



Ericsson News

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Managing Editor:

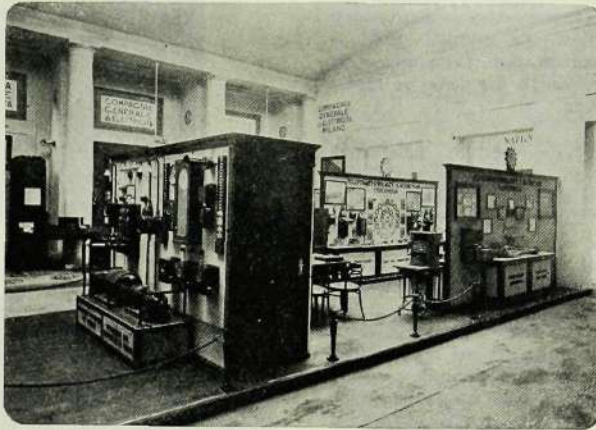
Woldemar Brummer

No. 6

L. M. ERICSSON AT THE COMO INTERNATIONAL EXHIBITION HELD IN COMMEMORATION OF THE 100th ANNIVERSARY OF THE DEATH OF ALESSANDRO VOLTA.

The one hundredth anniversary of the death of Alessandro Volta, physicist and world-renowned pioneer in the field of electrotechnics, was duly commemorated in the city of Como, on the beautiful alpine lake of the same name. It was here that Volta was born on the eighteenth of February 1745.

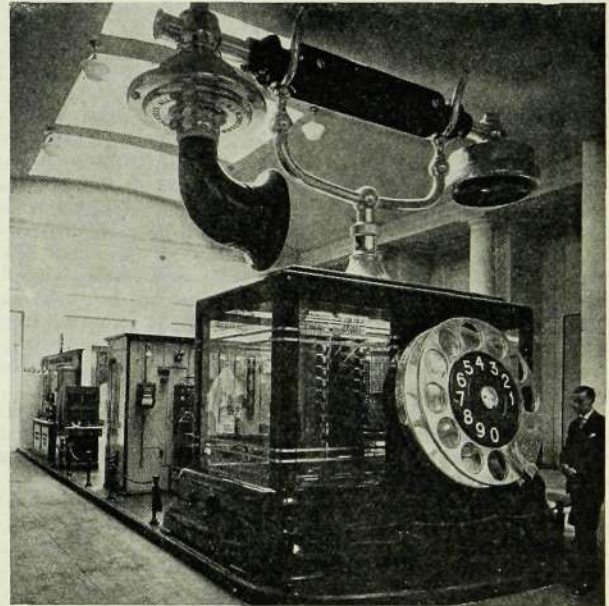
This event was celebrated under the auspices of H. M. King Victor Emanuel and under the presidency of the two most highly esteemed Italian contemporaries, Mussolini and Marconi, with an international exhibition of large proportions illustrating the historical deve-



the »Villa Olmo». It will be kept open until the month of October and will be the seat of a series of scientific and technical congresses.

The telephone industry occupies a prominent position at the exhibition on account of the lively interest for the telephone awakened by the present reorganization of telephone communications in Italy. Telefonaktiebolaget L. M. Ericsson is participating with one of the largest stands, organized by Società Ericsson Italiana, L. M. Ericsson's Italian subsidiary.

The accompanying photographs



lopment of and the results attained by the electrical industries in the various fields of human endeavour.

The exhibition — opened on May 28th by H. M. the King — is located in the park and in the beautiful, palatial building of

give a few views of the Ericsson stand at the Como Exhibition.

The immense telephone instrument — outwardly a true copy of one of the popular automatic Ericsson table sets, enlarged 8000 times — created quite a sensation. Its chief point of

interest is the model full automatic exchange which has been mounted inside of it. This exchange is in operation and interested visitors are able to make calls over a number of telephone instruments and to follow the various switching operations through the glass sides of the giant telephone.

Two P. A. X. switchboards for small communities, factories and offices are also exhibited and can be tried out by visitors. One of these automatic switchboards is connected to the above-mentioned automatic exchange in the giant telephone to demonstrate junction traffic between a local and a central exchange.

A complete fire-alarm plant, by means of which the efficiency and reliability of the Ericsson fire-alarm system can easily be ascertained, is also exhibited, as well as a time control plant for factories, etc., comprising a main clock, secondary clock, programme apparatus, time registering clocks and acoustic signalling devices, all connected up and in working order. A taxi exchange for purposes of demonstration is also installed, similar to the one delivered by L. M. Ericsson to «Stipel», owners of the concession for the operation of the telephone nets in northwestern Italy, this exchange having been put in operation in Milan in the beginning of July last.

Among the various Ericsson exhibits are included telegraph instruments, line material, cable and wire, various types of telephone instruments for different purposes as well as a very interesting collection of historical apparatus of Ericsson manufacture.

