Ericsson News

1931 — English edition | Managing Editor: Woldemar Brummer | No. 4—6.

The Annual General Meeting of Telefonaktiebolaget L. M. Ericsson

The annual general meeting of *Telefonaktiebolaget L. M. Ericsson* took place on May 30th, 1931, in the boardroom of the Swedish Match Company in Stockholm. The net profit for 1930, including profit brought forward from 1929, is 8 755 098: 25 kronor, against 7 169 348: 52 for 1929. On the proposal of the Board, the available profits were distributed as follows:

R 3016

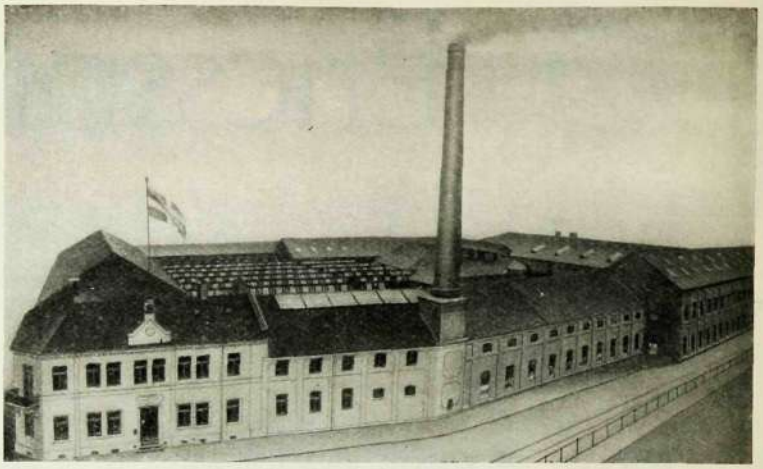
IVAR KREUGER

The following members of the Board were reelected: Consul General Walter Ahlström, Professor Henning Pleijel, Bank Directors Oscar Rydbeck and Helmer Stén, Mr Hemming Johansson and Captain Johan Grönberg, while the following new members were elected: Messrs. Ivar Kreuger, Erik Sjöström and Andrée Meyer, (Paris). All deputy members and auditors were reelected.

Dividend to the shareholders 8 %	Kr. 4 839 904: —
Reserve fund	» 889 582: 44
Carried forward to 1931 Profit and Loss Account	» 3 025 611: 81
	Kr. 8 755 098: 25

News from the Head Office of the Ericsson Concern.— The *Svenska Elektromekaniska Industriaktiebolaget* in Hälsingborg — "Elektromekano" for short — has been merged in the Ericsson concern from the beginning of this year, and is now controlled by Telefonaktiebolaget L. M. Ericsson. "Elektromekano" was formed in 1918 to carry on the business of Hälsingborgs Mekaniska Verkstad, a firm founded towards the end of the 18th century and originally a foundry for the manufacture of principally cooking ranges and other castings. During the subsequent 150 years, the works gradually grew with the progress of engineering. The manufactures in time came to include steam and railway engines, railway trucks, etc. The early technical demands made by industry on the products did not necessitate any specialized work, and, like other engineering workshops, the predecessors of Elektromekano took up one branch of activity after another, and finally also entered the field of electrotechnics. The new prospects and opportunities of developing mechanical engineering thus eventually opened by electricity, and modern qualitative and quantitative demands on the production, compelled a complete reorganization of the plant, and the change-over to solely electromechanical manufactures was carried through by the new company. The original factory buildings were rebuilt and extended. A drawing mill for copper wire was installed, and shortly afterwards supplemented by a modern rolling mill, which is the only one in the North where round copper wire can be rolled to a diameter as small as 6 mm. Its capacity was originally intended for the needs of the company's own factory alone, but considerable quantities are now supplied to other firms also. The production includes practically every kind of electrical power machinery and appliances, and in the course of years a great number of power stations and factories have been provided with complete electrical equipments. This latest acquisition of the Ericsson concern, in addition to others in recent years, constitutes a long stride on the road towards making the concern electrotechnically self-contained. All materials required for its activities can thus now be supplied from its own factories, and contracts for any kind of electrical installations, whether in the sphere of telephones and telegraphs, power supply, wireless, or cable manufacturing of all kinds, can now be undertaken.

In Sweden, sales offices of the "Elektromekano" are established in Stockholm, Gothenburg, Malmö, Karlstad, Nässjö, and Växiö, and the company is in addition represented in Norrland by Elektriska A.-B. Skandia, with sales offices in Umeå, Sundsvall, Gävle and Östersund. The company is also represented in Copenhagen, Oslo, and Helsingfors,



R 2050 The "Elektromekano" factories in Hälsingborg.

as well as in a number of other European and extra-European countries. A view of the Elektromekano factories in Hälsingborg is reproduced here above.

— *Italy.* The office of the finance company *"Società Elettrotelefonia Meridionale"*, Milano has been moved to *Corso del Littorio 3.*

— *Argentina.* The operating companies *Compania Argentina de Teléfonos del Litoral, S. A.* and *Compania Argentina de Teléfonos, S. A.* have been combined, under a joint financial and administrative management, into one firm under the latter name.

— The Contracting Company *Compania Constructora de Teléfonos y Telégrafos, S. A.* has been merged in the *Compania Sudamericana de Teléfonos L. M. Ericsson,* which latter company is thus combining the contracting work of the former with its earlier selling and installing activities.

