinion that the most effective production would be the one-act play, so far as we know there was no broadcasting
station sending out one-act plays at the time. During the fall we put on several with good effect. Since this was pioneer work we made discoveries as we went along. We did incidental music to give atmosphere in a place where part of the action took place at a dance...It then occurred to us that an artistic hour of entertainment would be the production of a foreign play with music of its own country surrounding.

The days when Crosley first began the operation of a radio station in his home in College Hill, radio program broadcasting was a decidedly embryonic stage. The year 1921 was still within the time when the marvel of any sound—be it noise or music—was breath-taking when heard through a set of headphones. To hear a station in the next town marked an epoch. To hear from the next state was to attain the pinnacle of heart’s desire for the first radio set owners.

LISTENER INTEREST

"To assist in popularizing of radio and to create a demand for wireless" was the avowed purpose of the first Crosley station, according to early files. At the time "letters received from hundreds of those who listened in proved that the station was heard many hundreds of miles away, in fact, as far as Maine, Texas, the Dakotas and far into Canada."

DEVELOPMENT OF WLW REVIEWED

When WLW increased its power to 50-watts and the Mayor of Cincinnati gave a speech over the radio the newspapers said "spectacular, marking the opening of the new Crosley radio station." It was written down as "A great day in Cincinnati radio history."

"By this time the call letters WLW had been adopted. The station was broadcasting on 360 meters, in common with half of the other stations in the country. The other half were using the 400-meter wave band. This chaotic condition, presaging the present radio turmoil by some years, (1928) continued for at least two years, for it was not until 1924 that WLW received a wave length of its own—or even partially its own."

To this writer’s knowledge I believe that WLW is the only true CLEAR CHANNEL STATION TO THIS DAY. (1976). Of the 26 or so 50,000 watt stations, all the rest have at least one domestic and several foreign stations on their frequency—WLW does not!

It was said: "Terrific heat was generated by the radio transmitting set which was in the same room with the entertainers."

"Engineers on the B & O Railroad, which ran by the windows of the first WLW studio, were interested in broadcasting. So interested, in fact, that they took delight in permitting the radio listeners to hear the whistle
and bells of the locomotive. Some of them even went so far as to insist that they could notify the division superintendent in this way that they were careful in the approach of street crossings.

The racket was often so uproarious that the concert would be inaudible. It was sometimes necessary for the station to "stand by" while the engineer "completed his selection."

Not much effort was expended in the preparation of programs. Most musicians were glad to have a chance at being on the radio. So glad, in fact, that many would volunteer to stand by in case someone was needed to keep the programs going. Piano and banjo players were common and the "piano interlude" was an everyday occurrence.

Vaudeville actors and performers couldn't fit into this picture as radio didn't have a visual audience so the antics and acrobatics were lost-being nonvisual.

The "newness" of radio appealed to many but there were those who would have nothing to do with this "toy."

It was said that listeners were as impatient as children and from the time the concert started until the "signing off" signal, the telephone rang continually with demands for certain selections. There were "kicks" too about the programs and even an occasional compliment from admiring friends.

Crosley himself did a lot of the announcing, but by this time he had hired Fred Smith, of an artistic frame of mind, to do this.

It was in September of 1922 that Crosley moved his radio manufacturing plant to new quarters at Colerain and Alfred Streets. With it went WLW, with an increase in power to 300 watts. The WLW studio impressively draped itself in "soft, red velvet" and was one of the show places in Cincinnati.

Writers of that day said "Quaint, almost describes some of the broadcasting traditions that governed those early days. For instance, the station 'stood by' for three minutes every fifteen minutes. Why? To listen for distress calls from ships! WLW was the first of the far-inland stations to explain to Washington the fact that its broadcasting would not interfere with naval wireless. There was also a 15-minute period of silence after each hour of the night programs. During this intermission the transmitter was allowed to rest and revive. And the announcer had time to get a breath. The station operated fifteen hours a week. Two hours of music and talks were broadcast on Tuesday, Thursday and Friday nights. There were short periods of piano and phonograph music during the day, and a half in early evening."
That second year, 1922, and the next year say the beginning of spectacular program broadcasting. On April 2, 1923, the first radio play, or radio play, was presented by a cast of players known as the UnkRIAN3. Besides every prominent musician in Cincinnati, the program register of WLW contained such names as Mable Garrison, soprano; Howard Thurston, the magician; Sidney Smith, cartoonist; Nicholas Longworth, speaker of the House; and Major Gen. John A. LeJeune, commandant of the United States Marine Corps.

Those days brought with them continual experimentation to discover the taste of the listening public, which was increasing with such rapidity. Speeches were popular and lessons in everything from "Ilo" the universal language, through French and Spanish, down to dancing, bridge, and "how to speak." The educational possibilities of radio were greater even than the entertainment value.

By then WLW was operating almost twenty-hours per week and on April 11, 1923 it was said "The Huge' festivities which celebrated the inaugural broadcast lasted for a little over two hours. It included Classical, popular, and jazz music, vocal, instrumental and orchestral selections, and messages from or addresses by the leading statesmen, business and professional men of the United States. Radio enthusiasts were sure that the pinnacle of broadcasting had been reached. There was talk that the 'fed' would lose its appeal, and some were saying 'too complicated and expensive' and it would outgrow itself."

Still WLW was broadcasting less than 20-hours a week. On two nights the programs were from 8 until 10 O'clock and on two from 10 to 12 O'clock.

Market reports, stock quotations, weather forecasts and police bulletins were the only daylight offerings. Even then it was considered that "next to running a grand opera, the running of a radio station is the best test of the mental stamina of human kind."

(The first Federal radio action, in the summer of 1924, gave WLW as "One of the most outstanding and powerful broadcasting stations," an exclusive wave length of 309 meters. Some of the radio chaos was done away with, at least for a time.

WLW began to agitate for increase in power for the most progressive stations, and Crosley, as a member of the Hoover Conference Committee, began with his station a propaganda campaign to permit the increase of power for his own stations and for others.

Early in 1925, WLW received its license to operate as a "super-power" station on 5,000 watts. The transmitter was moved to a high hill two miles from Harrison, Ohio, out of the densely populated districts, where it might cause interference. A two-story modern house was built for the transmitter.
and for the operating engineer and his family.

Preceding the increase in power, however, WLW celebrated another anniversary with the opening of its large studios and control room in the Crosley Factory. Another epochal radio program marked the inaugural broadcast from the new studios. The 500-watt transmitter was housed on the sixth floor and studios on the fifth floor.

