



WORLD-RADIO

DOMINION & FOREIGN PROGRAMMES

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Two Pence.

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WORLD-RADIO

Station Identification Panel

MILAN (Italy), 1MI

Wavelength: 549.3 m.

Frequency: 546 kc. Power: 7 kw.

Approximate Distance from London:
560 m.

Preliminary Signal: Tuning note.

Call: "Ente Italiano Audizioni Radio-
foniche Stazione di Milano."

Interval Calls: On conclusion of item,
"Stazione di Milano." Before each
item, "Stazione Radiofonica di
Milano."

Woman announcer.

Closes down with the words: "Fine
della trasmissione" followed by
Fascist Hymn, National Anthem,
and "Buona notte a tutti" ("Good
night, everybody").

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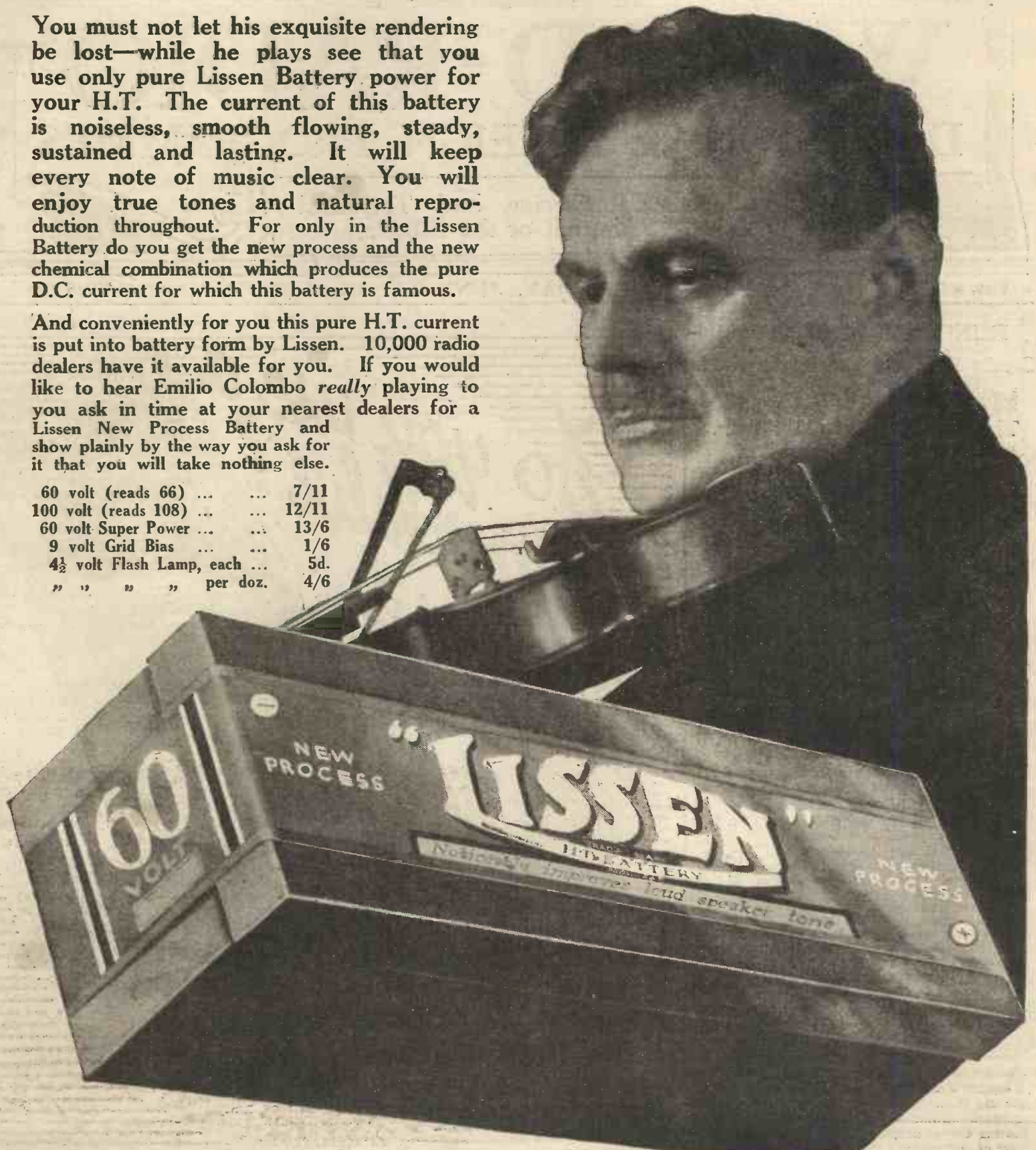
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WORLD-RADIO

Vol. VI. No. 150.

FRIDAY, JUNE 8, 1928.

Two Pence.

The Czecho-Slovakian Broadcasting Organisation.—II.

By ARTHUR G. ALLAN

Brünn Station.