— *Automatic telephone exchanges on the L. M. Ericsson system,* with 500-line selectors:

The following new automatic exchanges have been opened after January 31st this year:

in *Italy,* in Avellino, Benevento and Salerno.

in *Mexico City,* the Tacubaya exchange, 2000 lines and the Santa Maria exchange, 4000 lines.

in *Argentina,* in San Francisco, La Paz and San Louis. In Santa Fé, the Centro, Nord and Maipú exchanges, working since Dec. 1929 with 1600, 500, and 240 lines respectively, have been extended by 3400, 1000 and 760 lines resp. to 5000, 1500 and 1000 lines. The Santa Fé exchanges thus now aggregate 7500 lines.

In *Esthonia,* the "Hauptamt" automatic exchange in Tallinn (Reval) has been extended by 1000 lines to a total of 2000 lines.

News Items from Elektrisk Bureau A/S, Oslo. This company has received an order for the conversion of the *Kristiansand telephones* to automatic working. The new telephone exchange will be made on the Ericsson automatic telephone system with 500-line selectors for 2000 connected num-

bers, which can be extended up to 5000. Both short and long distance traffic will be automatically transmitted. As technical consultant to the plant acts Mr M. L. Kristiansen, Oslo, Director of Telephones. The alterations of the present exchange premises, which in view of the new system must be fairly extensive, have already begun. The instrument hall will be on the first floor, and on the second floor accomodation will be provided for offices and management. In the yard, new repair shops and store rooms will be fitted up, and a separate house will also be built there for the reserve power station which, in case of a breakdown of the city power supply, will provide the current needed for the telephone system.

— The *Fredriksstad Telephone Co.* has ordered a central exchange, on the Ericsson automatic telephone system, with 500-line selectors, from the Elektrisk Bureau A/S, Oslo, for 2500 connected lines, and an automatic exchange for 200 connected lines for Selbak, a village on the eastern bank of the Glommen about 4 km. from Fredriksstad. The present central exchange has about 1900 connected numbers, plus about 100 party-line subscribers. The 6 district exchanges in the concession area of the company — which beyond Fredriksstad comprises the Onsy, Glommen, Rolvsöy, Kråkeröy, Torsens, and the greater part of the Borge districts — have about 460 subscribers. The whole plant at present comprises c. 2400 subscribers and c. 60 trunk lines to rural exchanges and for long distance traffic. The new Fredriksstad automatic exchange has an estimated average busy hour traffic of 1.2 calls per subscriber at 2-minute unit call. A slightly higher capacity is calculated for a P. B. X.-group included in the new plant. The present average daily traffic in the central exchange is 18000 calls per weekday, but has in exceptional cases exceeded 27000 calls per day when the traffic has been particularly heavy. The Selbak district exchange is planned on the basis of the same traffic data as the central exchange in Fredriksstad. It is the intention of the company gradually to include all the districts in a joint automatic net, when some of the subscribers will be connected direct to the central exchange and the remainder to small automatic exchanges which would then replace the present district exchanges. These small automatic exchanges will be placed at points in the concession area further away from the central exchange than the present district exchanges.

— *The first automatic district exchange of the Norwegian State Telephones* has been supplied, on the order of the Norwegian Board of Telegraphs, by Elektrisk Bureau A/S, Oslo, and is situated at Trykkebygda near Voss. This exchange is built for 50 local lines, of which 40 were connected when the exchange was opened. 3 circuits connect the Trykkebygda exchange to the Voss L. B. Exchange.

— Elektrisk Bureau A/S has received an order for *two automatic district exchanges for the Stavanger telephone net*, one of which will be put up in Buöy and the other in Sola. The former will be made for 120 local subscribers with 10 trunk circuits to and from Stavanger, and can subsequently be extended up to 400 numbers. The Sola exchange is built for 70 local subscribers with 5 lines from and to Stavanger and one line from and to Molde, and can be extended up to 200 lines. Intercommunication is automatic. Including these orders, the Stavanger telephone net has up to the present purchased in all 6 automatic district exchanges — all of which have been supplied by Elektrisk Bureau A/S, Oslo — for a total of 440 numbers. Another two, which the telephone company also intend making automatic, still remain to be built.

— Among automatic telephone exchanges for private use at present being made by Elektrisk Bureau A/S, Oslo, an *automatic P. B. X.-exchange* on the L. M. Ericsson system ordered by the Oslo telephones for the *Oslo Electric Lighting Works* deserves special mention. The station, made for 300 extension lines, has 20 exchange lines and can be enlarged up to respectively 400 and 40 circuits.

— In the beginning of February the first shipment of materials for the *Reykjavik and Hafnarfjördur automatic exchanges* was made, manufactured by Elektrisk Bureau A/S, Oslo, on the Ericsson system with 500-line selectors. The first group of fitters under the command of the engineer, Mr Rüse, left at the same time.

Reminiscences of André. Since the discovery of its remains on White Island, many reminiscences of the André Expedition have been published in the press, and the Editor is in a position to contribute to them with a notice found in "Elektrotechnische Zeitschrift, No. 25" of June 18th, 1896, signed H. J. This notice will be of special interest to our readers, as it states that the expedition carried complete equipment for telephonic communication between the balloon and the ground. We quote below a translation of this notice and add that of these materials, the telephone sets were manufactured by L. M. Ericsson, and the cable and wire by Max Sieverts Cable Works. The equipment was naturally not wireless, the nowadays usual and only possible means of intercommunication between airmen and the ground, but may nevertheless be designated the first aero telephone in the history of aeronautics.