The Royal Swedish Telegraph Administration is represented by an exhibit where one may follow the gradual development of telephone and telegraph communications from their very infancy up to the present time and in which the name of Ericsson occupies a most prominent position.

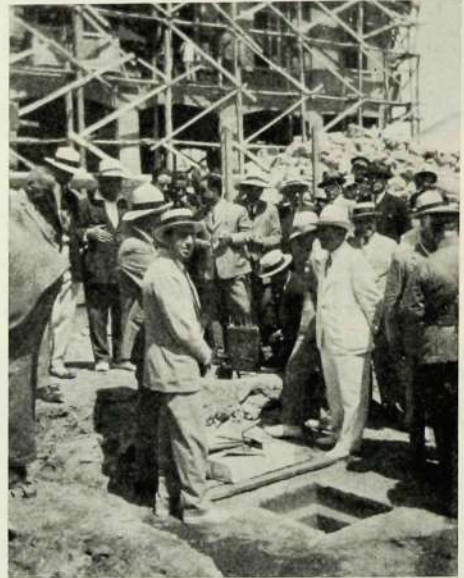
The first Italian taxi exchange, delivered by Telefonaktiebolaget L. M. Ericsson. The Milan taxi telephone exchange — ordered by Stipel (Società Telefonica Interregionale Piemontese e Lombarda) from L. M. Ericsson through the good offices of Società Ericsson Italiana in Genoa — was put in operation on July 11th. This plant is built according to the system so successfully used in Stockholm (see description in Vol. I, Nos 11 & 12 of The L. M. E. Review, page 135) although, quite naturally, with due consideration for local needs and requirements, the adaptability of the system making this an easy matter. The plant is designed for an ultimate capacity of 120 cab ranks, of which 48 are now in use, soon to be followed by 12 more. Consequently, the net is at present equipped with 60 order lines, the service requiring 18 operators and one chief operator during rush hours, two operators being sufficient when the traffic is light. A decidedly local feature is the provision of facilities whereby the public may order not only taxicabs but also motor lorries and trucks for general express service. These vehicles have their own special stands, corresponding to the express offices to be found in Stockholm and other cities. Such an efficient concentration of motor transportation facilities is without doubt unparalleled in the world to-day and proves with what foresight the municipal authorities as well as the telephone company of Milan have sought to satisfy the demand for convenient arrangements as regards public utilities. According to the daily press, the public is quickly learning to take advantage of this new convenience. Already on the first day 76 orders were placed, this figure being increased to 100 on the second day. Among official statements we take pleasure in citing the following from an article by the Italian secretary of communications, Ciano, dealing with telephone communications in Italy and published in the daily papers:

«Oltre a ciò, a Milano, funziona il servizio per le chiamate dei taxis con un sistema identico a quello in uso a Stoccolma, che a giudizio di tutti i competenti è il migliore», the translation of which reads as follows:

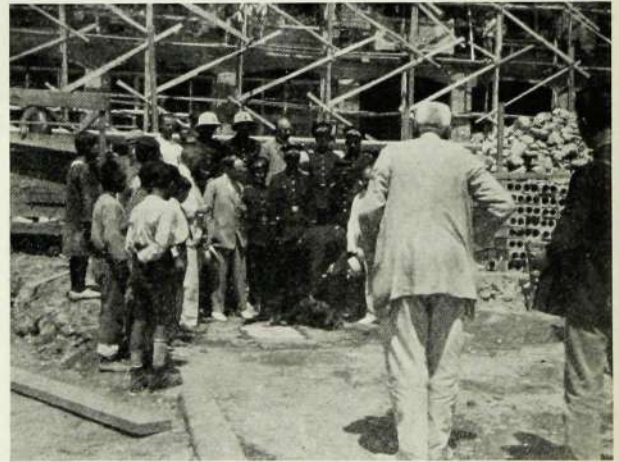
«Furthermore, Milan is now equipped with a taxi telephone exchange operating on the same principle as the one in Stockholm, which principle, according to the opinion of prominent experts, is as yet unsurpassed».

The Ericsson Concern. We hereby wish to make the announcement that *Société des Téléphones Ericsson* in France have on Aug. 1st moved their head office from 37 Boulevard Haussman in Paris to their works at *Boulevard d'Achères* in *Colombes*, to which address all communications should now be forwarded.