A short-wave transmitter was put into operation in 1927, and this has helped to program to places in other countries beyond the Atlantic and Pacific oceans.

The birthday celebration in 1927 was marked by a thirty-six hour program in January of 1928 the celebrated included sixty-two hours of continuous broadcasting.

BUYS WSAI

On May 7th of 1928 Crosley announced his intention to purchase a 50,000-watt transmitter for station WLW. On the following day he announced, and affirmed the reports, that he would take over the operation of station WSAI, for five years owned by the U.S. Playing Card Company in Norwood, Ohio.

Within the next four days Crosley built in line with his three studios for WLW a fourth studio in the main plant. On May 12, at 10 p.m. with ceremonies broadcast by both stations, Crosley took over the control of WSAI for the Crosley Corporation and the Norwood home of that station was abandoned.

I think I should insert my own personal memories of the Norwood operation of WSAI at this point.

It was a privilege for me to get to know the builder of the early WSAI. Many a pleasant conversation was experienced by me as Paul A. Greene and I talked about the U.S. Playing Card WSAI.

In my book "NORWOOD SCRAPBOOK" I had written about those early years. As I am presently writing for those who may not share my memories, there may be some danger that we may not have a common background. Hopefully my apprehensions are unfounded.

I REMEMBER NORWOOD-It's Like Whispers of Everybody

by Joe Rice

All in all, I think I was born in a good age to live in, even with the depression and wars, for certainly no other generation has gone through so many drastic changes-all the way from the horse and buggy to computers and moon voyages.

My favorite subject is radio, and being born in the year 1916, I have first-hand knowledge of the beginnings of the medium that brings
whispers of everybody. But more on that later.

I was born in a section of Cincinnati called Evanston and I can recall my grandfather, Joseph M. Rice, marching at the head of the 4th of July parades on Montgomery Road, ending up at the Evanston ballpark. He was Cincinnati fire commissioner and one of the horse-drawn fire trucks was named "Joseph M. Rice" at old engine company No.29. A proud heritage.

SHANMOOR AND CANDLES

But back to Norwood, where we moved in 1923 to our home on Shanmoor Avenue. This was in South Norwood, and I did what every boy of that time loved—built things from Erector sets and if we were so fortunate to have an old pair of roller skates, we took one of them apart and nailed each set of two wheels to a board and made a scooter. Orange crates became the hood of an auto with wheels from a discarded wagon. Tin cans nailed to the front of the hood, with candles inside, became headlights. It's still fun for all boys I guess.

My early schooling was at Sharpsburg School and I remember the manual training teacher telling a group of us one day that talking pictures would soon be the rage. And sure enuf, about a month later, my Sunday School teacher took some of us downtown to see "King of Kings" and I'll never forget the first sound I ever heard from a movie screen—the 30 pieces of silver!

BIRTHING STATION WSAI

I was always fascinated by sound and it was in this era of "sound beginnings" that WSAI began in the U.S. Playing Card Plant on Beech Street. Previous to that time, the old phonograph had been my "popen sesame" to beauty and illusion.

We lived only about a half mile from it, but I really didn't know where the "Card Plant" was. I'd heard of the card plant because we got the time each day from the bell tower. That set of bells told all of Norwood when it was a quarter, half, three-quarters or full hour time.

But in those days I didn't know that on November of 1922, the U.S. Playing Card Company had bought a new Western Electric transmitter and they were planning on putting a radio station on the air.

And sure enough, they did—on June 7, 1923, from a small studio on the third floor, with a power of 500-watts and on a frequency, or wavelength as it was called then, of 309 meters. And I was there to hear it, just squares away.

FIRST PROGRAMS

WLW was then one-year old and both WSAI AND WLW shared the same frequency and both were licensed by the Commerce Department. They alternated
programs. WSAI was not prepared for continuous broadcasting, and sometimes it was several days between broadcasts. There was never a phonograph record played on WSAI nor was there ever a commercial with the exception, of course, that the Playing cards, bicycle and Congress, were mentioned over the air. WSAI had a network of 19 stations teaching "How to play bridge" on the air.

The first programs were aired at 5:05 p.m., on June 7th, 1923, with a piano solo by Dorothy Waldman, followed by an address by John Omwake, president of The U.S. Playing Card Company. There was also a violin solo by William Morgan Jones and an address by Mayor of Norwood, George P. Carrel. Homer Bernhardt, Florence Enneking, Katherine Reese, John Dodd, Mrs. Alice Gardner, Helen Nugent, Alice Kessing, Richard Pavey and Herbert Schwartz were the vocalists, and the later famous Grace Clauve Raines was the accompanist. The Hotel Gibson Orchestra filled out the rest of the program.

The next morning the newspapers gave the following account of the broadcast which was attended by 200 guests assembled in the recreation room where amplifying instruments made the music and speeches clearly audible:

The U.S. Printing Company inaugurated its radio broadcasting station in Norwood under unusually auspicious circumstances last night. Not only was a varied and interesting program prepared which was produced without a mishap, but the mechanical details of broadcasting functioned with a smoothness not always accompanying an opening performance.

HOMEMADE

Many people were building radios in those early days of the crystal set. We had one of those large punch bowls in our dining room which set on a round mirror. Around this bowl were cut-glass cups. We found that if we placed out earphones in this bowl, the whole family could hear our crystal set.

What a thrill that was to hear those sounds snatched from the air by a small piece of Galena for a detector, some green-covered wire wrapped around an oatmeal box for a coil. Things were never quite the same again.

Later on, my Dad bought an amplifier using "peanut" tubes which attached to the crystal set for louder sounds. Then came the regular speaker shaped like a morning-glory with a funnel shaped horn flaring out at the top. It sat on the table and the cloth-covered flexible wire ran to the connections formerly used by the earphones.
During that era the sports announcer came into being and one of the early sports broadcasts was the famous Dempsey-Tunney prize fight. Norwood's Mayor, Harry Baker, happened to stop in at Wiebold's Drugstore on the corner of Forest and Robertson, to hear a blow-by-blow account over the headphones set made by "Doc" Wiebold. There were always half-finished sets stacked on the drug counter.

And the personalities on WSAI! I remember a banjo player who gave the news by making it up in rhyme. He would sing the news to the accompaniment of his banjo. There was Wendell Hall, "The Redheaded Music Maker" who burst into "Yes, We have no Bananas" and Bob Burdett who had an exercise program. He was later to be on WLW along with Sid Ten Eyck as staff announcers. Both were good friends of Bradley Kincaid who received more letters on WLW than anyone. Sometimes as high as 50,000 letters per week! That's a letter per watt!