"*A telephone line in the Far North.* The telephone plant which will shortly be built on the Spitzbergen island in the Arctic Sea will apparently be the most northerly telephone plant in the world. The Swedish balloon expedition to the Pole led by Mr André, which left Gothenburg in the beginning of this month by the s. s. Virgo, carries 1500 m. twin conductor submarine

cable and 1500 m. double lacquer-insulated wire as well as all requisites for putting up the line. The intention is to establish communication between the men preparing and filling the balloon and the steamer, and it is assumed that the anchorage will be at the most 1500 m. from the edge of the icefield, and that the work place also will be at most 1500 m. from this edge. The submarine cable will be used for the first distance, and the lacquered wire, which will be laid on the ice, for the second. But when the balloon has ascended, the passengers will still be in communication with the ground, i. e. with the s. s. Virgo. Wind and ice conditions permitting, the balloon will at first be used as a captive balloon — fixed to the steamer — and during this time communication between the balloon and the ship will be maintained by telephone. The line, which naturally will be made as a double conductor, will consist of a cable particularly suitable for this purpose, with three twisted insulated strands, two of which are made of copper to serve as conductors and the third of iron to give the cable greater strength. Each copper strand consists of three 0.5 mm. wires, and the iron strand of seven, also of 0.5 mm. diameter. The distance between the balloon and the ship is assumed to be about 200 m., and this cable will only weigh about 12 kg. while the breaking strain of the iron is about 120 kg.

H. J."

R 3015

Coppa Ericsson. An illustration is here given of the cup, presented by Swedes engaged in the Ericsson concern in Italy and in Sweden, to be competed for by the 6-m. class at the international regatta at Genoa this year. This was the fourth time that the Swedes, on the initiative of Consul General Elov Kihlgren, contributed a prize to this competition. The first year, 1928, the cup was won by Sweden, the next by Denmark, and last year by Spain. This year the prize went to Italy, won by the yacht Rosita.

Coppa Ericsson 1928—1931.

R 3012

1928
"Windy", Sweden.

R 3013

1929
"Dana", Denmark.

R 3014

1930
"Lau", Spain.

R 3015

1931
"Rosita", Italy.

News from Holland. The Amsterdam agents of the Ericsson concern, Koopman & Co., have forwarded to the Editor a cutting from the paper "Het Nieuws van den Dag", reprinted in translation below:

"The new age demands modernizing.

The little township of *Lembang*, 15 km. north of Bandoeng, has the honour of possessing the first automatic telephone net in the Dutch East Indies. In Europe, the automatic telephone is not new. In Holland — in the large cities — automatic telephones have been introduced long ago, and experience has proved their usefulness and convenience.

The great distances in the Dutch East Indies have made the authorities doubt the practicability of this system.

The L. M. Ericsson factories in Stockholm, represented here by "N. V. Indisch Kantoor van Koopman & Co.", being of the opinion that the problem of overcoming the obstacles, even as regards the distances, is solved, proposed to the telephone authorities that some telephone net should be made automatic, and offered to lend the equipment necessary for a trial.

The telephone authorities agreed and Lembang, a district easily accessible from Bandoeng (the Head Office of the Dutch East Indian telephones is in Bandoeng), was selected for the experiment, as very lively telephonic communication exists between these places.

The Lembang telephone net was altered, and from January 4th the automatic telephone is functioning there.

The automatic exchange is of the type OL 550, equipped for 50 connexions in Lembang and a few trunk lines to Bandoeng.

A much greater number of telephone sets and trunk lines can, however, be served by this installation.

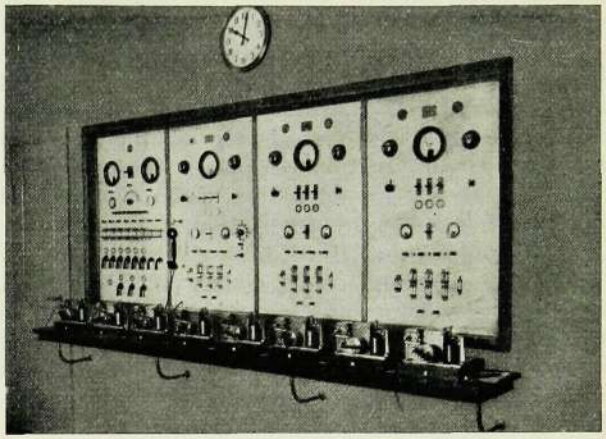
Intercommunication between not only the local stations in Lembang, but also between them and the Bandoeng exchange, is automatic by means of a dial manipulated by the subscriber in Lembang. Very quickly, simply by dialling the digit 0, connexion is obtained to the operator in Bandoeng, who will then put the call through in Bandoeng.

When telephoning from Bandoeng to Lembang, the Bandoeng operator dials the number desired in Lembang, which is immediately called automtically without further manipulation.

For trunk calls, the operator can by means of a key interrupt a conversation in for instance Lembang, to inform the subscriber of a trunk call arriving. A simple manipulation breaks the Lembang call to admit the trunk call.

