



The Oscillator

"All the Electrons that are Fit to Flow . . ."



The Official Newsletter of the DVHRC

May 2011

Kutztown Radio Show XXIV

By the time you read this, the twenty-fourth Kutztown radio Show will be just a week or so away.

All signs point to another successful show. Just like the past number of shows, the main pavilion is SOLD OUT, and additional tables will be in the second pavilion.

As always, your club needs your help to man the DVHRC table, help with the auction and other tasks. Sign up at the May meeting, or contact a board member.

April Meeting Highlights

There was a "buy it now" sale prior to the start of the meeting. It was a chance for members to pick up items ranging from books and parts to test equipment. These items were from the Bob Parvin collection.

As the meeting was called to order, the sales closed. We had a call for volunteers to help with the raffle radio project for the upcoming Kutztown meet. Lowell Schultz has worked his magic on the cabinet. Chuck Azzalina volunteered to finalize the electronics as Wilbur Gilroy got the radio close to complete - so

we're on our way with another nice radio for Kutztown.

Stan Saeger finished restoring a Philco 570 grandfather clock radio (another item from the Bob Parvin collection) which will be part of the auction.

Please note that the dates for the radio swap meet are incorrect on the mailer from Renninger's. The correct dates are May 13 and 14, 2011. The September dates on the mailer are correct. (All DVHRC communications including the website have been correct).

Ted Sowirka has made our capacitor program work for many years. The club recently invested in a substantial lot of capacitors. These will be available to members at regular monthly meetings. We will also have them for sale at Spring and Fall Kutztown meets. Walt Peters is establishing an inventory system and new pricing. This way we can be certain to have capacitors on hand.

We had a short "show and tell." Dave Snellman showed off a Sony multiband transistor radio - model CRF-320. Selling for \$2000 in 1985, this wasn't your typical "portable" radio. It weighed 30 pounds without batteries.

It tunes longwave, medium wave, shortwave (to 30 mHz) as well as FM bands.



Dave also showed a small wet cell battery tester with a rather unique name - "Overbecks Rejuvenator"! We'll give this item our former club president at Kutztown.

Dave Abramson showed the group a Simonize Scratch-up stick. While designed for automobile finishes, it can be put to use on radio cabinets.

The theme for this month's meeting was Ingraham cabinets. Members brought along some fine examples.

Mike Koste outlined the history



Delaware Valley Historic Radio Club

**PO Box 5053
New Britain, PA 18901**

www.dvhrc.info

The Oscillator is the monthly newsletter of the Delaware Valley Historic Radio Club.

Articles on radio and television history and collecting can be submitted by the 25th of the prior month to saegers@ptd.net. Personal views, opinions and technical advice do not necessarily reflect those of members, officers or Board of Directors of the DVHRC, nor is the DVHRC responsible for any buying or selling transactions.

Dues are \$20 per year and can be paid at a meeting or mailed to the above address.

DVHRC Board of Directors

President:

Mike Koste
215-646-6488
gokmike@gmail.com

Vice-President:

Dave Dean
610-933-0330
dw.dean@verizon.net

Secretary/Treasurer:

Dave Snellman
267-354-1395
dsnellman@comcast.net

At-Large members:

Dave Abramson
610-827-9757
dabramson@phillies.com
Walt Peters
215-487-3602
wpeters143@msn.com

Trustee (Past President):

Stan Saeger
610-509-7382
saegers@ptd.net

of Ingraham cabinets for the group. The largest user of Ingraham cabinets was Emerson, although other manufacturers used them or modeled their cabinets after Ingraham.