It was the custom in those days to have an exercise program and Bob Burdett would say "up-down, that's it you're doing fine" and the piano playing all the while in slow measured beats to the tempo of the voice.

Listeners often wrote in asking where to find "Sin Sin Naughty," That's the way WSAI's English announcer pronounced Cincinnati. He should have said Nahwood!

I could go on and on about those golden years-when W3AI built the 5,000 watt high powered transmitter station in Mason, Ohio and brought programming to out-lying districts.

If you were listening the night Vincent Lopez's snycopated band played, then you heard Deke Moffitt and his clarinet too. Those were the days.

The year of 1928 saw the demise of the U.S. Playing Card Phase of old WSAI. Powel Crosley had purchased it.

But those early days of Norwood and radio will never be forgotten. As a local boy, I reveled in its magic. Yes, it was like whispers of everybody.

That was the end of my article and I had forgotten to mention that John Omwake, President of the Card Plant had told Paul Greene, "I don't care what it cost, I want the finest radio station in the world." Paul said he had never had anyone tell him that before. He proceeded to build the finest. WSAI had lavish decor with beautiful oil paintings and tapestries on the wall. The furniture was built especially for the new studios. The transmitter was the first crystal controlled job and Paul built three studios. Two of the larger studios shared a common control room. This too was a first. There was a short wave station there also. It was Paul Green who conceived the idea to seek a more...
Paul Greene rigged up a receiving apparatus and made extensive tests to see exactly where he could receive radio stations the best.

The site selected was in Mason, Ohio. Exhaustive test were run and there was no doubt this was it.

Towers were built and Bell Laboratory engineers were called in to run some experiments. They determined that the ground was excellent, being marshy, and the terrain was level. For the first time that I know of the engineers recommended the use of copper wires run underneath the ground to increase the conductivity. A Fordson tractor was rigged up to stretch the heavy wire in shallow trenches dug for that purpose. The antenna still was patterned after the one used on the Playing Card Building in Norwood, being what is known as a horizontal. When WLW moved here several years later they built what I believe was the first vertical radiator.

It was said that the "Sister Stations", WLW and WSAI were to mould the staffs of two rival stations into one production staff. They were to maintain the individual identity of each.

For seven years, until this time, WLW and the Crosley name had been known in the broadcasting business. On May 12th, 1928, the ceremonies were broadcast by both stations.

Mr. Crosley said: "We realize that each of the two stations has an individual identity that endears it to vast numbers of its listeners. This identity we shall keep even though we operate both stations with an organization made up from the staff of both."

When WSAI was moved over to the main plant of the Crosley Radio Corp., where the studios and control room of WLW are located, the executive, musical, operating, and program planning staffs of the two stations were combined to form a single staff working for both. Under the direction of Ford Billings, who became the director of WLW on May 1, 1928, it was agreed that only the announcers are to be identified with a single station. As the new owner pointed out, "The listener often comes to locate a favorite station by the voice of an announcer."

Considered among the assets of WSAI which were taken over by
Crosley were the four K Safety Club with its two clowns and Ferdinand, and Grace Clauve Maine, musical directress of the station. Mrs. Maine was made director of vocal music for both the Crosley stations. The two clowns continue to entertain daily at 6:00 p.m., with their songs, stories, and talks on safety for children. They count among their members 160,000 children who have received Four K Safety Buttons because they know the five rules for safety. Ferdinand, whose bedtime stories are rivaling Hans Andersen in popularity, could not have his picture taken because "the lawnmower had just cut off his beautiful golden curls," the newspaper said.

**BIRTH OF 50,000 WATTS FOR WLW**

After the Mason, Ohio, site had proved itself as a feasible site for radio Crosley made plans to erect his new transmitter here. At this time WLW was still at Harrison, Ohio.

Ground was broken on June 25, 1928 for the building to house the new WLW. Fourteen weeks later the first test program was broadcast using 50,000 Watts. Not a hitch marred the performance of the giant broadcaster on its debut on the air and a record for the installation of radio equipment was set, both in speed and accuracy.

A month of testing, during which the station had been heard as W8XAL in every continent of the earth, had preceded its dedication.

The next important addition for WLW was in December of 1935 with the completion of its downtown auxiliary studios. It now had the largest studio facilities of any individual radio station in America. The new studios are located in the Union Central Life Insurance Building Annex at Third and Vine Streets.

These additional quarters, occupying 16,000 square feet and virtually doubling the station's available floor space, were made necessary by the rapid growth of station WLW during the period from 1930 to 1935. The production of larger broadcast shows, the substitution of more and more programs originating in its own studios for network programs made expansion necessary.

Five broadcasting studios, one of them occupying 4,000 square feet of floor space are provided in the new quarters, making a total of thirteen studios available for broadcasting and rehearsals. There were eight studios already in the WLW plant in the Crosley building. The new studios were to be used chiefly for programs requiring large instrumental and vocal groups, such as "Grand Opera," Music Box Hour," "Musical Style Show," "Follies," and "Unbroken Melodies."

In addition, the downtown studios house the sales, commercial, program, continuity and music departments. The office of business manager, together with the technical, educational, sound effects, publicity, and the Artists'
Bureau and the news room, will remain in the Crosley building.

It was said in the Enquirer: "The average listener has little conception of the immense amount of work required to produce the typical WLW broadcast he hears simply by turning a knob on his receiving set. That particular half-hour production may have required hours of planning by the program department, more long hours by the continuity and music departments in creating the script and musical score, and finally four to eight hours of rehearsal by the dramatic cast and orchestra. Then it is the work of a corps of highly trained engineers to bring the final production to the ear of the listener with an exact fidelity of tone and quality."

"It requires a staff of about 400 to maintain WLW—the world's most powerful broadcasting station—on its daily 19½-hour schedule. Headed by John L. Clark, gen. mgr. (1935), the personnel of the Nation's Station is the largest of any station in the country. Its music dept. under the direction of Edward J. Fitzgerald, includes sixty-five full-time musicians, forty-two vocalists, eighteen arrangers and copyists, ten conductors, a librarian and five assistants."

To emphasize the enormity of WLW's operation here are some more statistics: "The program department, headed by Don Becker (Covington, KY) assistant general mgr., includes a continuity staff of fourteen writers, nine production men, twenty-five actors and actresses, twelve announcers and five sound effect engineers, Joseph A. Chambers, is the technical supervisor, who has fifty-six skilled engineers in his department. The executive and commercial offices include thirty-five individuals."