Mr. H. Keller, Head of the Bandoeng telephones, and his staff manager, Mr L. F. Bekker, have for several weeks carefully controlled the new installation. This control proved the L. M. Ericsson automatic telephone to fulfil all expectations."

The new Kungsholmen Fire Station in Stockholm. The latest and most up to date of the Stockholm Fire Stations, situated in the corner of Kronobergsgatan and Hantverkaregatan, was opened on the 17th of January last. The alarm apparatus in this, as in the other Stockholm Fire Stations, is supplied by Telefonaktiebolaget L. M. Ericsson. It consist of three panels for connexion of fire-alarm box loops, three loops to each panel, and a fourth panel for battery charging, resistance and insulation measurements on the lines, station alarm, etc.



R 3010 The Alarm Board in the Kungsholmen Fire Station.

Each panel is equipped with two Morse instruments for recording incoming fire alarms. A further two Morse sets, connected to two control lines from the Bromma Fire Station, are also provided. They record all alarm signals arriving in the Bromma Fire Station. All alarm signals arriving in the Kungsholmen Fire Station (from Bromma also) are transmitted by control lines to the Johannes Fire Station, the Main Stockholm Station, where they are also recorded.

The panel equipment is of the standard L. M. Ericsson type for large fire alarm boards. The fire-alarm box loop lines are provided with supervisory circuit, and various both visual and audible signals are automatically received for various line faults, e. g. breaks, leakages, or simultaneous break and leakage, or any other disturbances occurring in any of the loops.

All operating and reserve batteries are connected to the fourth panel by automatic switches. In the upper part of the panel there is a lamp for control of the charging current.

Below this lamp, a voltmeter with switch for measuring battery voltage, line resistance, and insulation to earth is placed, as well as ammeters for measuring the battery charging current. Below the measuring instruments are push-button switches for connecting the different lines to the measuring device for insulation and resistance.

Three switches at the bottom of the panel serve for giving the local alarm in the station in case of fires, chimneys on fire, and requisitions for the ambulance.

As this Fire Brigade turns out into the heavily trafficked Hantverkaregatan, large gongs and signal lights have been mounted on two tramway standards to avoid accidents. When the Fire Station is alarmed, these lights show red in both directions of Hantverkaregatan for a certain time, while the gongs ring.

For control of the time taken in turning out, two split-second clocks are mounted on the board, in circuit with contacts on the fire engines. The second-hands of these clocks are started when an alarm is received in the station. When a fire-engine turns out, the clock connected to its stops and thus indicates the time taken for turning out.

The station alarm board is also equipped with a selector installation for telephone communication with the various fire-alarm box, and a switchboard for local telephone communication.

Note: On request, the Editor, Telefonaktiebolaget L. M. Ericsson, Kungsgatan 33, 2nd floor, Stockholm, will forward to anybody interested, as fas as the supply permits, a pamphlet describing in detail The Ericsson Fire Alarm system for Towns and large Communities. The number of the pamphlet, B 19, should be stated in the order.

News Items from Spain. An article published in "La Libertad" on telephony in Spain deals, among other matter, with conditions in this respect in the province Guipúzcoa, where the telephone nets, both in the capital San Sebastián with surroundings and in the rural districts, are worked by the respective urban and rural authorities. The rural net is largely, and that of San Sebastián completely, on the Ericsson automatic system. The outside net in the capital is wholly laid underground. It should be noted that this part of Spain was the first to adopt the automatic system, and San Sebastián the first Spanish city to introduce underground telephone system. These exchanges hae been working since June 1926.

The L. M. Ericsson Review for 1926 contains, in No. 5—6, p. 50, the history, and in No. 7—8, p. 93 a technical description of these plants. A reprint in English (B 14E), or in Spanish (B 14S) of the latter can be obtained by our readers, as far as the supply lasts, and may be ordered from the Editor, Telefonaktiebolaget L. M. Ericsson, Kungsgatan 33, 2nd floor, Stockholm. In the article in "La Libertad" mentioned above, the excellence of both the functioning and workmanship of the materials used, and not least the pleasing appearance of the telephone instruments, are freely acknowledged, and above all the comparatively moderate price of the plant, on account of which the administration has been able to maintain the lowest telephone tariffs in Spain. The article in the L. M. Ericsson Review No. 5—6, p. 50, 1926, contains a comparison, based on concrete facts, between the telephone subscriptions in Guipúzcoa and in other parts of Spain. According to the article in "La Libertad", the cost to a private subscriber is 10 pesetas per month, without any extra charge for the inter-group traffic, which comprises the whole province. The newspaper ends by saying that Guipúzcoa is proud of the telephone net, proud of its material and technical finish, and of its staff, who are satisfied with their work and doing this well under the leadership of an expert technical and administrative management.

News Items from Hungary. Last year the "Ericsson" Ungarische Elektrizitäts A.-G. took part in the Intercommunication Exhibition in Poznań (Posen) and was awarded a "Grand Prix" for its exhibits. The Editor is now able to show (see page 7) photographs of the presentation medal, bearing the inscription "Za chlvbne wyniki pracy" ("For excellent workmanship"), and a facsimile of the diploma, reading in translation:

"The Republic of Poland, Minister of Communications — Diploma for Government Awards at the 1930 International Tourist- and Communication Exhibition in Poland.