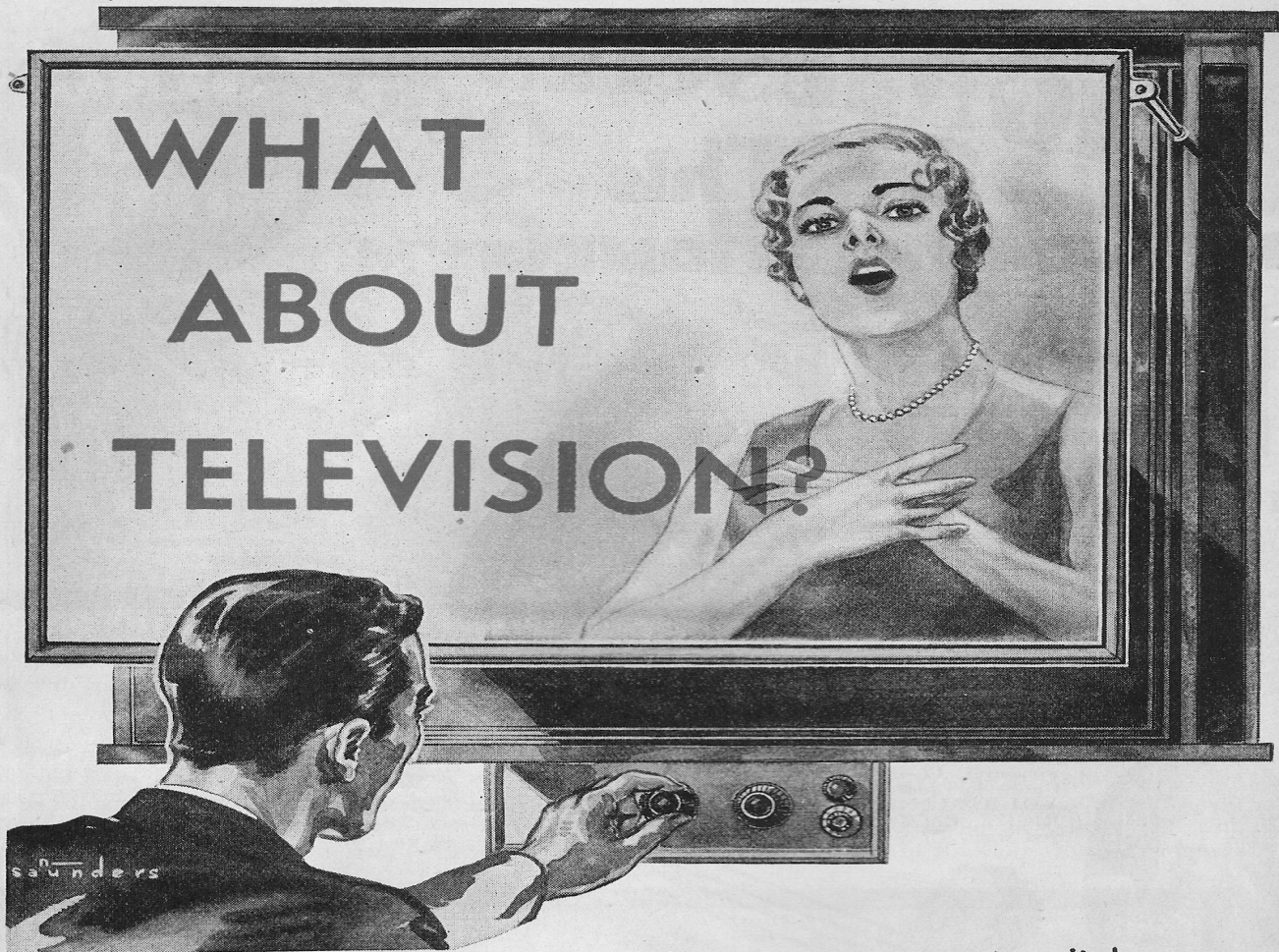
The next meeting will be held on Tuesday, May 10 at 7:30 PM at the Telford Community Center. We'll be circulating the volunteer sign-up sheet for club table and auction duties, and working out any further logistical details. If you can spare an hour or two on Friday or Saturday and will be unable to attend the meeting, drop me an email and we'll pencil you in. We'll also need some able bodies to help us pack up the tubes and supplies for the meet. And, if all goes as planned, we'll have our restored Silvertone raffle radio on display. Hope you can join us. We will have a sign-up sheet at that session for folks to sign-up for Kutztown and club table duty. Hope to see you on the 10th. - Dave Snellman

Thanks to . . .