In order to improve still further the quality of the station's programs, all persons doing creative work—such as writers, arrangers, conductors—are provided individual offices where they may work undisturbed. A spacious lounge is provided artists, musicians, and actors, where they may relax when not rehearsing or broadcasting.

Another feature of the new quarters is its delightfully appointed lounge studio, a cozy home-like room for such broadcasts as interviews, and talks, where the hazards of "mike fright" are reduced to a minimum. Private consultation and client audition rooms are also provided.

**WLW DAYTIME SCHEDULE FOR JULY 1955**

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<thead>
<tr>
<th>Time</th>
<th>Program</th>
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<tbody>
<tr>
<td>3:30</td>
<td>Pepper Young</td>
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<tr>
<td>3:45</td>
<td>Right To Happiness</td>
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<tr>
<td>4:00</td>
<td>Backstage Wife</td>
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<tr>
<td>4:15</td>
<td>Stella Dallas</td>
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<tr>
<td>4:30</td>
<td>Widder Brown</td>
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<tr>
<td>4:45</td>
<td>Woman in the house</td>
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<tr>
<td>5:00</td>
<td>Just Plain Bill</td>
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<tr>
<td>5:15</td>
<td>Lorenzo Jones</td>
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<tr>
<td>7:00</td>
<td>Lone Ranger</td>
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<tr>
<td>7:30</td>
<td>Morgan Beatty</td>
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</table>
On a Friday night you could listen to One Man's Family at 7:45 and stay tuned for Dinah Shore at 8:00 and then a wrap-up of the World's news at 10:00. Then everybody's favorite, Fibber And Molly at 10:30 then a series of half-hour programs from different night spots with the dance orchestras such as Coney Island and Buckeye Lake. At the stroke of midnight was Moon River followed by Music 'Till Dawn.

MOON RIVER

Moon River, a lazy stream of dreams,
Where vain desires forget themselves,
In the loveliness of sleep.
Moon River, enchanted white river,
Where nothing is but sleep.

In radio on the Cincinnati Scene of course was Peter Grant who came to WLW from St. Louis in 1932. WLW's "Conference Call" was one program in the early evening that was a must for me. The combining of the thoughts from three different cities, and three different environments, produced a well-rounded picture of the days' happenings. From Cincinnati Dayton, and Columbus, Ohio there was a telephone hook-up linking the 3 Crosley stations together...remember Walt Phillips, and how quick of wit was he...someone would start a sentence, and he would finish it-even quicker than the original person could have?...Peter Grant had some difficulties because his voice was a sound-alike for President Roosevelt...once he deliberately imitated Roosevelt's voice and one of the networks had a time extricating themselves from this predicament...Don Ameche, and the First Nighter Show..."The curtain falls on our Little Theater on Times Square."...I suppose to most people there always was a WLW, one of those things like an American Flag and ice cream. Would-be announcers would talk to themselves as they walked down the street "This is WLW-The Nation's Station, Cincinnati, Ohio, hoping someday to say that over WIN mikes. In the midwest area of the U.S., everybody knew about Cincinnati from WLW. No matter where you were in the United States you would find yourself tuning in to WLW.

PROGRAMS FOR JANUARY 2, 1939

5:45 a.m. ... Top Of The Morning
6:45 " ...... News
7:00 " ...... Family Prayer
7:15 " ...... Natches Arizona Boys
7:30 " ...... Ren From Valley
7:45 " ...... Checkerboard time
8:00 " ...... Time To Shine
8:15 " ...... Peter Grant
8:30 " ...... Gospel Singers
9:00 " ...... Paul Allison
9:15 " ...... Myrt and Marge
9:30 " ...... Hilltop House
9:45 " ...... Linda's First Love
10:00 " ...... Headline Highlights
10:30 " ...... Heart of Julia Blake
10:45 " ...... The Goldbergs
11:15 " ...... Vic and Sade

The Moon River program began in October of 1930 and the first voice was that of Arthur Ainsworth with poems and soft music which became known as a period of smooth, restful melody and verse, that over the years was to lull countless millions to the land of sleep.
Fred Smith, who was WLW's chief announcer and director from 1922 turned to writing in 1970 and published a book "The Growth and Decline of the New Deal." He had ghost written for Senator Capehart and left Cincinnati for New York to write for the "March Of Time" series for Time, Inc. He also wrote and produced the first play, it was said, ever produced especially for Radio: "The Step On The Stair."

In 1933 Lowell Thomas would be heard at 6:45 p.m. followed by Amos 'N Andy at 7:00 p.m. Lum And Abner at 7:30 and then the Enos Crime Club at 8:00 p.m. One of WLW's largest productions in a musical/variety type show was the "Crosley Follies" starring Sid Ten Eyck and his fictitious Grandfather, Tar-Baby Ten Eyck. He was reputed to be the world's first aviator, but he had a drinking problem. Actually, it wasn't the drinking so much, it was the nasty habit of throwing the empties over the side as he was flying over cities that got him into trouble!

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<tr>
<th>Time</th>
<th>Program</th>
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<tbody>
<tr>
<td>6:00</td>
<td>Tone Poems</td>
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<tr>
<td>6:15</td>
<td>Rene' &amp; Violin</td>
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<td>6:30</td>
<td>Concert Band</td>
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<td>7:00</td>
<td>Shadow Review</td>
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<td>8:00</td>
<td>Opera Guild</td>
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<tr>
<td>9:00</td>
<td>Silken Strings</td>
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<td>9:30</td>
<td>Walter Winchell</td>
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<tr>
<td>9:45</td>
<td>Unbroken Melodies</td>
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<td>10:00</td>
<td>Hall Of Fame</td>
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<td>10:30</td>
<td>Frank Black Ork</td>
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<td>11:00</td>
<td>News Flashes NBC</td>
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<td>11:05</td>
<td>Tea Leaves &amp; Jade</td>
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<tr>
<td>11:30</td>
<td>Byron Dunbar Ork</td>
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<td>12:30</td>
<td>Mills Band</td>
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<td>1:00</td>
<td>Markas Carrioca Ork</td>
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<tr>
<td>1:30</td>
<td>Moon River</td>
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Indirectly this caused the studios of WLW to be moved from the Arlington Street location. I say indirectly because Powel, Crosley obtained a large order from the Government for proximity fuses. These were devices which would detonate when they came near certain objects such as a vehicle or building. As these were considered classified and restricted information it was felt that the Crosley Plant should be guarded. This meant that the general public would be inconvenienced when they wished to visit the studios.

