

HUGO GERNSBACK -- BROADCAST PIONEER

INVENTOR, AUTHOR, PUBLISHER

by Myron B. Shaw

Hugo Gernsback has been credited with coining the word "television," heralded as the "father" of modern science fiction with the statuettes awarded its top writers named "Hugos" in his honor, and acclaimed as the inventor of radar. His inventions also include the "Radiotrolia," which was the first radio console with a loop aerial, the "Staccotone," a radio piano, and the "Osophone," a bone-conduction hearing aid which unfortunately aided only those willing to walk around with a microphone in one hand and a hard rubber mouthpiece between their teeth.

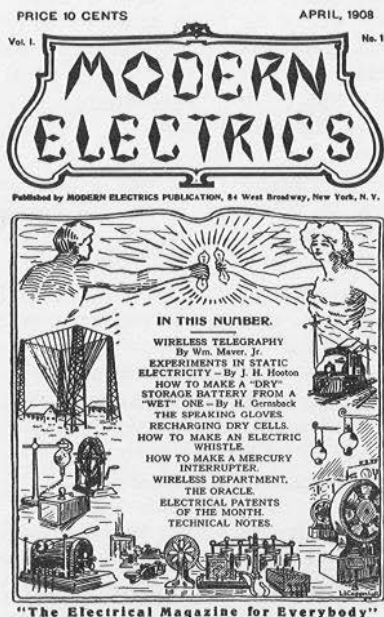
This is but a glimpse of the breadth and depth of Hugo Gernsback. To do justice at all to this creative genius, it is necessary to narrow appreciably our field of view and length of focus. Even so, one is hardpressed to more than penetrate the surface of this remarkable person.

At his death in August, 1967, at the age of 83, Gernsback held eighty scientific patents. He was editor-in-chief of the monthly magazine Radio-Electronics, and Chairman of the Board of Gernsback Publications, Inc. Since 1908, he had initiated the publication of more than fifty periodicals, ranging from humor through economics, photography, aviation, and crime detection.

In 1908, Gernsback published his first book, The Wireless Telephone, a combination of progress report and hopeful prediction. Radio Electronics described it as an attempt to speed the development of the art.

Three years later, in 1911, Gernsback wrote what is considered to be his most important work, Ralph 124C 41plus. This science fiction novel predicted rather accurately the progress of science and invention for the next half century and beyond. The novel was serialized in Modern Electrics in 1911. It contains a description and illustration of radar that could be used to teach radar today. The imaginary equipment was actually used to locate a space vessel.

Ralph 124C 41plus also mentions two-way television, germicidal rays, tape recorders with quarter inch tape, night baseball, artificial silk and wool, stainless steel, magnesium as a structural material, and fluorescent lighting. All this was envisioned by Hugo Gernsback as early as 1911.



The world's first radio magazine
Vol. 1, #1 "MODERN ELECTRICS"

In April, 1908, Gernsback had founded Modern Electrics. Following numerous mergers, Modern Electrics eventually evolved into today's Popular Science. In 1912, Gernsback began a major thrust in publishing with the Electrical Experimenter, which became Science and Invention in 1920. While publishing the Experimenter, Gernsback also published annual catalogues of Electro Importing Company. Founded in 1904, the Electro Importing Company was the only and original concern in America selling solely ex-

perimental electrical goods. The first amateur wireless outfit in America was made and sold by Electro and the writer, the pioneer in amateur wireless, is not without good reason called "The Father of Amateur Wireless" by his many friends and followers.

In 1919, Gernsback began publishing the nation's first "purely radio magazine," Radio Amateur News. The following year the name was changed to Radio News, and it has enjoyed a lasting sojourn with its subscribers. The March, 1925, issue featured a cover story on "How to Make an Ultra Short Wave Receiver," as well as articles devoted to Marconi's "Radio Beam Transmitter," "The Life and Work of Lee de Forest," and the "Inventions of Reginald A. Fessenden."

The same issue also contained the First Annual Radio Set Directory, compiled with photography by Hugo Gernsback. This feature became a most popular addition to Radio News.

Another well-known publication of the Experimenter Publishing Company was Practical Electrics, which Gernsback initiated in 1921. The issue of February, 1923, included articles on the titanic power line in California, loudspeakers, in schools, talking and



Romance— Mystery— Martian Intrigue

Against an amazing background of mechanical electrical and chemically altered life of mankind there is set a brilliant and colorful romance in the life of the greatest living scientist of that age.