Dave Dean for the article "What About Television" from *Mechanical Package Magazine* which appears in this issue of the *Oscillator*. While undated, the article appears to be from the early 1930's.

DVHRC at Lehigh Valley History Expo

The DVHRC was represented at the 2nd Lehigh Valley History Expo at the Lehigh Valley Heritage museum in Allentown, PA on April 9th. Many people stopped by the table and discussed radios and picked up information for Kutztown.



Here are answers to vital questions concerning the past and present state of television. You will find in this typical Packmag article exactly these things:

1. What Has Been Done With Television?
2. What Television Offers the Experimenter
3. When Home Receiving Sets Will Be Sold

told by
DOUGLAS L. WEST
 Chief Engineer, Baird Television Corporation

THE history of television, like that of other great inventions, is full of the romance and hardship encountered by pioneer workers, and their persistent efforts towards obtaining results in spite of the tremendous obstacles with which they were faced.

In this respect, Mr. John Logie Baird, acknowledged to be the first inventor in the

world to successfully transmit images of living subjects, has passed through experiences which are interesting from a historical standpoint.

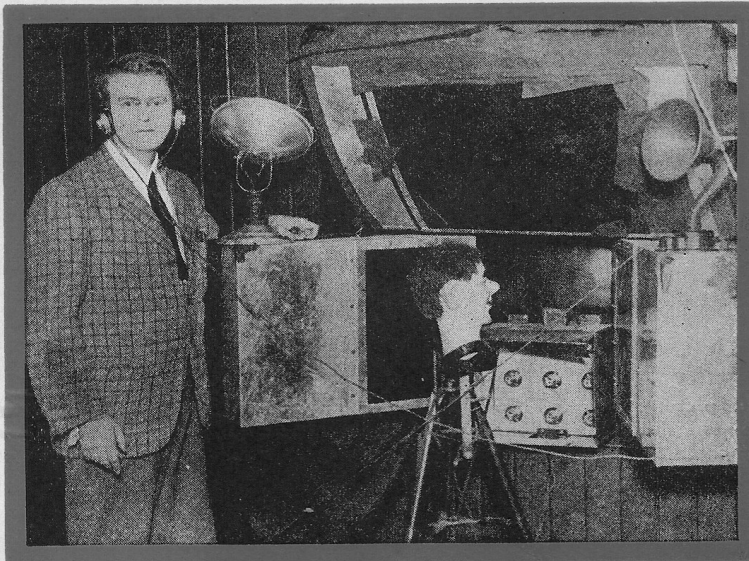
Just prior to 1923, Mr. Baird faced a serious break-down in health and journeyed to the West Indies under his doctor's orders. It is probable that during his enforced convalescence, many of his cherished ambitions for producing

practical television, took shape and were formulated into a series of plans for future experimental research.

On his return to England, he took up residence in the small seaside resort of Hastings, and equipped an experimental laboratory in a small room over a florist shop, for which premises he paid little or no rent. He carried out his experiments throughout the year 1925 utilizing for his apparatus, component parts of bicycles, and other odds and ends which he was able to purchase with the meager amount of funds in his possession.