The Elks hall was completely rebuilt inside so as to accommodate WLW's operations.
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A great deal of Crosley's success was due in part to his ability to have the most capable personnel. Crosley chose the highest calibre of engineers. Joe Chambers was among his first and later Jim Rockwell and Mr. Clyde Haehnle.

The ninth street studios were ready for WLW in 1922 and at that time there were nearly 400 employees including a talent staff of nearly 100.

Crosley experimented with "remote" broadcasting in the Cincinnati area and as early as June 1923, when the first multiple hookup of stations for broadcasting was successfully tried by WEAF, New York, WGY, Schenectady, KDKA, Pittsburgh, and KWW, Chicago, a nationwide network of stations was being promoted. But it was not until the National Broadcasting Company was organized, November 1, 1926, with WEAF and WJZ as key stations, that this plan was put into practice.

In 1938 the NBC operated two basic networks, Red and Blue, linking together more than two hundred stations. In Cincinnati WLW, WSAI, and WCKY broadcast NBC programs.

A few months after receiving an experimental license to use 500,000 watts of power, WLW executives in 1934 decided to make the station one of the key outlets for a new chain, the Mutual Broadcasting System. Four stations, WLW, Cincinnati, WOR, Newark (New Jersey), WGN, Chicago, and WXYZ, Detroit, comprised the original group. MBS became affiliated with 107 stations and WLW and WSAI carried their programs.

WLW aired "Secretary Hawkins" stories in 1927. These were written by Roberts Schulikers who also narrated the show. These were later put in a book form and I think every boy in the Cincinnati area read them. For comedy WLW had Gene and Glenn who were popular in the 20's with their show "Gene & Glenn" with Gene playing the part of Jake and Lena. There was a silver masked tenor named Joe White and I wonder if anyone remembers hearing W.K. "Old Man" Henderson, a folksy commentator of station KWWK, Shreveport, Louisiana? He began his show with the remark "Doggone your buttons, don't go away." At WLW there was William Stoess (pronounced Stace) who directed the WLW orchestra for Jane Froman when she began on WLW in 1926. How many remember Fred Smith, the announcer, when he signed off WLW with "Goodnight?"

At Mason, Ohio is a Wireless Museum and the curator was Jack Gray. Jack passed away on August 1 of 1970 and Jim Weaver, who writes a weekly column in the Enquirer had this to say about him. "Death has silenced the telegraph key and transmitter of Amateur Radio Station W8JDV, Mason, Ohio. George J. Gray died of cancer Saturday, August 1, 1970 at Christ Hospital. He was one of the most renowned "hams" in the tri-state area. Jack was born
in Middletown, Ohio, in 1900. He became interested in wireless at the age of 12 and at 17 he became interested in becoming a Maritime wireless operator. He got a job with the Marconi Wireless Company. During the first World War he served as a Navy Radioman and after the war worked in the old Crosley Radio Factory in Cincinnati. He was engineer for WLW radio and supervisor of the "Voice of America" station at Bethany, (near Mason, Ohio).

"Fascinated by early radio, Jack began collecting wireless memorabilia years ago. A garage full of items accumulated and later on he compiled a book entitled "Bits of Wireless." Jack was an outstanding gentleman. He will long be remembered by his fellow workers and radio amateur friends."

A newspaper article said recently "WLW became known as the "Cradle of Stars," and for good reason. Hundreds of persons made their start over the mikes of WLW. Most of the greats of show business, vaudeville, theater, and the arts, have made their appearances over WLW. Remember Millie and Bill McClusky? Red Foley came to WLW to air the Renfro Valley Barn Dance. Millie was the sister of the late Dolly Good and together they were known as "The Girls of The Golden West."

"There may be those who recall Arthur Chandler, Jr. at the giant organ of WLW with his raccoon coat. He played the organ from 1928 to as late as 1950 and it was he who played for Moon River. Newscaster Lou Dothat was on the air in the 40's and names like Sid Cornell, who wrote the script for "Crosley Follies" in the early 30's and whom later I met at WKRC. He also wrote the "Kenrad Mysteries" in these same years."
The article continued: "How about the names of Judy Perkins? Anita Auch? Well, Judy was the singer on many WLW shows, and Anita, if memory serves me right, ran a cooking school over the air. Jack Norwine the announcer and "Everybody's Farm" with Carrol McConahan and Elsie Sule was Secretary to Ruth Lyons."

When asked about his early experiences on WLW, Powel Crosley said: "When an amateur soprano was too awful to inflict on the listeners, we simply cut her off the air, and she was none the wiser."

On the occasion of the 25th anniversary of WLW in 1947 Mr. Crosley was both reminiscent about the past and prophetic about the future: "I must confess that I had no thought when we broadcast that first program that radio would grow into the great servant of the people, a medium of entertainment, education, and amusement. For at the time I was primarily interested in building radio sets. In so doing I felt it my duty to provide some of the entertainment and programs without which the receivers could not function."

"So I regarded a broadcasting station as a necessary adjunct to our business of making receivers. But soon, the broadcasting phase of the business became so fascinating to me that I devoted more and more time and energy to it. As time went on, commercial programs made their appearance and with the revenue from this source, radio stations everywhere were able to provide listeners with more entertainment. In like fashion, such revenues made it possible for us to advance technically and to develop a higher power that brought our programs to more remote rural regions. Now just as the Crosley Broadcasting Corporation has led in the advance in every field of radio transmission, to date, so will it lead in bringing you the advantages of television. One of the great scientific achievements you may look forward to in the near future."

In 1939, though, Mr. Crosley wasn't a believer in television. He said: "I don't see how stations would be able to pay the immense cost of producing programs."

WLW was ready for television in 1939. But the first attempts at TV in New York didn't go over, so Mr. Crosley waited. But he had carried on experiments from the Carew Tower at this time.

When World War II came along and TV development stopped. After the War Mr. Crosley sold WLW to AVCO, which carried the station into TV. Mr. Crosley said at this time "I didn't realize that sponsors would be willing to pay as much money for programs as they pay now."