Ralph's love for the beautiful stranger, his conquest of his rival and the worsening of the great saturnine Martian, culminating in a running fight in space with tragedy and terror conquered by almost unbelievable and incredible weapons, make one of the most interesting and gripping stories ever told.

singing films, traveling electrical beautification, and an article by President Gernsback on "Gloves That Talk." The gloves "talk" when the operator placed his gloved left hand lightly against the cheek of a lady while both of them hold to the handles supplying the high tension current. The lady's face, the glove, and the hand inside it are the condenser which talks. As Gernsback explains, you also need a microphone, a B size battery, and a few pieces of wire. The author writes very directly, and with a sparkle and verve that tend to excite the reader to try the experiment.

Short Wave Craft was another of Gernsback's more than fifty periodicals he published during his illustrious career. The August-September, 1930 issue is headed with his editorial "Short Wave Opportunities." In its closing paragraph, Gernsback notes that the

(Continued on next page)



Hugo Gernsback 1884 - 1967
[Photo by Bob Hertzberg]

"surface of short-wave possibilities has not yet been scratched; and that sooner or later, we will certainly have a real boom in short-wave radio." A striking feature of Short-Wave Craft was its series on "Men Who Have Made Radio."

In the issue of October, 1930, Count Georg von Arco was featured. Arco was a vital part of the triumvirate of German radio pioneers along with Slaby and Braun. Among many of Arco's accomplishment was a transmission system which gained international prominence as the Slaby-Arco system.

Among the best known of all the Gernsback publication is Radio-Electronics which debuted in 1939. The issue of November, 1966, contains the inscription "Over 55 years of Electronic Publishing."

The contributions of Hugo Gernsback to radio, to publishing, to writing, to life itself, are immeasurable. We are indeed in his debt.

-- ABOUT THE AUTHOR --

Dr. Myron Shaw is on the teaching staff, Dept. of Communication, State University of New York at Geneseo. This article contains excerpts from a paper he delivered at the 1975 AWA Conference.

WITH THE COLLECTORS

[Continued from page 17]

JOE SZABAT (Oil City, Penna.) has a mint AK-19, Comet -Pro and a RA-DA plus a Westinghouse 26-C amp.

ALAN DOUGLAS (Pocasset, Mass.) located a Clapp-Eastham Radak R-4 for his collection. Later Al recognized the set as one he had repaired for a friend over 18 years ago!

LARRY FLEGLE (Hialeah, Florida) made a good swap and ended up with a rare New World Globe radio made by Colonial Radio Co.

BRUCE BURKHARDT (St. Michaels, Md.) trade an early TV set for a Murdock detector, Clapp-Eastham loose-coupler and a Chelsea Condenser! He recently bought a box of old tubes that included several UV-200s, ten deForest Audions with porcelain bases, two WD-11s and a Moorhead amp.. nice going.

Addenda to

ESPIONAGE TRANSMISSION BY ARC

Ed. note: Much as been written about the famous WWI German station WSL at Sayville, L.I., New York [OTB 16-4-30, 17-3-20]. There has always been some question as to type of transmitter used at the time the "secret" transmissions were sent. The station at one time or another had a Goldschmidt alternator, an arc transmitter (AWA has the arc keying relay) and a spark transmitter]. We believe Don de Neuf has the answer.

As a result of extensive research spade work by Thorn Mayes (W6AX) it now seems certain that the mode of the WSL transmissions in question was neither arc or alternator but made by a 30 kw. quenched gap 500 cycle spark set!

In addition, Bob Morris, W2LV has told W6AX that there was a broadcast station (WJZ) interview Dec. 27, 1934 with Apgar who told about his work in 1915 in recording the WSL signals, and that he made a tape of the Apgar interview from the old original aluminum master disc owned by WJZ (now in AWA Museum).

As part of the interview, Apgar played some of his old wax cylinder records carrying the WSL signals and they are not only unmistakably those of a 500 cycle quenched gap, but Ed Raser (W2ZI) recalls copying WSL many times and there is no question in his mind that the recorded signals are those of this station capable of working POZ at Nauen, Germany direct.

Thus we wind up this saga with "espionage -- maybe -- but by spark and not arc.

--Don de Neuf, WA1SPM

DR. LEONARD FULLER

made Honorary A.W.A. Member at semi-annual business meeting. Dr. Fuller's career has been noted in previous Bulletins and a picture is on page 4, Sept., 1974 OTB. It is a privilege to welcome such a distinguished engineer to our roll of Honorary Members.