In the fall of 1925, his work attracted the attention of others and one of his close friends was incidental in raising a small amount of money to transfer his equipment to London and set it up in a new laboratory on Frith Street, Soho. The facilities afforded by this move were not much in advance of those Mr. Baird possessed in Hastings except that more money was available for continuing the experiments, and his work was being carried on under the sponsorship of a small private company. In

SEVEN YEARS AGO -- FIRST TELEVISION



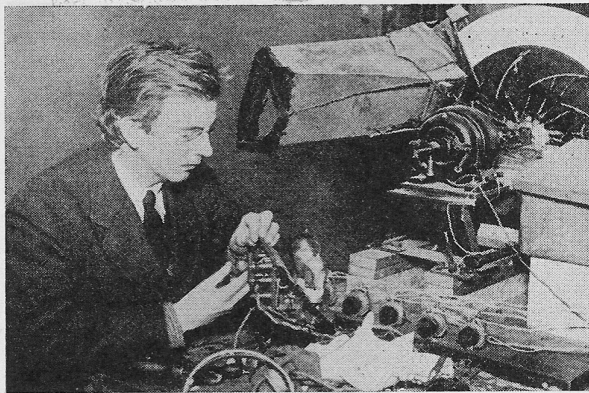
After returning to England from Cuba in 1925, John Logie Baird set up this crude bicycle wheel scanning disc, loud speaker and photocell bank. His first subject was a head from a ventriloquist's dummy. This is the first television outfit used to transmit wireless sight.

spite of these obstacles, Mr. Baird persevered with his work, and in January, 1926, the first public demonstration of television in the world, was given to members of the Royal Institution, the foremost scientific body in the

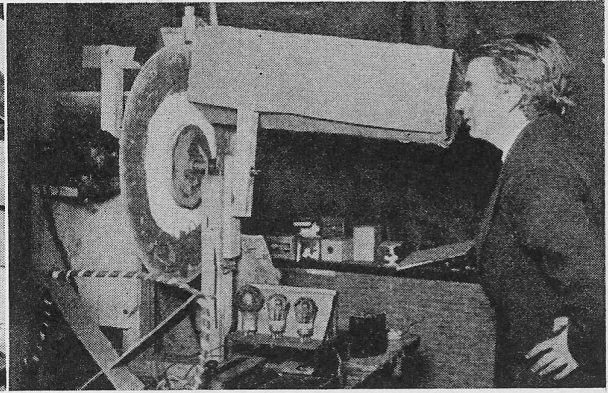


Today, but seven hectic years from the televising of the first image, 250,000 television sets are in operation in the United States by amateur enthusiasts. Skilled directors using new technique supervise and direct new stars in nightly programs from Chicago and New York.

TELEVISION'S RAPID HISTORY RECORDED IN RARE SHOTS



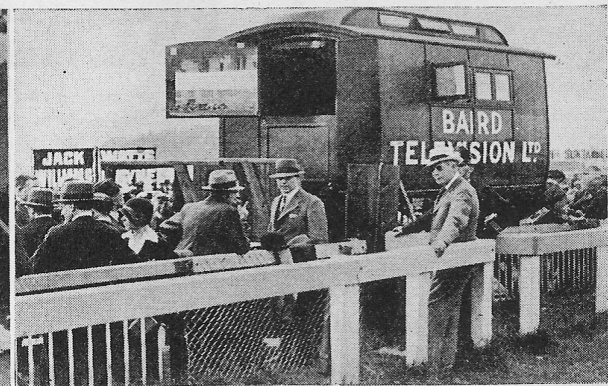
This picture, made in 1925 in Baird's Soho quarters in London, shows the father of television at work on the synchronizing mechanism of the first radio sight receiver.



This is the receiver for the transmitting set pictured on page 15. The crude framing for the wheel bearings, the liberal use of cardboard are mute evidence of forced economies.



A milestone in television history was hung up in 1927 when this American operator-amateur of Hartsdale, N.Y., received in this basement laboratory intellible pictures from London.



Still more startling is this absolutely unretouched photograph showing the trackside daylight teleview of the last Derby at Epsom Downs. Horses at the finish are shown on the screen.

British Empire. On this memorable occasion, the first true half tone pictures were transmitted between the two rooms, comprising the laboratory at Frith Street and history recorded the fact that Baird was the first man in the world to achieve this scientific feat. Comments on this demonstration received world-wide publicity due to the extraordinary nature of the results achieved, and in consequence, much to Mr. Baird's satisfaction, a larger company was formed under the name of Baird Television Development Company, placing at his disposal further resources for the continuance of his work.