THE station in Brünn is more than just a relay. Brünn (Brno) is the capital of that part of Czecho-Slovakia called Moravia, and, although itself mainly an industrial town, the surrounding districts are more of an agricultural nature. It is the second city after Prague, with a university, three theatres, a technical college, and a conservatoire, and has ample possibilities for outside broadcasts. But, in contrast to Prague, it does not make such free use of the facilities for relaying from the outside

is to be transmitted. In an adjacent room, separated from the studio by a glass wall, the visitors to the exhibition will be in a position to observe the transmitting of programmes and to listen with headphones.

The Bratislava Station

Bratislava (formerly called Pressburg), picturesquely situated on the Danube and about two hours' tram journey from Vienna, has a transmitter of only 0.5 kw. aerial energy. The Engineer-in-Charge showed me what

there was to see: a small studio on the banks of the Danube, the amplifiers and the transmitter. Owing to the importance and position of Bratislava it is shortly to receive a much more powerful station; in fact, I was told, a twin to Daventry Experimental. There will then be three high-power transmitters along the Danube—one in Vienna, one in Bratislava and one in Budapest.

In spite of the tiny studio, Bratislava specialises in typical Slovakian programmes; also, the language chiefly used is Slovakian, which is really nothing more than distorted Czech, at least to my ears. In reality the languages, especially when written, are practically the same. A new studio at Bratislava will be located in the new post-office building which will be finished at the end of this year.

Bratislava relays a good portion of the Prague programmes as the number of listeners in its own district, owing to the extreme low power of the transmitter, is only a little above 7,000. The relays are at present effected by means of landline, on which there is a certain amount of distortion. Still, the new telephone cable Prague-Brünn-Bratislava will soon have been adapted to transmitting music, and then this obstacle will be definitely overcome.

Kosice Station

The Kosice station is meant to cover the easterly corner of Czecho-Slovakia, together with that part inhabited by the Ruthenians. A new building is under construction here which will contain, together with other postal offices, the studios and control-room. At present Kosice transmits only for a limited number of hours daily.

(Contd. in next col.)

Radio in the Latin Quarter

The Latin Quarter of Paris and the region round about draws the student-stranger from all quarters of the world. Here the meeting of the races expresses itself in an internationalism which accepts a common culture, but at the same time asserts the distinctive character of each particular people.

In this interplay between what is universal and what is individual lies much of the charm of the place to the observer. Each nation, for instance, has established its own restaurant. So, if you will, you can eat with Chinese, Greeks, Poles, Russians or Italians, according to your tastes and theirs, but in the medley of tongues which you will hear, there will always be American. A pretty commentary it is on the old-world of the nineteenth century and the new world of the post-War period, and in the midst of all the clashings and contrasts comes Radio.

One day I went to lunch in a small Polish café in a narrow side street. The menu was in Polish, and the girls who waited upon me wore national dress. Outside, not far away, was the busy hum of the traffic of the French capital, but, inside, the decorations and pictures on the walls took me away to Warsaw and Cracow. Then came a demand for music. I listened. The tone was perfect, the singing was distinct; I caught the words of the song, and I understood. A girl was singing in English; it was the Daventry programme transmitted through an excellent loud speaker by means of a well-tuned wireless set.

E. J. P.

Broadcasting is exceedingly well organised in Czecho-Slovakia, and though the number of listeners is only increasing slowly, this is due to the low power of some of the stations (except Prague) and to the awkward geographical formation of the country.

Although all the Czecho-Slovak stations belong to, and are controlled by, the Broadcasting Company—the Radiojournal, Prague, that is—the transmitting apparatus proper belongs to the Department of Posts and Telegraphs, with its central seat in Prague.



House of Parliament, Prague

halls. Naturally, Prague commands better artists.

The studios at Brünn are efficient and of recent date, but, again, are only considered makeshifts until the completion of a projected new building. The transmitter in Brünn is about four miles from the town in Komárov. The aerial masts are of steel and are 180 ft. high. I was sorry I could not view it personally, but time did not permit.

I had a very interesting talk with Mr. Simacek, the Director of Programmes for Brünn, who is also *régisser* of the central Czech theatres in Brünn. It is, perhaps, owing to his influence that the Brünn station transmits from time to time plays so well adapted to studio production. One of the most notable was *R.U.R.* Evenings devoted to primitive folk music are another speciality in the Brünn programme.

The actual town of Brünn has partly a German-speaking population, which accounts for the time devoted in the programmes to German speech and purely German items.

The Brünn station will shortly be increased in power to 12 kw. in the aerial. At the present time there is in the city a great exhibition of contemporary Czecho-Slovakian culture and Radiojournal is exhibiting in a large pavilion, the principal object of which is to enable visitors to the exhibition to become acquainted with the technical equipment of a studio and of a broadcasting service in general. The most interesting part of the pavilion is the well-equipped studio, from which the last part of the daily programme



Brünn Studio: the cast for "R.U.R.," by K. Capek.