Notes of interest from Smyrna. *Société Anonyme Turque des Téléphones de Smyrne et Environs*, the operating company in which L. M. Ericsson and the municipal authorities of Smyrna are jointly interested (see The L. M. E. Review, Vol. III, nos. 7 & 8, page 3 of General Notes), has now begun construction work on the telephone plant for this city. The underground conduit lines were inaugurated on June 6th in the presence of the Vali Kiazim-Pascha, the commander of the



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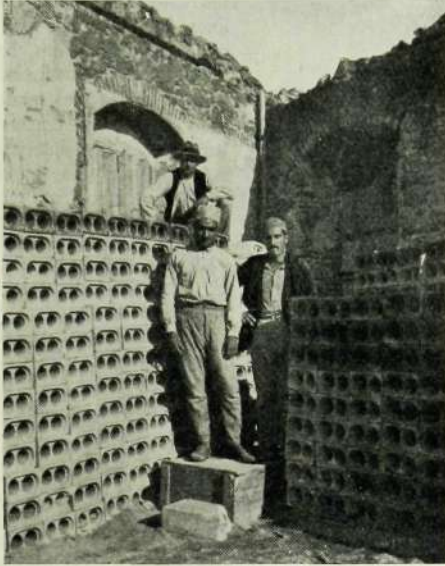
R 751

garrison Fuad Pascha, the mayor Aziz bey and numerous representatives for the higher military and civil government authorities, for the municipality, and for the financial and commercial world, the company's Turkish and Swedish representatives being also present. The laying of the cornerstone for the new exchange building took place on June 30th. On this occasion adjutant Halid bey was present in the capacity of representative for the Vali Kiazim Pascha, others who honoured this ceremony with their presence being the commander of the garrison, the mayor of Smyrna, colonel Kadri bey, Hadji-Hussein bey, representative for the people's party, Emin Ali bey, the city prefect Eumer bey and the head of the P. T. T. Administration Enver bey. After a short speech by Aziz bey, a copper casket containing a plate on which were engraved certain data concerning the building, a document with the signatures of those present, Smyrna newspapers for the day and current Turkish coins, was placed within the cement foundation and covered with a marble slab. This ceremony was performed by Halid

bey, Aziz bey and Hadji Hussein bey. A lamb was then slaughtered on the marble slab in accordance with the custom of the country.

After the ceremony greetings were cabled to L. M. Ericsson in Stockholm by Vehbi bey, president of the board of directors of the Smyrna company, as follows:

»Pierre base fondation centrale mise aujourd'hui solennellement presence autorités superieures gouvernement ville».



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Two photographs taken on this occasion are reproduced on the preceding page, the illustrations on this page showing the manufacture of cement conduits for the underground distribution net.

Litterature. Numbers 1 to 3 and 4 to 6, Vol. IV (first and second quarters) of The L. M. Ericsson Review contain the following articles.

Nos. 1 to 3. *Swedish Telephones in Angora*, giving a review of the history of Angora together with a description of the new Ericsson automatic telephone exchange. The article is illustrated with a portrait of Mustafa Kemal Pascha, president of the Turkish republic, a number of views of the city itself and seven illustrations for the description of the automatic exchange. — *The Forli Automatic Telephone Exchange*, of special interest, as this is the first time that an OL P.A.X. switchboard has been used for a small town exchange. — *The Electric Interlock-*

ing Plant in Hässleholm, by Ivar Larsson, signal engineer for the Swedish Gov't Railways. The fact that the interlocking of the manoeuvring devices for the points and signals in this plant is accomplished wholly by electricity makes this article of actual interest (see also Ericsson News No. 5, 1927, page 1). — *American and European Toll Telephone Traffic*, by A. Lignell, superintendent of telephones in Stockholm, one of the most able authorities on this subject and member of the International Consultative Committee for Long-Distance Telephone Communications. Considering the present reorganization of European toll and international telephone service, this subject is of vital interest, the article being rich in statistical information.

Nos. 4 to 6. *On Various Principles of Receiver and Loud Speaker Design*, theoretically illustrating the more important principles of receiver construction. This article covers the electrodynamic receivers and is a continuation of the one published in Nos. 7 & 8, Vol. III of The L. M. E. Review, and dealing with electromagnetic receivers. The next article of this series — covering the electrostatic receivers — will appear in an early number of The L. M. Ericsson Review. — *Automatic Section Blocking on the Line Stockholm Östra—Stocksund and Electric Signal Installation for the Djursholm Railway*, dealing with railway signal devices especially suited for electric roads. — *Field Telephone Switches and Switchboards*, by captain W. Gyllencreutz, ordnance officer in the Royal Swedish Signal Corps, deals with the various principles of construction for field telephone exchanges from a historical, military and technical point of view.

The Ericsson Automatic Telephone System (Angora, 1927). This very interesting description of the automatic telephone plants in Angora and Smyrna is written by Emin bey, one of the foremost Turkish telephone authorities. Richly illustrated with photographic reproductions and diagrams, this work is in all probability the first on the subject to appear in the Turkish language.