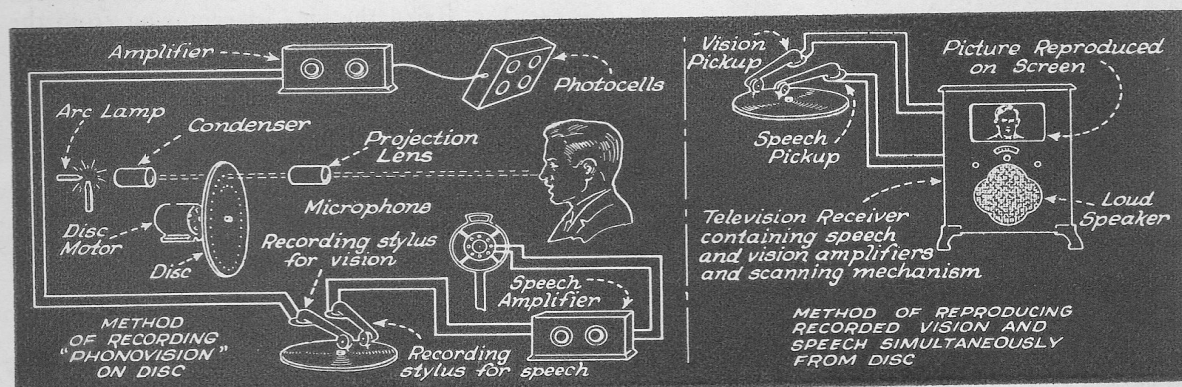
Off to a Good Start

From the year 1926, development proceeded at a phenomenal pace and Mr. Baird contributed to the science of television, a number of remarkable inventions, each one more revolutionary than its predecessor. Our later de-

scription of these inventions only serves to endorse the versatility of Baird's inventive faculty. One could at great length, elaborate the smaller details concerning this pioneer work but space in this article does not permit of this, and any person interested in reading the historical side of the evolution of television will find much published information in books on the subject. Perhaps, the crowning success of Mr. Baird's career was the request received from the Science Museum in South Kensington, London, that his apparatus be donated to that institution and placed on exhibition and record for posterity as the first machine in the world to achieve the transmission and reception of true television images.

Many pioneer inventors as far back as the year 1880 had conceived theoretical ideas regarding television but until Baird's advent into the field these schemes were poorly problematical. For instance, in the year 1880, Nipkow, a