Actually the depression in 1929 following the stock market crash was a boon to radio. People didn't have money to spend for most other entertainment,
and radio was there for the listening. At the Nation's Station they hired a husky-voiced performer who was to become a national radio idol—Little Jack Little..."You took the Moonlight out of the sky..." and also contributing greatly to the fine musical programming of the early days was the late, great, musician, and composer, William Stoess and another personality of those days, pianist, composer, musical director, and who was destined to conduct for many of today's TV performers, Bert Farber...piano and fade for...In 1929 WLW's really big show, which went on the air over a network of eight independent stations, an hour and one-half show, sponsored by Granite Hosiery, and featuring two announcers, a twenty-piece brass band, a thirty-piece orchestra, a choir of around 15 voices and a country and western group too...And so from the 20's WLW moved into the "Fabulous 30's," the golden age of radio...music "Take Good Care of Yourself"...fade for: "During the 30's WLW was a great radio voice in America and outstanding in program quality and public service, and in broadcast power. In 1934 WLW was a great radio station and Crosley engineers accomplished the seemingly impossible, they built from the ground up, literally, a 500,000-watt transmitter with 31-tubes costing $1,000 each, and a tower at Mason, Ohio, soaring 831-feet in the air.

WLW began broadcasting on New Years Eve of 1934, continuing full-time broadcasting with this high-power until 1939 with test programs from midnight 'till 6 a.m. as an experiment. Truly this was the Nation's Station. The 30's also marked another highlight in the history of WLW with the arrival of James D. Shouse and Robert E. Dunville. With their guidance WLW was to become the focal point of many new, and outstanding contributions to the radio industry, and an increasingly dynamic and constructive force in American Broadcasting.

Another person rose to the heights of success in the WLW family. He was John Murphy who became president of the entire WLW operations in later years. He began his show business career as a page-boy at NBC.

The list of fine programs on WLW would cover a book three times this size. I am trying to emphasize the personal life of Powel Crosley, Jr., rather than the business history of station WLW, but the two are so closely entwined it is difficult to separate them.

In 1944 Doris Day joined the WLW staff. In 1945 two shy girls from Maysville, Kentucky, got an audition on their first broadcasting
experience...The Clooney Sisters...Rosemary and Betty. In 1942 marked the arrival of a talented, creative personality, who was destined to become the Nation's Stations greatest star. Ruth Lyons was not only to attain immense popularity, but she was also able to accomplish through that personality and popularity, great public service. Her first programs over WLW included: Morning Matinee, Pettycoat Party Line, and then Ruth Lyons became the hostess on a new program which soared on the rating charts. This was the 50-50 club, so called at first because 50 women were admitted to the studio for each show. Later expanded by an additional 50 women to become the famous 50-50 show. In 1951 the Ruth Lyons 50-50 club went to television.

Television, first just a cloud on the horizon of radio in the 40's and now in 1962 a real storm that was to have far-reaching effects on the old medium. In 1962 WLW said on their 40th birthday "When television became commercially successful around the country in the early 60's, radio staggered under the impact, sponsors deserted radio in droves. Radio's days of the big productions were over, and there were some who thought that it would soon be dead. Those were dark days, but, then radio began changing its form and course. Gradually things started picking up. The Crosley management attacked the problem by expanding public service, improving broadcast quality, and improving programming. 1954 marked the installation of a complete weather station by both WLW radio, and WLW-TV. This was the first such service for any weather unit. In 1962 it employed three persons. In 1955 a RADAR weather unit was installed and this scans a circle 300-miles from Cincinnati."

In 1957 the personnel of the weather station moved into a new communications exchange building, called "COMEX," at 9th and Elm Streets across the street from Crosley Square. This was designed especially for fast transmission of weather and news service. Programming was revised with emphasis on melodic music and interesting and informative talks. Once again there was another engineering first with the design and construction of equipment for unequalled high-fidelity sound transmission on WLW. Thanks to the engineer, Jim Rockwell, WLW became the "Highest Fidelity" station, and today WLW follows its responsibility of a clear channel station serving a wide area.

WLW spoke for itself "We look ahead, and we fondly look back too. For 4-decades WLW has graduated hundreds of skilled performers, and technicians, Derward Kirby, Ed Byron, Jay Johnson, Lynn Clark, Bill Nimmo, Myron Hertz, Dick Noel, Jack Fulton, The King's Jesters, Homer and Jethro, Norman Corwin, Rod Serling, Frank Lovejoy, Andy Williams, Lucille Norma, and
the lists of graduates goes on and on. So it can be said the Cradle of Stars is still rocking!"


Mr. James Shouse, chairman of the board, said in 1962 "Those of us who have worked for many years at WLW and those of us who have worked here only a short time continue, we hope, to carry out as best we know how the original concept of which WLW began its operations 40-years ago. A means of providing a sound balance on entertainment, information, and education. We continue to recognize that WLW's license to use the clear channel frequency of 700 kilocycles represents the collective rights of many thousands of people to own and operate their own broadcast station. The late Powel Crosley, Jr., and his brother, Lewis, never deviated from a very fundamental premise, namely, that there was an obligation on the part of the clear channel stations to deliver the clearest possible signal to the greatest number of listeners."

"Earlier you have heard of WLW's pioneering efforts in this field. We do not doubt that if WLW had not shown the way through higher power for broadcast stations to deliver clearer reception to more people, someone else would have done so. The fact is;WLW DID IT, and not someone else. It may be of interest to know that the FCC is now reconsidering the present power limitation of 50,000-watts in 1962."

"On behalf of Robert Dunville the President of the Crosley broadcasting Corporation(1962) and me, I would like to assure you that while we realize that there may well have been many mistakes in our management they have been very honest mistakes. Neither under the late Powel Crosley's ownership, nor as we now operate as a subsidiary of the AVCO Corporation, has there ever been any overt attempt to dissuade WLW from its proper course as a responsible and legitimate servant of the listeners."

In February of 1961 the organization of Broadcast Pioneers honored WLW with its' first "Mike Award." As stated on the award: "For distinguished contributions to the art of broadcasting, and in
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recognition of the pioneering developments, and advancement of the careers of performing artist."

The mike award, a gold-plated ribbon microphone which was one actually used back in the good old days, occupies a prominent place on the WLW mantle. Mr. Shouse said:"On this, our 40th anniversary, and as we begin our 41st year of broadcasting, we pledge continued effort to bring you good radio programs of the quality that has distinguished WLW Radio down through the years."

THIS IS WLW-THE NATION'S STATION-CINCINNATI, OHIO

HISTORIC NOTES:

On April 2, 1953, the government announced that the two Voice Of America transmitters were no longer to be used. James D. Shouse became president in 1946 and the newspapers said on November 15th of 1946"Only 1% of Cincinnati radio listeners had FM receivers."

WLW planned on installing an FM transmitter and Wilford Guenther, who was to be technical supervisor, said WLWA(FM) will program from 2 p.m. until 5:30 p.m. Monday through Saturdays and from 5:30 to 11:30 daily and Sundays.