Via Ether

ALTHOUGH I am quite aware that, with the vagaries of the British climate, by the time these notes are in print we may have again sideslipped into winter, and that any reference to finer weather is always a dangerous course to adopt, the advent of sunny days and long evenings undoubtedly has induced most of the Continental stations to push forward their summer programmes. They are seeking entertainments of a lighter nature, and of the numerous concerts advertised by the studios you will find that many are taken from outside sources—from parks, from public squares and from open-air restaurants. If we add to these the excellent operatic performances down for transmission, we are able to compile in one evening's tour all the elements of a satisfactorily varied programme.

At 8.30 p.m. to-night (Friday, June 8) Vienna offers us a novelty in the relay, from the Urania Picture Palace in that city, of a talking film; it will be interesting to observe to what degree of clarity speech is reproduced. At the same hour we may turn to Dublin for an unusual broadcast—a concert by the Choir of the Convent of Sisters of the Holy Faith, from Glasnevin. Radio Schaerbeek, the small private transmitter at Brussels, honours us at 8.30 p.m. with a Ketelbey festival, which will include, I feel sure, *In a Monastery Garden*, or the Market of the Persian variety. To PTT Paris, at 9 p.m., we may turn for a gala Russian festival under the direction of General de Gorienko, and at 10 p.m. to the same station or to the Eiffel Tower, for a broadcast of a vocal and orchestral entertainment relayed from the Grand Palais du Salon des Artistes Décorateurs, in which an exhibition is now being held. At Naples at 8.50 p.m. we find *Dejanice*, an opera by Alfredo Catalani, an Italian composer whose *Loreley* and *La Wally* are better known. As a pupil of his father, a church organist, he wrote a Mass when only fourteen years of age! At 9.10 p.m. Radio Lyon presents Puccini's *Bohème*, and as a pleasant finish to the day, we might do worse than tune in to the new Budapest station for dance music from its Hotel Ritz.

If, by chance, you should find yourselves in the neighbourhood of the wireless set to-morrow (Saturday, June 9), at 3 p.m., try for PTT or Eiffel Tower, Paris, both of which, in conjunction with the official transmitters, will be broadcasting the ceremony in connection with the laying of the foundation stone of the new École Polytechnique in the French capital. You may hear speeches by President Doumergue, Marshal Foch, and other celebrities, as well as an excellent concert by the Band of the 40th Infantry Regiment and a running commentary by "le Parleur Inconnu." On the same evening at 8.30 p.m. Berlin must be our objective, for at that hour it will relay from the Great Hall of the Kursaal at Swinemünde, a general rehearsal of Glück's two-act comic opera *Der Letzte Rausch* (L'Ivrogne Corrigé), of which the English title might be "The Last Binge"—and probably isn't! It is one of the later works of Glück, but produced at Paris only in 1921, with a revival to its credit in 1923. Both from Breslau and

from Frankfurt-on-Main at 8 p.m. we are to be given stage performances of Wagner's opera *The Flying Dutchman*.

With Helsingfors now within our reach via Lahti, at 6.30 p.m. it may be worth our while to listen to an act of Kalman's operetta *The Autumn Manœuvres*, or to Prague at 6.55 p.m. for a performance of Smetana's work *The Two Widows*. Again this evening, I should advise a visit to Budapest at 9.20 p.m. as it is the first broadcast, so far as I can recall, of a military concert relayed from the Parc Anglais in that capital. Finally, Madrid, for its late transmission at 10.15 p.m. has chosen the tragic opera *La Dolorès*, a popular work by Tomas Breton, which scored a success in the Spanish capital on its first night in 1895. In this score the composer introduces the famous Aragonese *Jota*, as well as many other folk songs of Iberic origin.

During the last few days many queries have reached *World-Radio* in respect to a transmission which included old marching songs, popular during the Great War. But few of the listeners appear to have recognised the well-known gramophone record made of the Wembley Military Tattoo, and have remained under the impression that it was their luck to assist at some military manœuvres in the course of which the dulcet tones of a sergeant-major were distinctly prominent in the foreground. On two occasions at least these records were broadcast by Huizen, and by Copenhagen, and the same popular transmission at other times has been made by other stations.

On Sunday, June 10, however, if you wish to hear the real thing, twirl your condensers until you pick up Motala, at 1.20 p.m., for from Stockholm you are to be given a relay of the Changing of the Guard at the Royal Palace, to be followed by an open-air concert by a regimental band. The Swedish stations will take us to the principal parks for an *al fresco* programme, on this day at 8.45 p.m., and again on Tuesday next (June 12) at 8 p.m. Sunday (June 10) also brings us, at 6 p.m. from Leipzig, von Weber's three-act romantic opera *Euryanthe*, as performed at the National Theatre at Weimar; at 9 p.m., we should return to this station for an entertainment of folk songs contributed by Russian University students accompanied by a Balalaika orchestra. Rossini's comic opera, *The Barber of Seville*, will constitute the main feature of Hilversum's evening programme; it is timed to begin at 7.50 p.m. Munich, too, at 7.35 p.m., effects a relay from its National Theatre of Offenbach's *Tales of Hoffmann*, and at 10.30 p.m. offers us a concert by a genuine Hungarian orchestra—now becoming rare—in which the leader advertises himself as "The Violin King with the Stradivarius"!