PICTURES ARE NOW RECORDED FOR ELECTRICAL TRANSCRIPTION



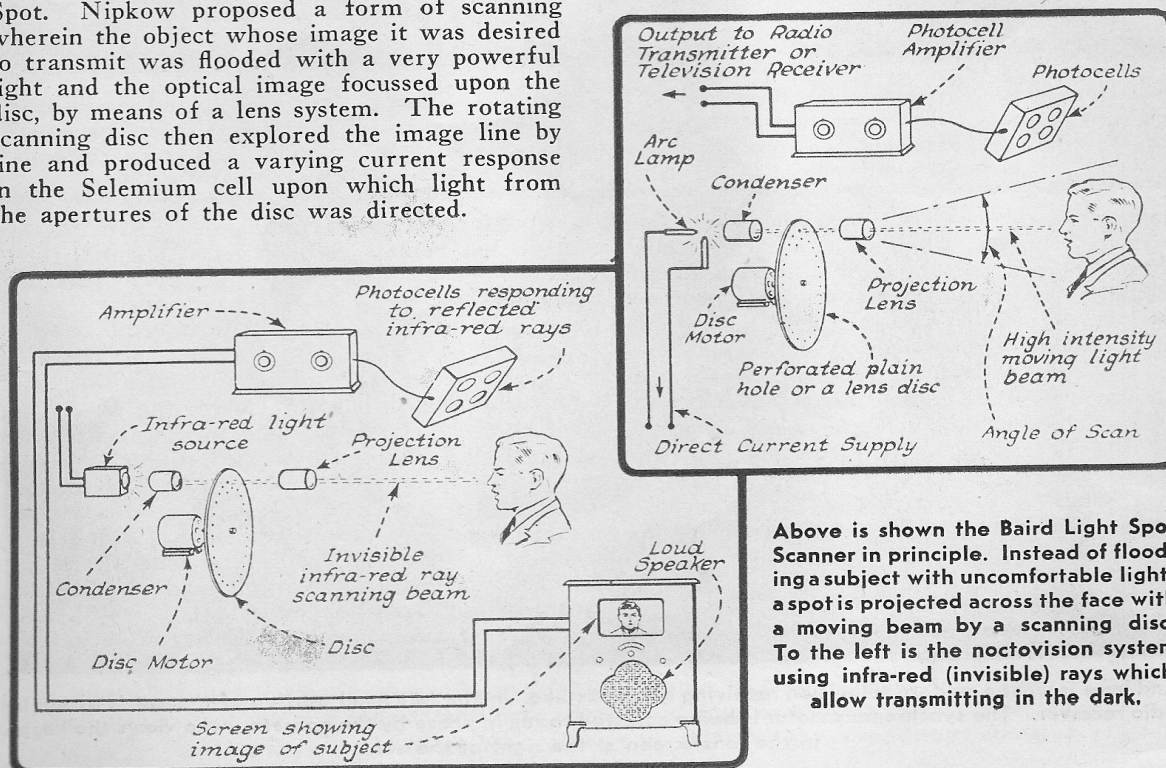
Believe it or not, Mr. Ripley, movies can now be canned on phonograph records! Baird soon saw that television studios would need some method of broadcasting "vizzies" by electrical transcription, so he invented a method of turning sight waves into sound waves, recording both sight and sound simultaneously on dual tracks and reconvertng the waves at will, anywhere, anytime, any place, Mr. Ripley! The diagrams are self explanatory and show how phonovision works with double recording styluses.

Russian, produced a design for the so-called scanning disc, but lack of facilities for building the apparatus and the poor nature of the electrical equipment available, prevented the demonstration of the system.

Early Russian Origin

One of the earliest inventions attributed to Mr. Baird was that concerning the system of scanning for transmission, known as the Light Spot. Nipkow proposed a form of scanning wherein the object whose image it was desired to transmit was flooded with a very powerful light and the optical image focussed upon the disc, by means of a lens system. The rotating scanning disc then explored the image line by line and produced a varying current response in the Selenium cell upon which light from the apertures of the disc was directed.

Experimentation proved that even with the newly discovered photoelectric cells, the intensity of illumination to which the person being televised was exposed, was excessive and resulted in their being unable to stand it for any length of time. Accordingly, Mr. Baird produced a new system of scanning, using a light beam of high intensity which is made to sweep over the subject at a high speed and whose



Above is shown the Baird Light Spot Scanner in principle. Instead of flooding a subject with uncomfortable light, a spot is projected across the face with a moving beam by a scanning disc. To the left is the noctovision system using infra-red (invisible) rays which allow transmitting in the dark.