»**Elektrosvjas**» is the name of a new periodical issued by the Governmental Low Tension Electrotechnical Trust of the Sovjet Republic, Leningrad. We have had the pleasure of receiving the first number, containing an article by A. A. Welitschko on »Automatic Telephony» in Russia. This article deals with the fundamental principles of the Ericsson system, which has been introduced into this country. Further, this number contains some interesting articles by noted experts touching on questions of a radio-technical character.

Number 20 of the Italian periodical »**Elettrotecnica**» (Milan, July 15th, 1927) contains an article (see page 452) by G. C. Ponti entitled *The Telephone Problem in Italy* (Il problema telefonico in Italia) and giving a detailed and vivid description of the successful development of telephone communications in this country in the two years during which this work has been in the hands of the five large operating companies. These auspicious results are well illustrated by numerous data, which show what well organized private enterprise under government protection and supervision can accomplish in a comparatively short time towards the perfection and development of this important means of communication.

Telegrafia și Telefonie (Telegraphy and Telephony) by D. Leonida, electrical engineer. This is an excerpt from the Roumanian journal »**Energia**» (No. 11 & 12, 1926), Bucharest, which describes in detail the means of communication at a distance used by mankind from prehistoric times up to the present day. Naturally, the greater part of this paper concerns itself with modern telegraphy and telephony, a rather large part being devoted to Ericsson's net construction work and manufacture of telephone instruments and more especially to this company's automatic system. Further, space is devoted to present conditions within the telegraph and telephone field in Roumania together with statistics concerning telephone conditions in other countries. The last chapter touches on the domestic telephone industry, represented by **Energia's** telephone factory in Cluj.

Przegląd Elektrotechniczny (Electrotechnical Notes) Nos. 20 to 24, Warsaw, publishes a description in Polish by W. Niemirowski of the Ericsson automatic telephone system, according to which the new telephone exchange in Cracow is being built.

VIENNA MODEL OF ERICSSON INTERCOMMUNICATION TELEPHONE INSTRUMENTS.

For local telephone installations with comparatively short distances between the telephone instruments it is often of advantage to use intercommunication telephones with line switches. For installations of this kind the number of telephone instruments seldom exceeds twenty.

With the above-mentioned model, the desired connection is obtained by depressing a push-button key after the removal of the handmicrotelephone from its cradle. The switching devices are automatically restored to normal by depressing another key or by replacing the handset. The various details of the interphone mechanism are mounted on metal strips within the black-lacquered metal casing.



Thanks to the novel design of the handset cradle, this telephone instrument can be used either as a wall set or table set.

The standard type of these instruments is made for double lines, but they can also be supplied for single lines, both types being for the common battery system. On special request, however, L. B. instruments can be furnished. The interphones are made either for purely local traffic or also for central exchange connections, no matter whether this latter exchange is built according to an L. B., C. B., semi-automatic or full automatic system.

The instrument weighs about 3.10 kg. without the calling dial and 3.50 kg. with dial. Maximum dimensions without the dial are 260×215×130 m/m.

This telephone instrument is furnished also in tropical finish.

Intercommunication telephones for local traffic and central connections to:

L. B. central exchange.

Type	Number of lines		Code word
	Local	Central	
HK 202w/5+1	5	1	Hobic
HK 202w/5+2	5	2	Hocid
HK 202w/5+3	5	3	Hodif
HK 202w/10+1	10	1	Hofig
HK 202w/10+2	10	2	Hogih
HK 202w/15+1	15	1	Hohij

C. B. central exchange.

Type	Number of lines		Code word
	Local	Central	
HK 204w/5+1	5	1	Hojik
HK 204w/5+2	5	2	Hokil
HK 204w/5+3	5	3	Holim
HK 204w/10+1	10	1	Homim
HK 204w/10+2	10	2	Honip
HK 204w/15+1	15	1	Hopir

Full automatic central exchange.

Type	Number of lines		Code word
	Local	Central	
HK 207w/5+1	5	1	Horis
HK 207w/5+2	5	2	Hosit
HK 207w/5+3	5	3	Hotiv
HK 207w/10+1	10	1	Hovix
HK 207w/10+2	10	2	Hoxiz
HK 207w/15+1	15	1	Hozib

Intercommunication telephones for purely local traffic:

With single lines.

Type	Number of lines	Code word
HA 273w/5	5	Habec
HA 273w/10	10	Haced
HA 273w/15	15	Hadef
HA 273w/20	20	Hafeg

With double lines.

Type	Number of lines	Code word
HA 275w/5	5	Hageh
HA 275w/10	10	Hahej
HA 275w/15	15	Hajek
HA 275w/20	20	Hakel

Terminal boxes for central lines.

Type	System	Code word
HR 302	LB	Hubac
HR 304	CB	Hucad
HR 307	Automatic	Hudaf

One terminal box is required for each central line.

Intercommunication telephone instruments for greater number of central connections can be supplied on special request.

Prices furnished on application to any of the Ericsson agencies (see Ericsson News Nr. 4, 1927).