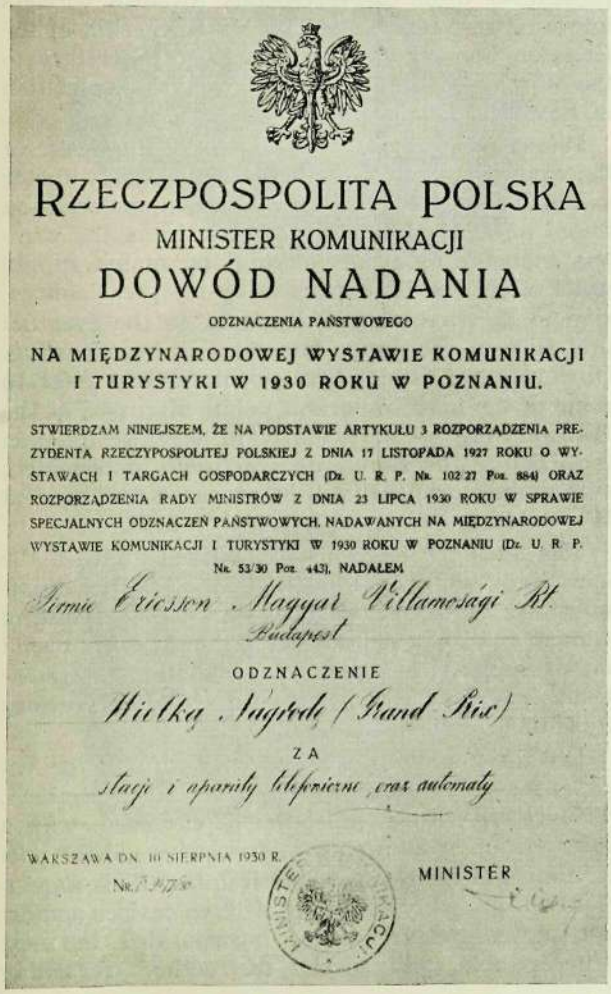
This is to certify that, by virtue of article 3 of the Regulations of the President of the Republic of Poland of November 17th 1927 regarding Exhibitions and Fairs (Polish Statute Book No. 102/27 § 884), and the Regulations of the Ministerial Council of July 23th 1930 regarding special Government Awards granted at the International Communication and Tourist Exhibition in Poland (Polish Statute Book No. 53/30 § 443), I have awarded to the firm "Ericsson Magyar Villamossagi R. T., Budapest, the "Grand prix" for Telephone Exchanges and Instruments, and for Automatic Exchanges, Warszawa, August 10th, 1930 — No. 9477/30 — Minister Kühn."

By kind permission of the Royal Hungarian Post Office, space was given in its pavilion to the exhibits of the Hungarian Ericsson Company.

The Commission on Elcctrical Installation Problems (IFK) held its 11th meeting in Stockholm on May 28th—June 2nd this year. This being the first time that this commission and its work is referred to in this journal, it may be of interest to begin the account of the above meeting with a short survey of its origin, object and work. The commission was formed in 1926, but the original idea sprung from a series of deliberations, begun as early as 1923, between the Dutch Electrical Association and its German counterpart. These deliberations were occasioned by the difficulties caused to electricity works in both countries by the unsatisfactory quality of installation materials. At a meeting of the Dutch Electrical Association

in June 1923, when this question was dealt with in lectures with demonstrations of new models, it was shown that the manufacture of perfectly safe installation materials should meet with no difficulties. Such should rather be looked for in the lack of some body to determine the types to be used in each particular instance. Such a body must be organized in some form or other and, in view of the international character of the electrotechnical industry, this must be done on an international basis. Thus arose "The Commission on Electrical Installation" — "IFK", for short, from the German designation of this body: "*I*nstallations*f*ragen-*k*ommission". Its cmposition gradually became international, as the German and Dutch electricity associations first invited the corresponding Scandinavian organizations, and later also similar bodies in other European countries, to joint conferences to which experts from industrial and testing institutions were also invited. The Commission met for the first time in Berlin in the spring of 1926, when Holland, Norway, Sweden and Germany were represented. Meetings have subsequently been held every autumn and spring, alternately in different countries. In the autumn of 1926 Denmark, Czechoslovakia and Austria joined, in 1927 Switzerland, and in 1930 Belgium, Finland, and France. Hungary sent a representative for the first time this year. In all, 12 European countries are thus now represented on the IFK. In an article in "ERA" of May 15th this year on "The Work of the IFK", Mr R. Holmer gives a resumé of the objects and work of the commission in the following words:

"The commission fulfils a double object: to improve the properties of the materials, and to promote acceptance of like demands in this respect in the different countries. Its activities embrace both installation materials and such power-consuming appliances as are ordinarily used in domestic installations and consequently employed and manipulated by laymen. Electricity works have every reason to advocate this standardization, as these materials are directly connected to their network of lines, and it is therefore to their interest to assist their non-expert subscribers with advice and information, and above all to see that satisfactory materials are available. So far, the commission has been dealing with the ordinary kinds of installation materials, and also with mains supply wireless sets. The reason why this somewhat different kind of apparatus has already been taken up is that wireless progress is extremely rapid and that a proposal from the IFK ought to be submitted



RZECZPOSPOLITA POLSKA

MINISTER KOMUNIKACJI

DOWÓD NADANIA

ODZNACZENIA PAŃSTWOWEGO

NA MIĘDZYNARODOWEJ WYSTAWIE KOMUNIKACJI I TURYSTYKI W 1930 ROKU W POZNANIU.

