



# The Audion of the "Instituto de Física de La Plata"



A historical review.

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In the course of the year 1920 the progress of the wireless in Argentina was very important. In this year several interesting wireless home experimental radio stations were put to work in Buenos Aires and La Plata town.

In the year 1884 was created the "Universidad Nacional de La Plata" (La Plata National University) and later in 1906 was established the "Instituto de Física de La Plata" (La Plata Institute of Physics). In this institute were working two scientists making experiments with wireless communications, they were Mr. Alberto Nicolás Eliçabe and Mr. Juan A. Otero.

Mr. Eliçabe put to work in the Instituto de Física a wireless station, made by himself, for to transmit in telegraphy and telephony mode, which employ the De Forest and Telefunken audion of that time. In the (Fig.1) you can see to Mr. Eliçabe driving the wireless station early 1920. The assembly of this station is a Tesla system with a variable condenser CV in the aerial-earth, with a valve V which filament is heated by a battery BF of 4 to 6 volts, and the filament power is controlled by rheostat Ro. The plate of the valve is connected to other battery BP of 30 to 40 volts. The (Fig.2) shows the electrical circuit of the receiver of this wireless station.

The elevated price of the audions in that time, carry forward to Mr. Eliçabe and Mr.Otero attempt to make audions in the laboratory of the Instituto de Física. The (Fig.3) shows to Mr.Juan A. Otero and the (Fig.4) shows the staff of the Instituto de Física where the first person sitting at left is Mr. Eliçabe. After several unsuccessful experiments was made the first audion working well, made in the Instituto de Física of La Plata circa of June 1920. Probably this audion was the first valve made in Argentina. The (Fig.5) shows a photo of this audion and the (Fig.6) shows a photo of a peaceful Mr.Alberto Eliçabe in the last years of his life.

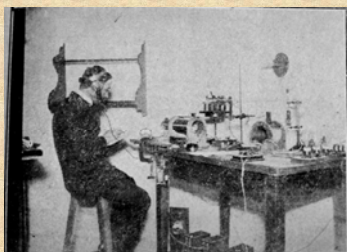


Fig. 1. Mr. Eliçabe driving the wireless station early 1920

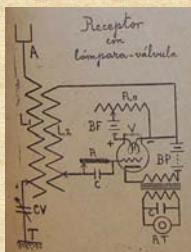


Fig. 2. Electrical circuit of the receiver of this wireless station.



Fig. 3. Mr. Juan A. Otero



Fig. 4. The staff of the Instituto de Física



Fig. 5. The first audion manufactured in La Plata.



Fig. 6. Mr. Alberto Eliçabe in the last years of his life.

Some radio pionners in Argentina, year 1920, figures 7 to 11.



Fig. 7. The "portable" radiotelephonic estation of Mr. Nicolás Sonilla

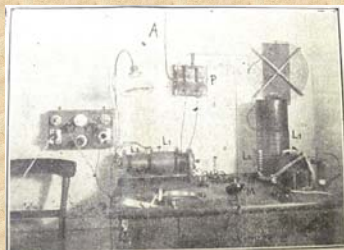


Fig. 8. The radiotelephonic estation of Mr. J. Blomberg



Fig. 9. Mr. Juan D'Albora making a radio transmission of music

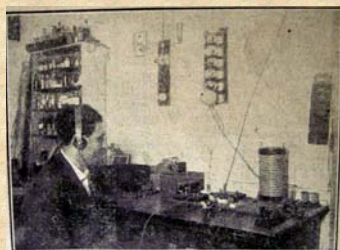


Fig. 10. The radiotelephonic estation of Mr. O. Duarte Indart



Fig. 11. Mr. Rafael Sanromá and his son listening the news by radio.