WLWA's first sponsor was Scott Radio Company. The programs were to feature good music and news. "Won't stand for any hysterical shouting of the news." The radio tower will be atop the Carew Tower with a 30-mile reception range. Estimated 1000 to 2500 receivers in this area in 1953.

Earl Neal, who managed the WLW model farm called "Everybody's Farm" since 1937, died June 8, 1959. There were 137 acres on this farm. Also in the news was the fact that Powel Crosley had applied for a television license as early as July, 1931.

In 1970 we find Mr. John Murphy at the head of WLW operations in Cincinnati.

[In 1947 it was said "On November 11th of 1947 a television and FM tower was constructed on Mount Olympus at Warner and Chickasaw streets in Clifton." Then on November 24th of 1947 it stated:"The new tower will be 65-feet square at the base, and will shoot skyward to 571-feet. The Carew Tower is 575-feet tall but the additional height afforded by the Clifton site will put the WLW-TV tower 300-feet above the Carew Tower. Studios for both TV and FM will be built here also at a cost of $700,000 and will cost approximately $6,000 to $7,000 per month to operate." ]

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EXPERIMENTAL STATION

With WLW established by 1924, and with plans going forward to build even a larger transmitter, Crosley, in 1926, made an important addition to his broadcasting activity. It was the establishment of a short-wave station known as W8XAL, renamed WLWO when the Federal Communication Commission changed call letters on many of the international transmitters and gave permission for commercial broadcasting.

In 1940, pending switch over to a commercial basis, WLWO was operated experimentally. The first license, in 1926, provided for power of 100 watts, which was increased to 250 watts in 1927 and then to 10,000 watts in 1931.

Plans were underway in 1940 increasing the power once again to 50,000 watts. Engineers are perfecting a special transmitter which will enable the international station to operate on not one or two, but six frequencies, adapted to weather and solar conditions and enabling the beam to reach any given country at any given time. Plans are to send the programs to South America by means of directional antenna shaped like a diamond. This is called a Rhombic antenna.

Although operating on 50,000 watts, the transmitter will produce the effect of 600,000 watts by means of the rhombic antenna which concentrates the beams at a small angle and shoots them in a given direction, just as a reflector increases the brightness of an electric light in a particular direction. The station is regarded as an important factor in the "good-will" relations between the Americas.

In 1927 WLW marked up a red-letter day when it was granted a cleared channel on 700 kilocycles and another a year later when the then Federal Radio Commission increased its power to 50,000 watts. Five months after this permission was received, WLW's new Mason transmitter was put into operation on October 4, 1928. (my birthday!)

Also, in 1928, Crosley acquired control of WSAI, now known as "Cincinnati's Own Station," founded in 1923 by the U.S. Playing Card Company.

Until 1933, when it was granted permission to use a daylight strength of 2,500 watts, WSAI had been a low-power station. Its strength in the Cincinnati area was increased in 1936 when the transmitter was removed from Mason, Ohio, to the suburb of Clifton Heights, where a high-fidelity transmitter was installed at Warner and Roh Streets. In 1937 its signal strength was upped to 5,000 watts daytime and 1,000 watts nighttime and it was classified as a regional outlet.
In 1939 WSAI was granted permission to increase its nighttime power from 1,000 to 5,000 watts. A three-tower directional system was worked out by Crosley engineers located near Mt. Healthy. Each tower is 350 feet in height.

In 1934 WLW engineers accomplished what until that time had been considered an engineering improbability, if not an impossibility, by building a transmitter that could send out a power of 500,000 watts.

The most spectacular part is an antenna tower at Mason soaring 831 feet into the air, topping the Washington Monument by 273 feet. The 500,000 watt transmitter was operated from 12 midnight to 1 a.m. nightly under the experimental call letters W8XO.

The Crosley facsimile station, W8XU, became an actuality in January, 1939, when it went on the air with a power of 1,000 watts at a frequency of 25,025 kilocycles.

In the same year, 1939, a ultra-high frequency station, W8XNU, began operation and was heard on a full-time basis at 25,950 kilocycles. Designed for local reception, it also has a power of 1,000 watts.

I feel that I, as an engineer, should insert my thoughts on this business of "The World's most powerful radio station." In the first place I believe the statement needs to be clarified. It is true that WLW was the highest powered American broadcast station. It is not true to say it was the highest in the world. Mexico had many high power broadcast stations. The U.S. Navy used high power since the earliest days of radio. The largest I know of is NPG at Big Jim Creek in the State of Washington. It runs over 1,000,000 watts of power with an antenna stretched across a valley almost 3,000 feet long. It is in the lower frequency portion of the radio spectrum around 15 kilocycles. It can be heard on the water, under the water, and over the water. Shipboard radio operators, particularly the U.S. Navy monitor this in all parts of the world.

But WLW qualifies as the highest power Broadcast station. The key to that last sentence is the word "broadcast." This implies programming of entertainment etc., not just morse telegraphy.

I think it best at this point to describe some of the physical features of the broadcasting plant at Mason, Ohio.

At the time Crosley was experimenting and building his far-flung operations with the new-found media of radio there were few who could grasp the full implication of what broadcasting could become. In a general sense a Newspaper wanted radio to supplement their printed matter. The AT&T, with its telephone wire facilities wanted small stations which it could link together. Crosley, on the other hand favored giant, high powered stations.
Like a giant steel spire, the WLW Vertical Radiator Antenna pokes its nose 831 feet in the sky and is visible for miles around the vicinity of Mason, Ohio. Because of its peculiar shape (diamond) this antenna represents a phenomenal engineering feat.

It is 35-feet wide at the center and only 30-inches in diameter at the base with the diameter at the base of the insulator bearing surface only 6½-inches. This extremely small base rests on a seemingly fragile bit of cup-shaped porcelain, one and one-half inches in thickness.

The foundation of this hollow porcelain base is 70-feet beneath the ground and it supports a total stress load of 450 tons, including 135 tons of structural steel. Eight two-inch cables—totalling more than a mile in length—hold the tower in position.

This vertical radiator antenna is a distinct departure from the traditional type of radio antenna consisting of copper wires stretched parallel between two fairly high towers. With the old type of antenna a large part of the electrical energy released flows directly upward and is lost in space. This results in greatly weakened signal strength.

Such inefficiency is largely eliminated by the new WLW vertical Radiator Antenna because to a large extent the broadcast waves radiate parallel to the earth's surface. Those flowing upward do so at a much lower angle than from the old type antenna and are reflected back to the earth's surface by the ionized stratosphere at the outer edge blanketing the earth.

