



# Ericsson News

May—June 1928

English edition

Managing Editor:

Woldemar Brummer

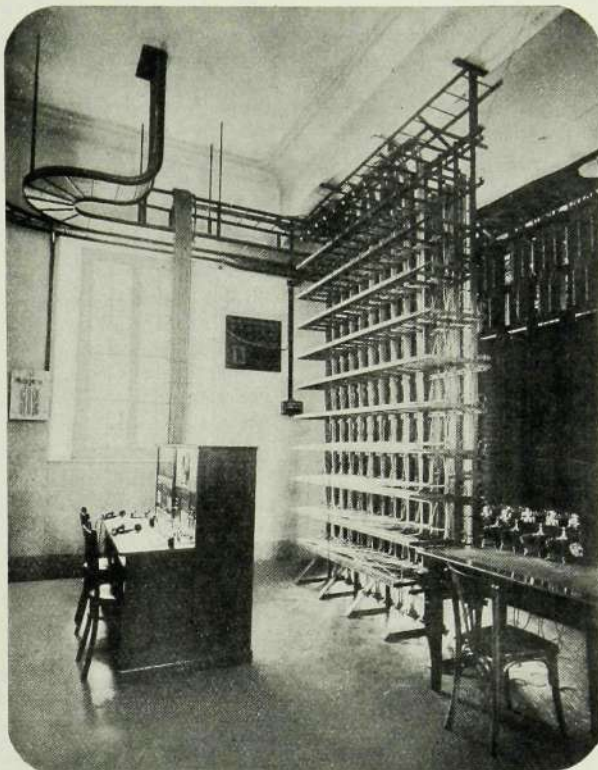
No. 5-6

— Inauguration of the Cremona Telephone Exchange. The ceremonies in connection with the opening of the Telephone Station delivered by the Ericsson Co. to the City of Cremona were held on the 24th of May. This Exchange belongs to the First Concession Zone of Italy, which is exploited by STIPEL.

Among prominent persons present at the inauguration were Signor Palestrino, C. E., as the representative of the Parliamentary member, Signor Ponti; the Director of the Company, Signor Venturini and the Engineer, Signor Pitigliani; the Inspector of Telephones, Signor Tabasso, and the Director of the Cremona Telephone System.

The Government and City authorities were represented on this occasion by the members of Parliament, Signor Farinacci and Signor Storace; the Director-General of the P. T. T., Comandante Pession, as the representative of the Minister of Communications; the Governor, the Mayor and other officials.

Signor Martelli, the Under Secretary of State in the Ministry of Communications, was also present though in an unofficial capacity.



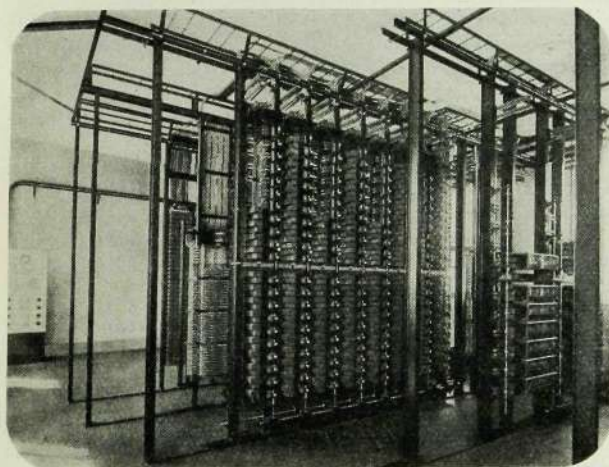
R 1011 a Interior View of the Cremona Automatic Exchange. Main Distributing Frame and Register Supervision.

Monsignore, the Bishop of Cremona, assisted by a number of priests, blessed the new Station.

The Ericsson Company was represented by its engineers Messrs. Kihlgren, Piccotti, Werner and Lundquist.

After inspecting the installations and exchange, Signor Palestrino extended a welcome to the visitors and others present. In his speech he gave a brief account of the successful work carried out in Italy during the last few years in the sphere of telephony, which had been made possible thanks to Signor Mussolini's clear-sighted policy and firm will. He pointed out by way of illustration that at the end of the war, Milano had only 13 000 subscribers (the service being entirely manual) and in 1925 18 000 subscribers (of which 12 000 with automatic service), the City having now 37 500 subscribers which are all served by automatic telephones.