Mickey Mouse is on W2XBS

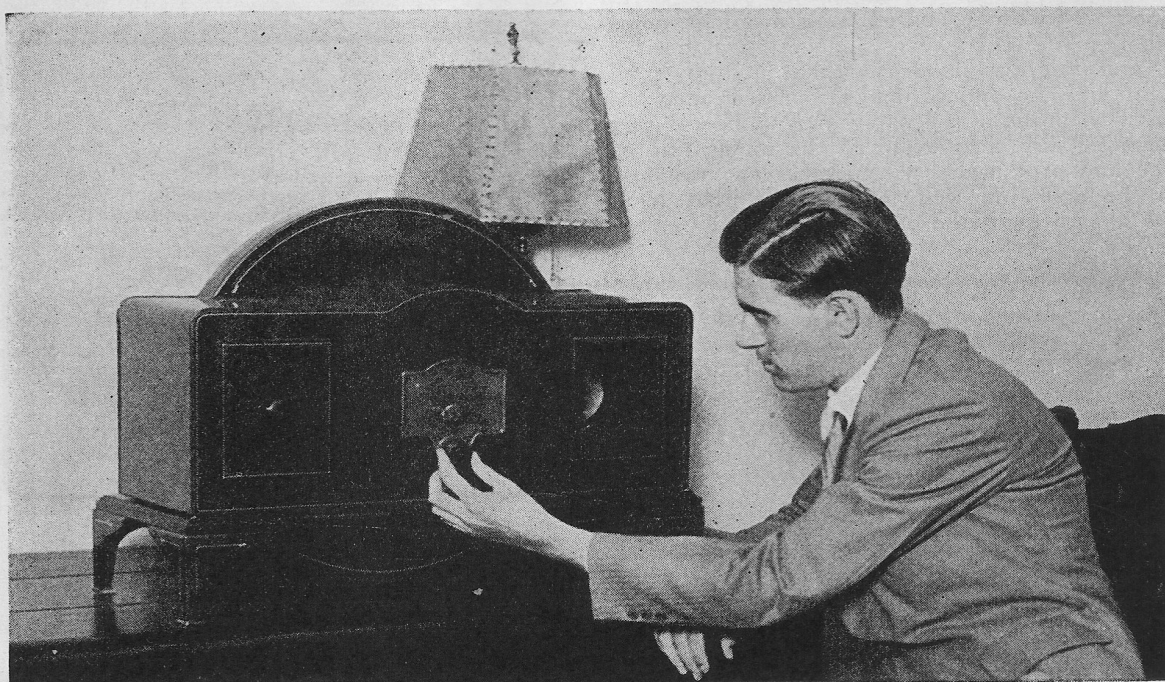


Station W2XBS of New York has here turned over its equipment to the pleasure of broadcasting Laddie Seaman, NBC juvenile actor and Mickey Mouse, who is perhaps today's leading movie hero.

intensity, due to its rapid motion, is not uncomfortable to the eyes. Subsequent research gave Mr. Baird the idea of removing from the beam entirely, all signs of visible light so that the person being "Televised" might not be aware of any light traversing in front of eyes.

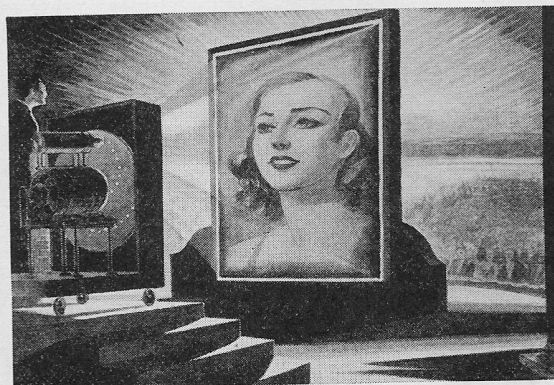
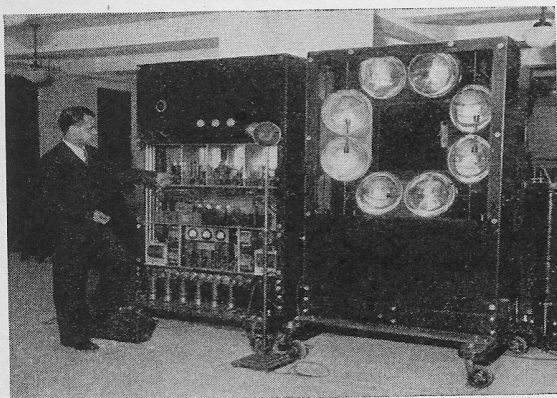
Infra-red Rays for Light