Mention of Munich prompts me to inform you that during July and August we may expect some all-star operatic performances, for at the Bayreuth Festival there are to be three complete series of *The Ring*—namely, from July 22 to 26, from August 1 to 5, and again from August 12 to 16. These operas, as well as performances of *Parsifal* and of

Tristan and Isolde, will be under the direction of Siegfried Wagner, and other well-known German conductors. I learn that some of the greatest Wagnerian singers have been specially engaged for the Bayreuth festival, and it is also stated that authority has been obtained to relay several of these gala performances for broadcast by the Bavarian transmitters.

Further advance news which may prove of interest is embodied in a communication recently received from the Rhineland. I understand that the full Italian opera company from the Scala, Milan, will visit Cologne from June 17 to 23. Its repertoire includes Verdi's *Rigoletto*, *La Traviata*, and *Falstaff*; Rossini's *The Barber of Seville*; and Puccini's *Tosca* and *La Bohème*. Of these at least two are to be broadcast by the Rhineland and other transmitters, most probably *The Barber of Seville* and *La Bohème*. Following this Italian visit, the Vienna State Opera House Company will also give a series of performances at Cologne from July 3 to 9. There is a strong probability that with the arrangements now being made, we shall be given an opportunity of hearing through Langenberg and partners Strauss's *Rosenkavalier* or Puccini's posthumous work, *Turandot*.

Radio Paris, during the coming week, offers some special attractions. On Monday (June 11) at 8.45 p.m. the studio revives a charming operetta, *Rip Rip*, by Planquette, little known to the present generation, but of which in bygone days many melodies were whistled in the streets of London. It is a musical version of one of Washington Irving's short stories dealing with the adventures of one Rip van Winkle, an inhabitant of the Catskill Mountains who fell asleep for twenty years and who, on awaking, found himself a stranger in his native village. In its day this operetta enjoyed the same popularity as Planquette's *Les Cloches de Corneville*. On Tuesday (June 12) at 8.45 p.m. we may revert to the same station for a concert which includes excerpts from Mozart's *Don Juan* with soloists and choirs from the Paris Conservatorium and also samples of Krenek's jazz opera *Jonny Strikes Up*. In the latter, the part of Anita is being taken by Madame Jefferson Cohn, the Jonny Blues (true jazz) to be sung by Georges Petit, of the Paris Opera House, and Mme. Cecilia Navarre, of the Théâtre Mogador.

Of the Swiss stations, apart from Berne, I, personally, find considerable difficulty in capturing any transmissions, and I welcome the relay to be carried out by Munich and the Bavarian group of studios of the popular entertainment to be given by Zürich at 8 p.m. on Wednesday, June 13. These international exchanges provide many opportunities of hearing programmes which otherwise might prove beyond our reach. On that evening, too, Madrid (EAJ7) presents a selection of the more interesting portions of Verdi's opera *Ernani*. When first produced under the title of *Il Proscritto*, at a period coinciding with a revolt against Austrian rule, its stirring choruses raised the patriotic ardour of Italian audiences to fever heat.

JAY COOTE.

Dominion and Foreign Broadcasting Intelligence

AUSTRALIA

(From a Correspondent.)

Victoria's "Listening" Record

The latest official figures show that Victoria, the smallest State in Australia (in point of size) but the second in population, has more wireless receiving licences than the whole of the other States of the Commonwealth together. The following were the numbers of licences in force in the States of Australia at the end of March:—Victoria, 136,481; New South Wales, 75,869; Queensland, 24,920; South Australia, 19,452; West Australia, 3,780; Tasmania, 2,838. The Victorian total is claimed to be proportionately the world's record—approximately 78 licences to every one thousand of the population. Many theories have been advanced to explain why Victoria has so many more listeners than New South Wales. The Wireless Royal Commission reported as follows:—"The position of broadcasting station 3LO Melbourne is unique among the stations in Australia. It is almost universally admitted to give the most satisfactory service in the Commonwealth..." Another explanation suggested is that Victorians are more "home-loving" than New South Wales folk.

Station 2UE, Sydney

A number of receiving sets have of late been installed in Australian homes in anticipation of the Eucharistic Congress to be held in Sydney next September. The organisers of the Congress have engaged broadcasting station 2UE as a means of conveying to interested listeners progress reports of the plans in preparation for the Congress. It must not be supposed, however, that 2UE devotes most of its time to this purpose. On the contrary, the station is used mainly for entertainment and educational purposes.

CANADA

(From our Montreal Correspondent.)

Allocation of Short Wavelengths

Canada has been invited to confer in Washington at an early date on the allocation of short wavelengths used in trans-oceanic and long-distance radio transmission. It is not known when the conference will take place. The United States Federal Radio Commission is now engaged on the preliminary work of establishing a basis for the allocation of short wavelengths among American corporations. Before a final decision is made, Washington wishes to come to some understanding with Canada which will prevent interference between the two countries in trans-oceanic wireless. Short wavelength transmissions reach long distances and do not interfere with transmission in the immediate neighbourhood, but the long coastline on the North American continent makes it necessary that Canada and the United States should meet and agree on the wavelengths each will use in long distance transmissions.