STWIERDZAM NINIEJSZEM, ŻE NA PODSTAWIE ARTYKUŁU 3 ROZPORZĄDZENIA PREZYDENTA RZECZYPOSPOLITEJ POLSKIEJ Z DNIA 17 LISTOPADA 1927 ROKU O WYSTAWACH I TARGACH GOSPODARCZYCH (Dz. U. R. P. Nr. 102-27 Poz. 884) ORAZ ROZPORZĄDZENIA RADY MINISTRÓW Z DNIA 23 LIPCA 1930 ROKU W SPRAWIE SPECJALNYCH ODZNACZEŃ PAŃSTWOWYCH, NADAWANYCH NA MIĘDZYNARODOWEJ WYSTAWIE KOMUNIKACJI I TURYSTYKI W 1930 ROKU W POZNANIU (Dz. U. R. P. Nr. 53/30 Poz. 443), NADAŁEM

Firmie Ericsson Magyar Villamossági Rt. Budapest

ODZNACZENIE

Wielką Nagrodę (Grand Prix)

ZA

stacji i aparaty telefoniczne oraz automaty

WARSZAWA DN. 10 SIERPNIA 1930 R.

Nr. [illegible]

MINISTER

R 3008

R 3007

The "Grand Prix" received by the Hungarian Ericsson Company at the Poznań Exhibition.

as soon as possible, before manufacturing has settled into too pronounced national grooves and regulations. The program also includes heating apparatus of various kinds, vacuum cleaners, and other electrical household appliances."

Those of our readers who desire more detailed information regarding IFK are referred to the journal "ERA" of May 15th this year which — apart from R. Holmer's article (p. 89) — contains an article (p. 87) by Professor I. C. van Staveren, chairman of the commission, on "Improvement of electrical installation materials — an object for international cooperation".

The above extract from Mr Holmer's article indicates that, by virtue of its present composition, the Ericsson Concern has every reason to follow the deliberations of the commission with attention, and to note its decisions. These decisions are recorded in the minutes of the meetings, and published. Among the companies affiliated to the Ericsson Concern which should especially benefit from the work of the commission might be mentioned Sieverts Cable Works, Elektromekano, Svenska Radioaktiebolaget, Aktiebolaget Alpha, and Elektrisk Bureau A/S, Oslo, as well as many of the selling and contracting companies of the Concern which, beside telephone and signal installations, also supply and install power machinery.

At the last meeting of the commission in Stockholm, one day was devoted to a discussion on the labours of the Inspector, the uniform application of testing instructions, etc. Apart from representatives of Swedish and foreign industries, 25 persons took part in the meeting. Among other questions discussed at the meeting may be mentioned fuses, switches, and ordinary wall plugs. Standards for rubber cable had been prepared by a sub-committee, in which special attention had been given to the properties of rubber and a method of testing this by artificial ageing. A proposal for automatic safety cut outs was discussed in Berlin last year, and a second revised edition of this was now presented. Finally, a special commission was appointed to consider standards for the length of life and the power consumption of electric lamps. For further details, interested persons are refered to the journal "ERA" of June 15th this year.

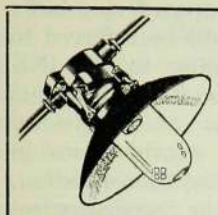
Standards for mains supply wireless receiving sets were proposed. A further account will here be given of this part of the proceedings, as dealing with a question of immediate interest to the Concern in general and Svenska Radioaktiebolaget in particular. The reason why IFK has devoted attention to the products of this latest of the many branches of electrical industry is no doubt the great popularity of wireless sets and recently also the mains supply gramophone amplifiers. Apart from pure light-fittings, no single group of domestic electrical appliances connected to the supply lines of the electricity works can show a larger number of apparatuses than that comprising wireless and amplifying sets. As far as power consumption is concerned, the wireless sets are, however, considerably outdistanced by the other groups of domestic appliances, e. g. vacuum cleaners and irons. Chiefly because the wireless sets originally were quite independent of the supply lines as a source of power, the public may not be fully aware of the altered conditions with regard to risks of fires and accidents caused by these sets being connected to the mains or by their power being increased. It is therefore of the greatest importance both to producers and consumers of wireless sets that the question of their design and construction as regards risks of fire or accidents will now be laid before a forum which has long collected experiences of all the appliances usually connected to the residential electric light supply. But in the interests of the electricity works also, wireless sets should be so designed that they damage neither consumers of electrical current nor the plant.

When this point came up before the IFK, a proposal for standards for mains supply wireless units, prepared by Holland on the basis of a preliminary discussion at an IFK meeting in Copenhagen in October 1930, was submitted. At the Stockholm meeting the wireless industry was given an opportunity to send some representatives — Messrs van Liis and Tromp for Philips, and Mr Lock for Telefunken — while the specifically Swedish wireless interests were represented by Mr H. Sterky, of the Ericsson Concern, in his capacity of Secretary to the Wireless Committee of the Swedish Association of Electrical Engineers.

When this proposal was discussed, the desire of the electricity works to increase the safety factor as much as possible was on more than one occasion found to be in conflict with the desire of the wireless industry to avoid making the mains supply units unnecessarily expensive by too great concession to the first named demands, to the eventual prejudice of the public interested in broadcasting. Obviously we cannot here do more than refer to some of the most important points discussed at the IFK meeting — particularly in view of the fact that, before the standards are finally determined, still another proposal will be prepared for the next IFK meeting in Prague in October next.