Signor Palestrino said further that STIPEL was rapidly extending to long-distance telephone service included in the building programme for its concession district. The most important cities within the First



R 1010

The Cremona Automatic Exchange.



R 1011 b

Toll Boards at the Cremona Automatic Exchange.

Zone are already interconnected by telephone lines, and in the near future this interurban network will be connected to the international telephone cables in Switzerland.

In conclusion, Signor Paestrino assured the listeners that STIPEL would always work energetically for the development and popularization of the telephone within its sphere of influence.

Comandante Pession replying briefly said that it afforded him much pleasure to learn that the Government's programme in regard to the popularizing of the telephone in all classes of the population was earnestly prosecuted. He pointed out that much remains to be done, as Italy to date had only 5 telephones per 1000 inhabitants, a small figure compared with such countries as Sweden, Switzerland, and England. He finally expressed his conviction that Italy in a few years would not have to lag behind in this respect.

After refreshments had been served, the invited guests were shown the administrative offices, which concluded the opening ceremonies.

In a private conversation with Signor Piccotti, Comandante Pession warmly praised the high quality work which characterizes the station equipments supplied by the Ericsson Company.

The Cremona Station is designed for the connection of 2000 lines, of which 750 are at present in use. The ultimate capacity is 5000 lines.

The exchange was opened for service a few days before the official inauguration, and functioned to the complete satisfaction of STIPEL. The public quickly got used to the manipulation of the instruments.

A toll Exchange for 40 lines was at the same time delivered for the long-distance service from Cremona. This station was simultaneously opened for service.

— **News from Mexico. — The Toll Service Mexico—Veracruz** was opened on the 20th of April. Veracruz is the principal sea port of Mexico, and the inauguration of this long-distance telephonic communication is therefore an event of enormous importance to Mexican commerce. This importance is further enhanced by the fact that, as a result of the telephone construction lately carried out by the Ericsson Company, not only the Capital but many other commercial centres in the interior of Mexico are now connected to the interurban telephone network.

The inauguration ceremony was held at the Offices of the Ministry of Communications in Mexico City. The ceremony was attended by the Minister of Communications in person; by Governor Primo Villa Michel; the Under Secretary in the Ministry of Communications, Señor Eduardo Hay; the presidents of the Mexican Chamber of Commerce and of the Foreign Chambers of Commerce; representatives of the press, and a number of other interested parties.

The Federal, Municipal, and Military officials at Veracruz met at the same time on the premises of the Ericsson Company in that city. The first telephone conversation over the new line was held between the Minister of Communications, Señor Ramón Ross and the Deputy Señor Roberto Morales, who on this occasion represented General Jesús M. Aguirre, the commander of the military forces, stationed at Veracruz. Señor Ross congratulated General Aguirre and the inhabitants of Veracruz on the important event. Several of those present afterwards tried the new connection, amongst them the engineer, Señor Hay, Governor Primo Villa Michel, Señor Rodrigo Montes de Oca, Secretary of the National Chamber of Commerce, and representatives of the press. Representatives of the Empresa de Teléfonos Ericsson S. A. at the official opening ceremony were the Director of the Company, M. Erik Östlund, and the Chief Engineer Helge Rost. The ceremony was concluded with a luncheon to which the Ericsson Company had invited those present.

— **The New Ericsson Network at Laguna.** Ericsson News No. 3 of this year contained on page 1 a paragraph, stating that on the 21st of January the Compañía de Teléfonos Ericsson de la Laguna had opened the local telephone net in the City of Torreón for public service. Below are some particulars

about the newly erected exchange and network, which has superseded the old out-of-date equipment.

The Ericsson central-battery system of the Company's latest design has been installed in the station. The network is constructed on the Ericsson well-known principles, all materials, both for the exchange and the lines and instruments, being supplied by Telefonaktiebolaget L. M. Ericsson, of Stockholm. No efforts or expense have been spared to make this telephone installation absolutely first class in every detail.