(From a Correspondent.)

Summer-time Troubles

Canadian listeners are at the present time wishing they were in Europe where more stations can be "picked up"; more especially the short-wave enthusiasts are grumbling because radio reception is so bad here. This is the time of year when it is difficult to receive a station from the United States, and listeners must rely upon local stations for their entertainment. This state of affairs will probably last throughout the summer, except in the late evening when one or two stations can be tuned in.

Shortage of Programmes

Broadcasting stations in Canada, as the summer season approaches, are curtailing their broadcasting activities, owing to the quiet season, and their inability to obtain programmes sponsored by commercial houses. This means that there are practically no wireless programmes given by the majority of stations during the day, while the evening programmes commence at 7.30 and cease at 11 o'clock. Owing to the lack of sponsors, the programmes consist mainly of hotel orchestras and dance bands.

AUSTRIA

(From our Vienna Correspondent.)

Regular Picture Transmissions

From October 1 next Ravag will broadcast pictures by the Fultograph method from Vienna, relayed also from Graz, Klagenfurt, Innsbruck, and Linz. The pictures will be sent out between 4 p.m. and 8 p.m., and an international picture service will be arranged in conjunction with Berlin, Budapest, and Paris. Between 3.15 p.m. and 3.35 p.m. during the intervening months experiments in picture distribution will be made daily by Ravag.

"Old Danube" Regatta

The broadcasting of sporting events in Austria is progressing rapidly. On June 9 the annual regatta on the "Old Danube" will be described, and the results of the races given out. The Old Danube is the original course of the principal stream of the Danube before the river was canalised at Vienna. The Danube in times of flood used here to be miles wide, and, even now, beside the new, broad, straight stream enclosed by embankments, there is a large area called the "Inundation Territory," which cannot be built upon, and which, being bounded by an immense embankment many miles long, is unlikely to be topped by any conceivable flood. Beyond that are settlements of various kinds, and then, on higher ground, the great suburb of Floridsdorf, a town in itself, but called the twenty-first district of Vienna. The Old Danube is really a great lake, about four miles from the centre of the city, beyond the Inundation Territory and main embankment, on the opposite side of the main stream from Vienna City.

FRANCE

(From our Paris Correspondent.)

Increased Subvention for Lille

The Conseil Général du Nord has shown its appreciation of the Lille broadcasting station by increasing its subvention from 5,000 frs. in 1927 to 25,000 frs. this year.

GERMANY

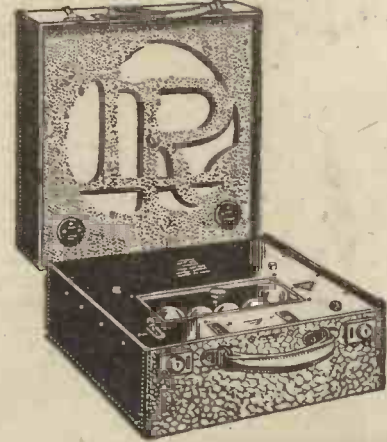
(From our Munich Correspondent.)

Local Reception Difficulties

Ever since the Nürnberg station changed its wavelength from 303 to 249.1 metres some time ago, listeners in the Nürnberg area have complained of a general loss in signal strength even after their sets have been adjusted to the new wave. The Reichspost, which is responsible for the change, and the Deutsche Stunde are at the present moment endeavouring to ascertain the causes of this sudden decrease in signal strength and will undertake the necessary steps for their removal if this is possible; otherwise a longer wavelength will have to be reverted to.



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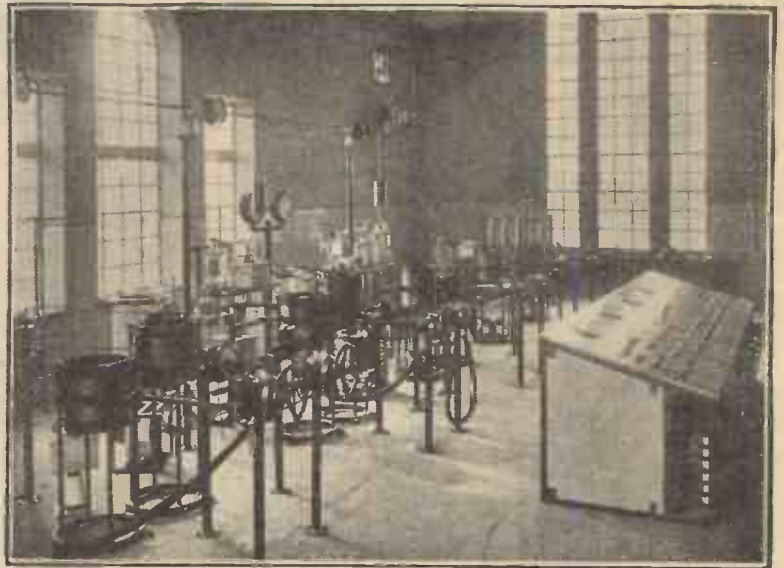


The Aerial.

were described in WORLD-RADIO of April 27, are situated on the Island of Csepel in the Danube, ten miles south of Budapest. The

aerial, with steel masts, about 480 ft. high, and part of the transmission buildings are shown in the accompanying picture. The earth, which consists of wire network, 3 mm. thick, covers a considerable area below the aerial.