The testing voltage has been fixed at twice the operating voltage + 1500 volt A. C., with a minimum of 2000 volt (RMS values). This testing voltage shall for at least one minute be impressed on all the parts for which the regulations prescribe tests. The voltage test will be made after previous moisture treatment.

Certain maximum *excess temperatures* for various materials and wireless parts are prescribed. These temperatures must not be exceeded, with a tolerance of + 20 per cent., even when all the pole terminals of the set are shortcircuited. This regulation will probably lead to protective devices against excess temperature being incorporated in most wireless sets, and special instructions regarding



Sievert's Gebe Materials

Exclude:

Breakdowns
Accidents
Risks of Fire

Low maintenance costs.

Connecting Box, Switch and Lamp-holder combined in one unit:

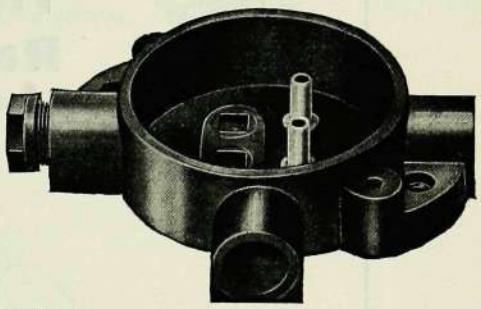
ALL IN ONE.

Sieverts Kabelverk
SUNDBYBERG — SWEDEN

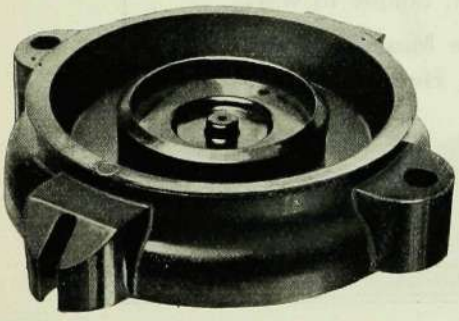
Bakelite Parts

Material-testing Machines — Low voltage Condensers.

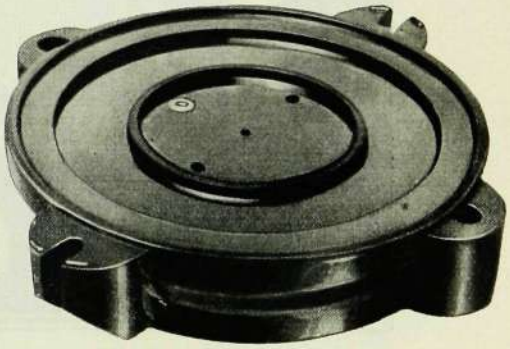
Aktiebolaget Alpha
SUNDBYBERG — SWEDEN



Connecting boxes with cable intakes.



R 2011



R 2012

Base-plate for lampsocket.

these safeguards are therefore included in the regulations.

All connecting devices on the outside of the apparatuses, and all inside parts accessible when working, which carry a higher voltage than 42 volts to earth must be *protected from being touched* in the same way as prescribed for sundry other domestic appliances.

The highest potential to earth permitted in a wireless set is, according to the proposal, 1000 volt (RMS value).

Loud speakers, electric sound-boxes etc. must in certain cases, if they carry a certain specified, high voltage to earth or a current larger than 20 mA, (RMS) values, be regarded, protected, insulated, and tested as high tension appliances.

When approved by IFK, the proposed standards for mains supply wireless units will be referred to the respective associations belonging to the IFK for introduction in the various countries. For this purpose, the Swedish Association of Electricity Works will cooperate with other organizations in the country interested in advancing this question. It is hoped that by this procedure the Swedish wireless industry's vitality and desire of progress will not be checked by any too strict safety restrictions in these standards.

At the invitation of Czechoslovakia, the next meeting of the IFK will be held next autumn in Prague, and the meeting in the spring of 1932 has already been booked for Helsingfors by Finland.

The Svenska Radioaktiebolaget

Stockholm **Alströmergatan 12**

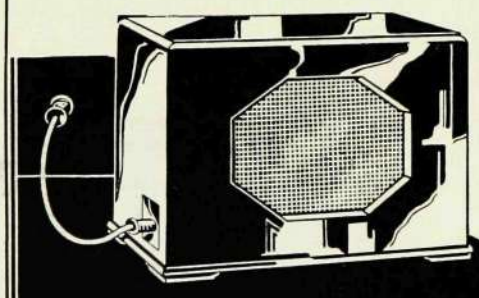
All mains Radiola

wireless receiving sets

for A.C. and D.C. supply lines, with jack for Gramophone Pick-up.

First class sound-reproduction. Simple to work.

The Musical Instrument of the Home.