The cement conduits of the Ericsson design have been made of Mexican materials and with Mexican labour, the latter being also exclusively employed for the entire construction work.

The subterranean work comprised 4 400 metres of conduits, with 8 800 metres' total length of ducts. The subterranean cable net has a length of about 450 000 metres, and the aerial cables consist of 170 000 metres of double conductors. Both subterranean and aerial cables, the latter supported on poles of Mannesmann steel tubing, are led into cable boxes fitted on special distribution towers of iron. From these boxes the lines of bright wire run out to the subscribers. The distributing towers vary in height between 10 and 20 metres. Altogether 140 transmission line and distributing poles have been set up. When the service was opened, the total length of lines from the distributing points to the subscribers' station was 35 000 metres of double conductors.

— Telephone systems are now under construction on the same principles as those applied in Torreón in the neighbouring towns of **Gómez Palacio** and **Lerdo**.

These three telephone networks will be interconnected by a number of lines corresponding to the intensity of the traffic. The connecting lines are collected in lead-sheathed quadruple cables, supported on poles of Mannesmann steel tubing.

— The construction of a 70 kilometre long interurban line from **Torreón** to **San Pedro de las Colonias** is shortly to be commenced, and complemented with the installation of a telephone exchange in the latter town. Aluminium wire, carried on poles of Mannesmann steel tubing will be used for the long-distance line.

The number of subscribers is rapidly increasing not only in the cities mentioned above, but also in the surrounding district. The whole Laguna region will therefore in the near future be connected up to the network of Empresa de Teléfonos de Laguna, and thus to the Ericsson System, which takes in a considerable part of all the States of the Mexican Federation.

— The beautiful place **Colonia Bella Vista** will shortly be supplied with a telephone network and up-to-date central exchange by the Empresa de Teléfonos Ericsson, to be immediately connected to the Company's Mexican telephone system.

— **Miscellaneous Construction Work** at present carried out by the **Empresa de Teléfonos Ericsson S. A.** in the United States of Mexico.

The work on the telephone network in the town of **Guadalajara** is prosecuted with all despatch. Along Avenida 22, in the Sector Juárez, the cement conduits are being laid down at a rapid rate, and the cables inserted as the work proceeds, the construction work in the beautiful Colonia Reforma district being already finished.

Simultaneously, modern telephone exchanges are being installed in the different hotels. The first central of this kind has lately been installed in Hotel Francés.

The opening of the telephone service in Guadalajara, and the connecting up of the town to the interurban Mexican network is looked forward to in the near future.

— The construction of the Ericsson telephone network in **San Pedro, Cosh** was commenced about the middle of May. The work on the erection of the interurban lines, which are to unite San Pedro with Torreón, is proceeding parallel with the local installation work.

The extension of the local network and the equipment of the telephone station in the town of **San Luis Potosí** are well under way.