Although this antenna has been specifically designed for use with the 500,000 watt station, it has been in use for some time with the WLW 50,000 watt transmitter.

The actual height of the metal structure is 708-feet and is augmented by a steel pole rising from the top center making the total height 831 feet. This was a radical departure in tuning an antenna. This is known as a Marconi type and in its usual form it is only one-quarter wave in height. This approaches a height of one-half wavelength. Another departure from the norm was in tuning the apparatus from the top pole-raising and lowering—to achieve a resonance conditions instead of a "base-loading" coil which waste power.
House on right side was WSAI. Tower on left was used during WW2 as a guard tower. Giant open water supply in foreground and present home of WLW facilities in center.

The Mason, Ohio, facilities included a complete woodworking plant, metal working machinery, various electronics laboratories, and everything necessary to carry out Radio Broadcasting.

The high-powered vacuum tubes required many thousands of water per minute to cool them.

WSAI had originally moved here to get out of a serious interference problem which existed in Clifton Heights. When WLW went to the high-power operations it was not unusual for the homes to be lighted up by stray RF energy existing in the near vicinity of the transmitter. Wherever two pieces of metal touched each other, such as metal gutters, stove and furnace doors, this caused what was known as "self-rectification" and WLW programs would heard without a radio!

THE "HIGH-POWERED" SITUATION

Mr. Crosley, always thinking about more power, next went for 50,000 watts and got it. He had said earlier:

In the early 30's I went for 500,000 watts, and we got it. WLW was the first and only station ever to have 500,000 watts.

We broadcasted under that much power for about a year. Then the license was withdrawn and the government set a top power limit of 50,000 watts.

I think politics had a lot to do with it. Our powerful 500,000-watt station could be heard as far away as Texas and small stations complained that people would listen to us and ignore them.

Crosley believed that someone with political influence got to President Roosevelt and that ended the 500,000-watt experiment.

Conflicting stories survive about the demise of the super-power job. One has it that one of the local owners of a radio station called attention to WLW with commercial programs when Crosley only had an experimental license. This license was to be used only for technical experiments—not programming.
As I am the first person to endeavor to tell the whole Crosley Story and after a lifetime of collecting bits of information, I believe I can come up with a coherent writing.

According to my view Crosley was a leader in the radio field. So much so, that he became president several times for the industry. He was present in Washington, D.C. when Herbert Hoover, then in the Commerce department, was formulating the laws which were to become the instrument of the newly created Federal Radio Commission (FRC). Crosley was included in a picture taken on the lawn in front of the White House in 1927 when Calvin Coolidge was President.

We all owe a dept of gratitude to Herbert Hoover for bringing order out of utter chaos. His ideas and philosophy are extant in the FCC today. As a matter of fact both Calvin Coolidge and Herbert Hoover were republicans.

The "high-power" thinking of Powel Crosley was given further impetus when an epochal paper appeared in the July, 1930, Proceedings of the Institute of Radio Engineers (IRE) entitled "Service Area of Broadcast Stations," written by P.P. Eckersley of England. He was former Chief Engineer of the British Broadcasting Corporation. I will explain his thoughts in a moment.

This paper came to the attention of Crosley when it appeared in the April issue of RADIO NEWS for 1931. With the Presidential elections only a few months away things were in a standstill as far as monumental decisions, or for that matter, anything that had to do with policies.

In 1927 S.W. Edwards, the Radio Inspector at Detroit, Michigan, completed a series of measurements on coverage of broadcasting stations. His results were publish seemed revolutionary to listeners accustomed to nothing better than doubtful night-time service. It was Herbert Hoover, President, in the year 1928 who defined the "True" service area of a given station. Most of Crosley's license applications were applied for in a republican administration. Such was the "high power" case. It is significant he lost them under the Democratic administration of Franklin Roosevelt.

When Crosley was seeking a license for continued use of the 500,000-watts he was dealing with a new regime. In 1937 he hired the Chief Press agent of the New Deal, Charles Michelson. Mr. Michelson accepted the radio position as a consultant for Crosley but retained his $25,000-a-year post with the Democratic National...
Committee.

The newspaper stated in 1937 "The Crosley Corp. has been under fire on various fronts for several years. Commissioner George Henry Payne of the FCC accused the firm of giving subsidiary companies lower rates than it charged other buyers of time. Crosley denied this."

Representative McFarlane (D., Tex.) suggested in a recent House speech that the company was able to obtain the 500,000-watt permit because it "has a better knowledge of how to secure concessions than some competitors or because it is not tied directly to one of the two dominant radio monopolies."

Mr. McFarlane said "I understand that the price of radio advertising was immediately raised some 50 per cent and that the company has continued to collect handsome profits on the basis of experimentation for 39 months."

Crosley did get an extension for six more months though. Politics quite naturally become involved in all undertakings and the larger and more viable a company becomes the more vulnerable it is to attacks from opposing forces.

In other protest made to the FCC it was said that WLW showed partiality to Governor Landon in the 1936 campaign. It is significant, at least to me, that Charles Michelson, chief press agent for the New Deal wrote withering attacks on the Hoover administration and his deft political strategy contributed to the defeats of President Hoover in 1932 and Governor Landon in 1936.

The high-power idea would have changed the whole concept of radio broadcasting as we know it. In general terms it would have created a ten-station monopoly with stations spaced geographically so that the continent would have radio coverage. The stations were to be synchronized as to frequency and all would transmit the same programming at the same instant. This is in opposition to the diversity of stations we have today, each covering its' own segment of society. Although the proposed system was feasible technically, it was not in the best interest, I think, of the national policy for diversity of culture, ideas, nor taste.

How much better the radio coverage might have been is open to conjecture.

One thing is certain, and that is, Powel Crosley again was first. There is no doubt that Powel Crosley was a giant and he truly was a titan.

A TITAN PASSES (Cincinnati Enquirer Mar 29 1961)

Powel Crosley, Jr. was much more than a man of immense and varied achievement. He was the embodiment of several great institutions.

He is part of the history of America and a very important part of the history of Cincinnati. The "story" of Powel Crosley, Jr. has been told in many places—magazines, newspapers, on the radio, yet there is no single story behind the life of this warm, intelligent, self-effacing and extremely competent man. He achieved a series of successes...he endured more than his share of tragedies...he was a thoroughgoing sportsman, a real humanitarian and a man of steadfast loyalty to his community.