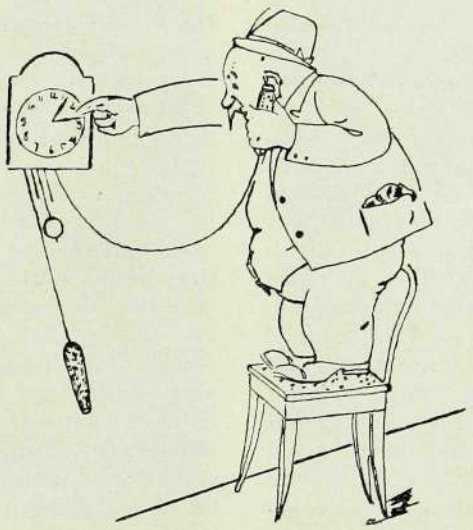
RADIOLA

Time-giving to Telephone Subscribers. A notice in "Il Giornale d'Italia" calls attention to the difficulty for subscribers to obtain the correct time when a telephone system has been made automatic, a matter which could earlier readily be attended to by the operators in manual exchanges. A clock designed in America for this purpose is also mentioned, which is put up in the exchange and will, on certain manipulations of the dial, send out a time signal to the subscriber. It may be of interest to note how the time-giving problem is solved in Sweden. In small manual exchanges, the time is given by the operator on duty on the request of the subscriber, and in medium sized exchanges by clerical assistants. In our large manual exchanges, where the traffic is heavy enough for the call service to give full occupation to the operators who — to retain good replying times — consequently cannot be charged with extra duties, and in our large automatic exchanges, special *Information Bureaux* are established, which for a small charge each time will accept certain special commissions for the subscribers. Such services include re-directing incoming calls to some other telephone number, supplying information to a calling party regarding the absence, address, and return of a subscriber, noting the telephone number of any person ringing up, and receiving short messages for an absent subscriber, etc., as well as wakening or giving the time to a subscriber.

The Table below shows the work of the Stockholm Information Bureau during the years 1925—1930.

Year	Re-directions, no. of days connected	Call answering, no. of days connected	Wakening, no. of times	Time-giving no. of times	Total no. of charge cards
1925	69 206	65 393	54 764	54 728	134 599
1926	66 762	73 307	62 157	62 326	140 069
1927	72 132	77 935	66 417	69 142	150 067
1928	75 668	78 295	72 682	73 723	153 963
1929	82 458	83 533	79 035	77 163	180 608
1930	87 807	91 957	92 003	84 965	205 208

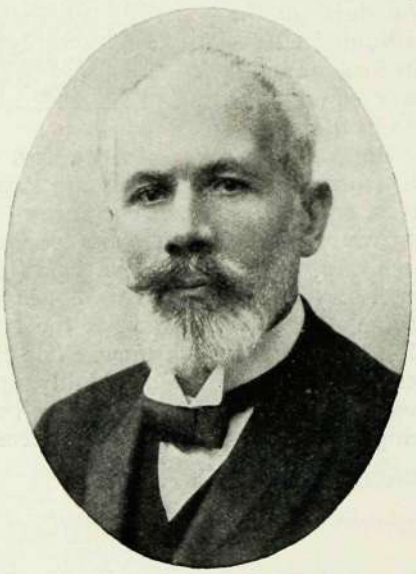
As we see, the calls on all branches of this service are steadily increasing, and the number of charge cards (one card often contains charges for the same service during a considerable time) have in five years increased from 134 599 to 205 208, or by 52 per cent. The gross receipts from the work of the Bureau in 1930 amounted to 138 000 kronor. The Information Bureau is an indispensable, highly appreciated, and very cheap help to many subscribers, particularly to doctors and small business offices.



D-N THOSE OPERATORS!
I've dialled at least twenty times, and there's not a sign of a reply!
(Gaudeamus.)

†

L. Lundqvist



On May 30th the mortal remains of Mr Leonard Lundqvist were committed to their last resting place in the North Cemetery Crematory. From his earliest youth — he died at the age of 67 — the deceased had been attached to the Stockholm telephones. In 1883, when Mr H. T. T. Cedergren founded the Stockholms Allmänna Telefonaktiebolag and built its first telephone exchange, Lundqvist was engaged as Technical Exchange Manager, in which capacity he remained until 1908, when the lines were transferred to Aktiebolaget Stockholmstelefon, a subsidiary company of the former. He retained the same office in the new company, and was also transferred to the service of the Royal Telegraph Board as Technical Manager of the Stockholm and District Telephone Exchanges when in 1918 the Government acquired the Stockholm Telephone Company and amalgamated it with the Government telephones. In 1929, Lundqvist retired on a Government pension at the age of 65, but his unimpaired energy and vitality soon tempted him to abandon his forced inactivity for new labours. His wide experience, highly appreciated in expert circles, soon gave him an opportunity of devoting his talents to the rapidly growing Ericsson Company. He was then engaged as a Controller at the Ericsson Telephone factory in Stockholm. Unfortunately, the company was not for long permitted to benefit from his wide experience. After two years service, death snatched him away. L. Lundqvist may rightly be considered one of the pioneers of Swedish telephony. The 500 or so subscribers entrusted to his care with the first Stockholm Allmänna exchange rapidly increased with time, and at the time of his retirement exceeded the first hundred thousand by about twenty thousand. With the growth of the lines and the successive perfection of telephony, Lundqvist's experience and knowledge increased, and as the Stockholm telephone net always has been one of the largest, at times *the* largest, of contemporary systems, he remained in the front rank of leading telephone mechanics of the world. When, at the beginning of this century, Allmänna Telefonbolaget extended its activity abroad, it was Lundqvist's task to train for their job those engineers and fitters who later by their excellent work and diligence brought honour to Sweden and maintained the position of their native country as one of the foremost in the sphere of telephony.

Kurt Lindberg, Boktryckeriaktiebolag, Stockholm 1931.