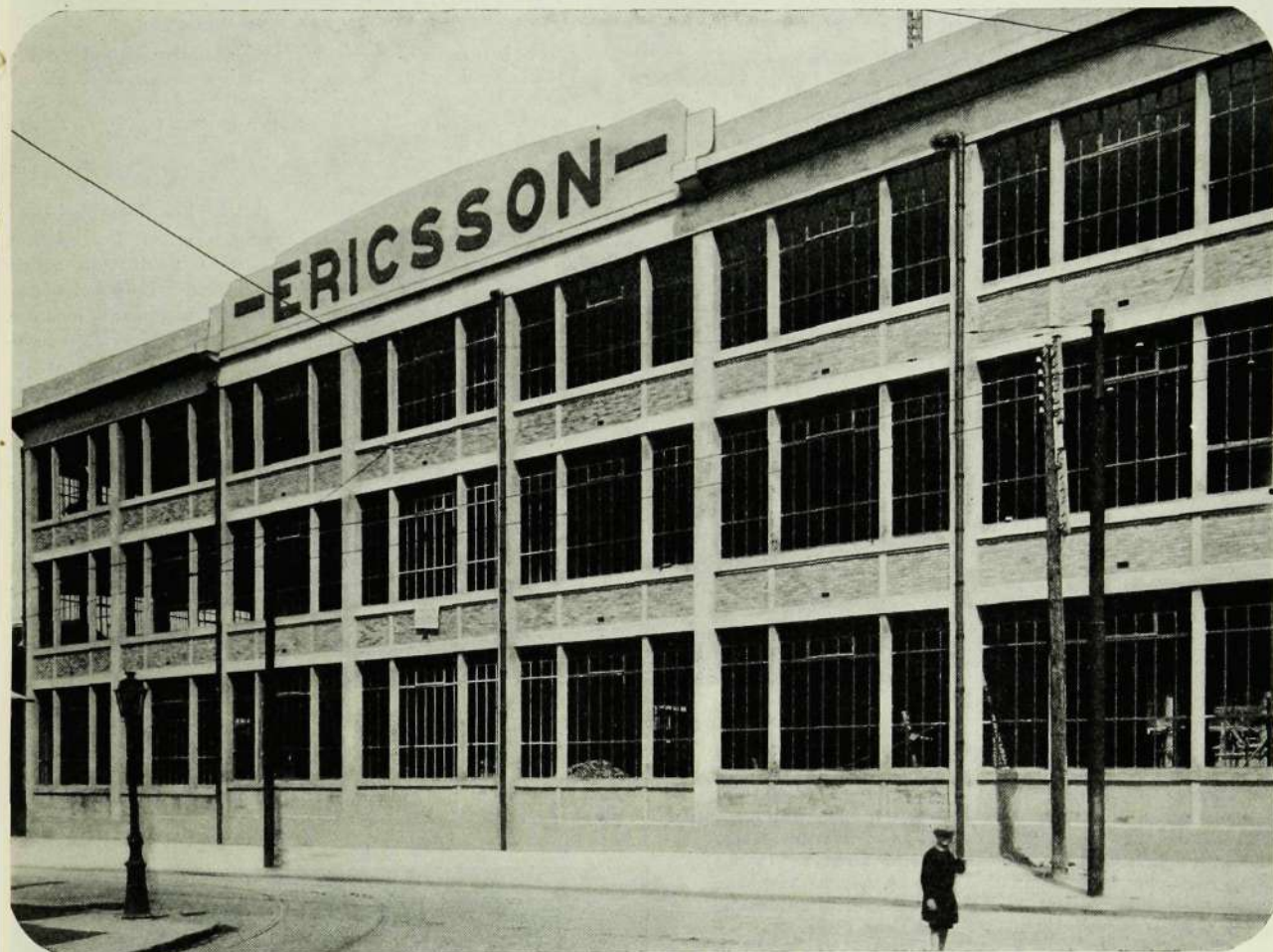
— The system of installing telephones, which may be used by the general public against payment of a fee for each call, has been introduced in **León, Guanajuato, Celays** and other important centres in shops, offices and for other subscribers whose business does not warrant the installation of a private telephone. In these cases the proprietor of the business is allowed to use the apparatus for his own calls without charge, and is besides allowed a small monthly compensation.

— **Ericsson Telephone Exchange in Mexican Government Dept.** Empresa de Teléfonos Ericsson has installed a local telephone plant with automatic exchange of the Ericsson Type OL 500 in the Treasury Department of the Republic. The installation is for the present connected up for 76 local, and 24 connecting lines to the outside telephone net of the Capital. The local system is of the Ericsson standard system with lead-

considerable extensions of the factory in view of the work entailed in the participation of the Company in the reconstruction of the telephone network in Paris. We are now in a position to illustrate below a part of the new additions, such as they appear at present.

— **International Long-Distance Telephony.** According to an announcement by the Royal Swedish Telegraph Department the connection between Sweden and America, which earlier has comprised the United States, Canada and Cuba, will this year be extended to embrace the Republic of Mexico. The fee for one call (3 min. period) is Kr. 242:70. (Reported by the Stockholm Chamber of Commerce).

— An attempt to call up a subscriber in the Swedish town of Kiruna, situated in the north of Lapland, from the **instrument**



Part of the new Extension of the Ericsson Works at Colombes, France.