The service of the new Radio Budapest was formally opened on April 28 to coincide with the opening of the Spring Trade Fair, and the station now takes its place among the most important in Europe. Its power is equal to that of the Langenberg station—viz., 15 kw. in the aerial. It can be heard very strongly after dark, and its musical interval signal consists of three simple chords. The programmes are noteworthy for the considerable proportion of "Tsigane," or gypsy, music which is broadcast.



[Photos by courtesy of the Research Station of the Royal Hungarian Post Office.
The New Hungarian Transmitting Station

(Continued from page 843.)

distance, possibly one of the G.W.R. expresses passing through Pangbourne. The valves used were detector and one H.F., but possibly the 5,000 feet altitude has something to do with this almost freak reception.

During the last two days of the month it was quite impossible to use my set at all owing to almost continuous thunderstorms, but, from a programme point of view, May has been very kind to us Continental listeners, so we will not grumble.

European Wireless Conference

A conference of the Council of the Union Internationale de Radiophonie, under the Presidency of Admiral Carpendale, and a European Conference of broadcasting engineers have now concluded their sittings at Lausanne. The Council ratified the admission of the following new members to the Union: Radio Stanica, Zagreb; British East African Broadcasting Co., Nairobi; Société Roumaine de Radiophonie, Bucarest.

The Council recommended that the identity of broadcasting stations should be stated as clearly as possible. The necessity was also emphasised of adopting all possible measures to avoid broadcasting propaganda of a nature which would be likely to offend the susceptibilities of neighbouring countries. Some twenty European countries were represented at the Engineers' Conference, at which discussions took place on the methods of eliminating interference with broadcasting by trams, lifts, and domestic electrical apparatus and on the latest experiments in short-wave transmissions. The technical conditions indispensable to the relaying of programmes over long distances by means of telephone lines and cables were also examined. The sittings concluded with the annual General Assembly of the Union. Members of the Council were re-elected, and the latter body afterwards re-elected as its President, for the fourth occasion, Admiral C. D. Carpendale (Great Britain) and, as its Vice-Presidents, Herr H. Giesecke (Germany) and M. R. Tabouis (France). M. M. Rambert (Switzerland) was re-elected Council delegate.

A new Commission to deal with problems affecting international relays by wire and wireless was appointed, under the presidency of M. S. Chamiec (Poland).

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Correspondence

To the Editor of WORLD-RADIO.

SIR,—Your correspondent T. Francis is quite right in noting the similarity of the wavelength of 2ME and 2FC. These are not two stations; the call sign 2ME is used by 2FC when 2FC is testing.

Australian listeners are very pleased that 2FC, Sydney, 3LO, Melbourne, and 2BL, Sydney, are being heard so well on the other side of the world.—Your faithfully,

C. C. FAULKNER,

Director, Radio Broadcast Bureau, 12, Castle-reagh Street, Sydney.

From the Swiss Alps

A Review of the May European Programmes

By YODELLER

THE month of May is ended, and what a month! We have had snow, sleet, bitterly cold winds, and rain of the real English variety for days on end, but despite the bad weather I have succeeded in extracting the maximum amount of enjoyment from the Continental "ether."

Tuesday, May 1.—Made an excellent start by tuning in Langenberg, which was relaying from Dortmund a fine performance of Verdi's *Rigoletto*. This came over at great strength.

Wednesday, May 2.—Spent a pleasant evening in Berlin, listening to a relay from the Berlin Playhouse of *Lilac Time*.

Saturday, May 5.—Again went for Berlin, this time via the long-wave transmitter, and heard the singing of 43 massed choirs totalling some 2,300 voices which came through magnificently.

Sunday, May 6.—Toulouse gave me a tip-top concert, with selections from Gounod's *Faust*.

Sunday, May 13.—In the afternoon called in at the Wurtburg, Leipzig, for a truly wonderful concert, personally conducted by Siegfried Wagner. The only drawback was that at this time of the day the Mitteldeutscher kept fading, a phenomenon to be expected in broad daylight from a distant station during the summer time.

Monday, May 14.—Radio Paris seems to be going from strength to strength, and their operatic broadcasts are getting more and more ambitious every day as proved by the almost perfect broadcast of *Samson and Delilah* on this occasion.

Tuesday, May 15.—Went back to England, and seated myself, in imagination, comfortably in the Royal Opera House, Covent Garden. To me, in the Swiss mountains, came the stirring strains of Richard Wagner's great work, *The Mastersingers*, with marvellous clarity and distinctness.