To achieve this he employed, in place of the high intensity light previously mentioned, a modified form of lamp giving a rich output of infra-red rays, these being beyond the range of vision of the human eye. After filtration he was able to accomplish the process of scanning without any sign of visible light. It was found that the results obtained in image definition were equally as good with the infra-red rays as when using visible light in other parts of the spectrum. In connection with this work, Mr. Baird demonstrated a very remarkable feat when he transmitted an image of a person sitting in darkness in a room in London, and reproduced the image in Glasgow, Scotland, by passing the signal over telephone lines between the two points. These principles of scanning with invisible radiations have a number of possible uses particularly as applied to warfare, and the navigation of ships and aeroplanes during foggy weather. Mr. Baird has demonstrated a number of these applications in England and the practical results obtained have been cited in the daily press from time to time.



And here is what a modern television receiving set looks like. In the left hand portion of the set is a regular radio receiver. The synchronous motor is being adjusted to run in phase by the operator, who views the image in the lens-screen at the right of the set.

SANABRIA THEATRE SYSTEM NOW IN DEVELOPMENT STAGES



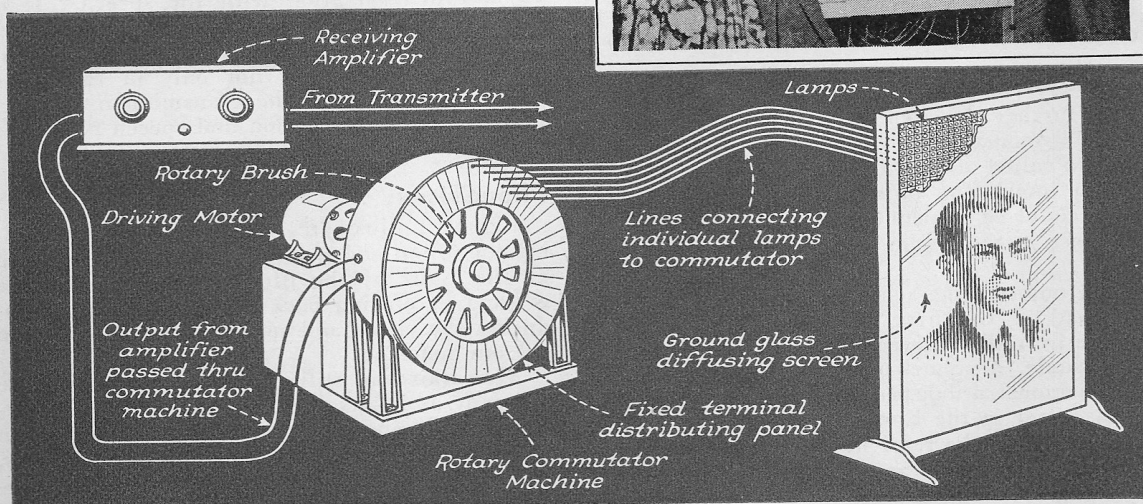
One of television's present ambitions is to replace movies in theatres as a medium of entertainment. Mr. Ulysses Sanabria, brilliant 24-year old Chicago inventor, is here shown with his apparatus. At the right is depicted the 10-foot screen as recently used in a New York theatre.

On one occasion he was able to detect the presence of an ordinary automobile headlight approximately six miles distant which at the time, was totally obscured from the observers by a belt of fog. Nevertheless the image of the lamp was easily discernable on the "Televisor" and its distance away could be recorded without difficulty.

Natural Color Television

Other inventions include a system for producing images of objects in their natural colors, this being accomplished by scanning the object with three different colored light sources comprising the base colors—as would be used in a three-color printing process—and then reconstructing the image by observing three

correspondingly colored receiving lamps in succession in the "Televisor" machine.



In the photo above Mr. Baird is pointing to an image on the screen of his zone television screen, which by means of a commutator ring and a bank of neon lights beneath an opal glass screen, transmits images on the order of the half tone area system, giving great brilliance at the sacrifice of definition.