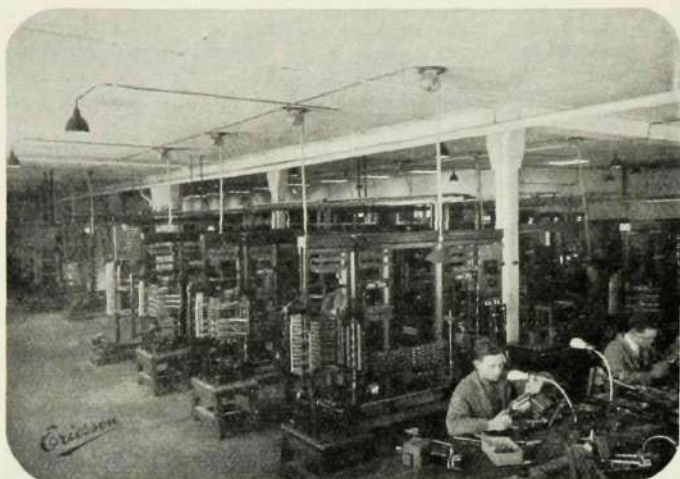
sheathed cable, coupling boxes and instruments made by Telefonaktiebolaget L. M. Ericsson in Stockholm. The heads of the Treasury Department have expressed their complete satisfaction with the work and the function of the plant to the Ericsson Mexican Company's officials. This applies both to the local service and the connections with the city system and environs. As a result of the excellent results, and especially the saving in time afforded by an installation of this kind, the other government departments in Mexico are contemplating the advisability of introducing the same system in their respective departments.

— **Société des Téléphones Ericsson, Colombes.** In No. 7 of Ericsson News 1927 (on page 1) it was stated that the Administration of the above Company had decided to make

in the **office of the Swedish Consulate at Genève** gave a fully satisfactory result. The length of the line was in this case 3 890 kilometres. The conversation was held on the 28th April by some members of the Swedish Secretariat of the International Labour Bureau of the League of Nations at the one end, and Mr. Nordman, Director of the Iron Mines at Tuollavaara and Mr. Sigmar, chief of the Telegraph Station at Boden, at the other end of the line, both of the latter being at the time in Kiruna.

(Journal Télégraphique).

— **Swedish Telephone Items.** In the estimates of the Swedish Telegraph Administration a sum of 8 618 593 kronor is asked for grants to cover new construction and development work during the Budget year 1929—1930. Of this



R 1023 View of New Automatic Test Room at the Ericsson Stockholm Works.

sum 7 000 000 kronor is allocated to continued development of the Government telephone and telegraph systems.

Statistics over the operation of the Government telephone and telegraph systems show that the number of telephone calls and apparatus subscribed for are still increasing. The number of instruments has increased from 453 513 in 1927 to 470 500 in 1928, and the fees collected for telephone calls from 26 962 228 to 28 000 000 kronor.

A sum of 1 200 000 kronor has been set aside by the Telegraph Administration for the building of new broadcasting stations, and for the laying of a new telephone cable between the Isle of Gotland and the Swedish mainland. The present cable contains three connections, and is already overloaded, making new lines absolutely necessary for coping with the traffic. It is the intention of the Administration to have the new cable in working order early in the spring of 1930, so as to have it available for the rush which always takes place in the summer. In this connection, the Administration announces that the telephone connection with Finland over the recently laid submarine cable will be opened about the New Year 1929.

— **Red. Telefónica de Guipúzcoa.** The management of the Telephone Company in the province of Guipúzcoa has published its annual report for 1927. (Publishers: Diputación de Guipúzcoa, S. Sebastian). In addition to very complete statistics, and a financial statement over the operation of the telephone service — both the automatic (L. M. Ericsson) and the manual systems — the report has a number of appendices of great technical and scientific interest. On page 67 there is a short paper on "A method for electric measurement of cables and electric circuits". On page 63 is an account of "The testing of a 5-magnet Ericsson inductor", and finally, on page 83, "Calculation of the pupinization of the telephone cables between S. Sebastian and Oyarzun". All of these papers are written by the Director of the Telephone Company of the province (Red Telefónica de Guipúzcoa), Señor M. Echaído, C. E.