Thursday, May 17.—Had the choice of two vastly different programmes—namely, *The Elijah*, from Munich, and *Madame Butterfly*, from Vienna. Listened to Mendelssohn's stately oratorio until about 9 p.m., and then switched over to Radio Wien for *Madame Butterfly*, which simply roared through my loud speaker, proving that the new Rosenhügel transmitter is now one of the strongest signals on the Continent.

Saturday, May 19.—*World-Radio* offered me a splendid range of choice. Bellini's opera, *Norma*, from Rome, *Les Cloches de Corneville*, from any of the Polish stations, and *The Gipsy Baron*, from Vienna, only three of the many good things the "ether" promised to send me. After a little hesitation selected the first half of *The Gipsy Baron* and then changed down to Rome for Act I of *Norma*, always a prime favourite. The second act was omitted, but we were compensated for this by a gorgeous rendering of Act III.

Friday, May 25.—Tried Motala, and for once conditions seemed exceptionally favourable. Such items as the second *Peer Gynt Suite*, and Paganini's charming Concerto for Violin and Orchestra, came through at great strength.

Monday, May 28.—This seemed to be an "all star" evening, for the number of things worth hearing was so numerous as to be quite confusing. Munich was putting out *Lohengrin*, Berlin *Rigoletto*, Italy suggested either *I Pagliacci* from Naples, or Zeller's comic opera *The Birdfanciers* from Milan. Then came Hilversum with *La Mascotte*, and lastly, an international concert from Posen. I began by tuning in Munich for Act I of *Lohengrin*, then moved up to Königswusterhausen and became so enthralled that, notwithstanding the fact that I had already heard this opera once in the month, I could not bring myself to change again.

Tuesday, May 29.—Listened to Lyon-la-Doua for the whole of the concert which consisted of such items as Claude Debussy's "Petite Suite" for Orchestra, a couple of selections from Massenet's famous opera *Manon*, and a Serenade of Rossini's entitled "Mira la bianca luna" which came through with great volume. My next port of call was Daventry 5XX, in search of the nightingale. Shortly after 11 p.m. came the notes of our sweet little English bird, with absolute fidelity, despite the fact that, owing to flashes of lightning being seen over the Italian frontier near Mont Blanc, I was using an indoor aerial, and only two valves, with ear-phones. Sounds like a fairy tale doesn't it, but let me assure you it is absolutely true, I even think I heard a train whistle in the

(Continued in column 2, page 842.)

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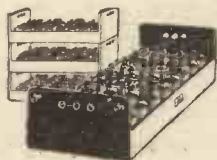
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Broadcasting and Languages

FRENCH

LE GRAIN DE PLOMB

(Continued)

(To be broadcast through Daventry from the London Station, by M. E. M. Stéphan, on Monday, June 11, at 7.25 p.m.)

"J'avais le cœur bien gros; je ne mangeais que du bout des dents, et je regardais cette pauvre mère à la dérobée, craignant de lire ma condamnation dans ses yeux. Aucun blâme ne parut sur son visage; mais elle non plus n'avait pas faim, et elle semblait attendre avec impatience que le petit Antoine (c'est mon frère le président) eût achevé ses prunes et ses noix. Aussitôt les serviettes pliées, elle nous précéda pour voir si tout était en ordre dans la chambre, et nous cria du haut de l'escalier:

"Montez dire bonsoir à papa."

"J'arrivai le premier de tous, grâce à mes longues jambes. Il était étendu sur le dos, avec trois oreillers sous la tête, mais il n'avait pas l'air de trop souffrir. Je l'embrassai en retenant mes larmes et je lui dis à l'oreille: 'Cher père, jurez-moi que je ne suis pas un malheureux!'"

"Albert," répondit-il, "tu es un bon garçon, et je t'aime de tout mon cœur: voilà ce que j'ai à te dire."

"Les petits, accourus sur mes pas, se mettaient en devoir d'escalader son lit, comme ils l'avaient fait tant de fois le matin, dans leurs longues chemises."

"Prenez garde!" leur cria-t-il, "j'ai un peu de rhumatisme aujourd'hui."

"Moi seul je ne pouvais pas croire à cet accès subit et violent d'un mal qu'il n'avait jamais eu. Je promenais les yeux autour de moi, cherchant quelques indices de la terrible vérité. A la lueur de la bougie qui éclairait bien mal la vaste chambre, je reconnus le pantalon qu'il portait à la chasse. On l'avait accroché à l'espagnolette d'une fenêtre, et il me sembla que l'étoffe était fendue dans toute sa longueur. Mais ce ne fut qu'un soupçon, car aussitôt ma mère, qui sans doute avait suivi mon regard, alla tranquillement fermer les grands rideaux."