— **The L. M. Ericsson Automatic Telephone System:** A new, abridged edition of the above brochure,

which was published in 1927. The present book is written in a more popular manner, and may be had in the Swedish, German, English, French, Spanish and Italian languages.

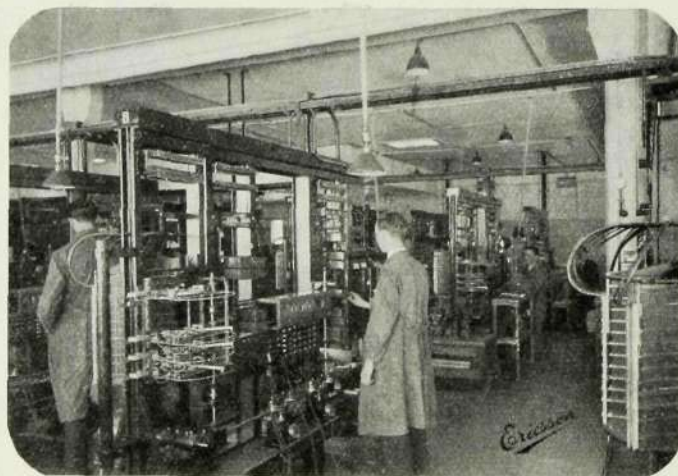
— In No. 23 of the publication "**Byggnadsvärlden**", of the 9th June 1928 (Editorial Office Birgerjarlgatan 23, Stockholm) there is an article on page 270 on "**Automatic Fire Alarm Systems**". The system designed and made by the L. M. Ericsson Company is also treated in this article.

— **Literature.** — In No. 5 of **Annales des Postes Télégraphes et Téléphones** (Publishers Librairie de l'Enseignement Technique, 3 Rue Thénard, Paris) of this year's edition an article "Projet d'un réseau téléphonique urbain selon le principe de la distribution" by E. A. Englund, C. E. is reproduced on page 397 from The L. M. Ericsson Review No. 7-9, 1927 (Third Quarter).

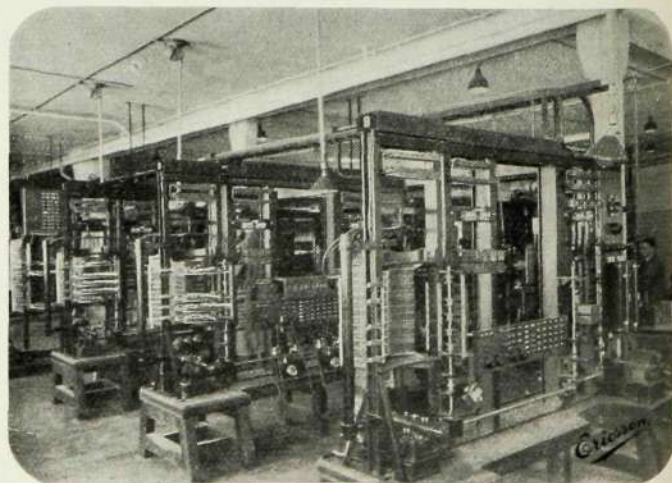
— In No. 4 of this year's edition of the journal **Techniká Rozhlody**, the organ of the Czechoslovakian Postal and Telegraph Servants' Federation, are reproduced two articles from The L. M. Ericsson Review: viz. "**The L. M. Ericsson Watertight Microphone Casing**" (No. 1-3, 1925), and "**Old and New in the Telephone Network in Tanager**" (No. 1-3, 1925).

— The Tele-Technical Association in Poland has started a publication called **Przeglad Teletechniczny**, to be issued monthly (Editorial Office Place Napoleona 10, Warszawa), and devoted to problems in connection with weak-current engineering. The first number of this publication was issued in March and contains the following articles:

1. *Interurban Telephone Cables* by S. Zuchmantomwicz,
2. *The Principles for the Construction of Telephone Networks in Cities* by A. Olenki,
3. *Interurban Telephone Exchanges* by W. Niemirowski,
4. *The Tele-Technical Association* by I. Niepolinski,
5. *The Telephone and Telegraph Cent*
6. *The Indo-European Telegraph Line* by A. Lisicki.



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The New Automatic Test Room.