"Je vous laisse à penser si cette nuit me parut longue. Impossible de fermer les yeux sans voir la pauvre jambe de mon père criblée

de plomb et tellement enflée que le docteur coupait le vêtement de coutil pour la mettre à nu. Mais je n'étais pas au bout de mes peines: les jours suivants furent de plus en plus mauvais. Notre cher malade ne pouvait plus dissimuler ses souffrances; ma mère cachait mal son inquiétude; les enfants eux-mêmes pleuraient à tout propos, par instinct, sans savoir pourquoi. Le digne et bon ami de la famille, Monsieur Maugin, venait pour ainsi dire à toute heure du jour. Je ne pouvais plus faire un pas dans la rue sans répondre à mille questions qui me mettaient au supplice. Aussi, le plus souvent, restais-je enfermé, sous prétexte d'achever mes devoirs de vacances. On m'avait installé une petite table dans un coin du cabinet de mon père, entre l'étude et le salon. J'y demeurais beaucoup, mais j'y travaillais peu. Le plus clair de mon temps se passait à feuilleter machinalement Dalloz ou le *Bulletin des lois*, quand les larmes ne m'aveuglaient pas tout à fait.

"Cela durait depuis quinze grands jours, lorsqu'un matin, entre onze heures et midi, je vis par la fenêtre notre excellent docteur suivi de trois messieurs d'un certain âge décorés. Ils montèrent tout droit à la chambre de mon père, et, après une visite d'un quart d'heure, ils descendirent au salon pour se consulter ensemble. Je ne me fis aucun scrupule d'écouter à la porte, car il y allait non seulement du repos de ma conscience, mais encore de nos intérêts les plus chers. Le peu que je saisis, à bâtons rompus, me fit dresser les cheveux sur la tête. Il y avait un plomb de mon fusil dans l'articulation du genou; on parla de phlegmon, de phlébite, et ces mots que j'entendais pour la première fois se gravèrent dans ma mémoire comme sur une planche d'acier."

"Les savants praticiens s'accordaient sur la gravité du cas et sur l'urgence d'une opération, mais aucun n'en voulait courir le risque. La responsabilité était trop grande et le succès trop incertain. On craignait que le malade, épuisé par quinze jours de souffrances, ne succombât entre les mains de l'opérateur. Une grosse voix répéta à quatre ou cinq reprises: 'J'aimerais mieux extraire dix balles de munition!' M. Maugin seul insistait, disait qu'il pouvait garantir la vigueur physique et morale de son malade. Il s'anima si bien qu'il finit par leur dire:

"J'irai chercher M. Sédillot, qui sera plus hardi que vous.' Là-dessus, je n'entendis plus qu'un tumulte de voix confuses, de portes ouvertes et fermées, et la maison rentra dans sa lugubre tranquillité."

"Notre docteur ne revint pas de la journée, et j'en conclus qu'il allait chercher le grand chirurgien de Strasbourg. La chose était d'autant plus vraisemblable que, le lendemain matin, à six heures, notre mère nous fit habiller, nous conduisit dans la chambre du père, qui nous embrassa tous avec une solennité inaccoutumée, puis elle nous embarqua sur le vieux char à bancs en me recommandant les petits."

"Mon enfant," me dit-elle, "ton oncle de Hochfeldt vous attend pour la fête, qui doit commencer dans trois jours. L'exercice et le changement d'air vous feront grand bien, à toi surtout qui mènes la vie d'un prisonnier. Ne t'inquiète pas de la santé de ton père: à partir d'aujourd'hui, il ira de mieux en mieux."

"La chère femme ne trompait par pitié, comme mon père m'avait trompé lui-même. L'opération était décidée, elle était imminente, puisqu'on nous éloignait ainsi. L'étonnement de mon oncle à mon arrivée me prouva qu'on n'avait pas même pris le temps de l'avertir. Plus de doute, pensai-je, c'est pour aujourd'hui. Ma place est à la maison; j'y vais. Je partis donc à pied, sans prendre congé de personne, et en moins de trois heures j'arpentai les quatre lieues qui séparent Hochfeldt de Saverne."

N.B.—Listeners are advised to provide themselves beforehand with paper and pencil as a short dictation test in French and two English sentences for translation will be given at the end of the talk.

The text of the dictated matter and the translation of the sentences will appear in the next issue of "World-Radio."

GERMAN

DICTIONARY

Wenn Sie an einen Deutschen schreiben, der einen Titel hat, so dürfen Sie nie vergessen, das Wort Herr vor den Titel zu setzen. Wenn Herr Braun ein Doktor ist, so schreiben Sie: Herrn Doktor Braun. Wenn Sie an seine Frau schreiben, müssen Sie schreiben: Frau Doktor Braun.

GRAMMAR AIDS

Consonants—II

Having disposed of the consonants we make with our lips, let us proceed to those in which the teeth play a vital part.

German *d* is pronounced as English "d," but, since the German finds it difficult to make a voiced consonant at the end of a syllable or at the end of a word, the *d* in those positions is pronounced like "t," just as *b* (which we discussed during our last phonetic talk) is pronounced in such positions like "p"—*der Tod* (pron. *Tot*): death. But in the genitive it would be *des Todes*. The past of the verb *binden*; to bind, would be pronounced with a "t," although written with a *d* (*band*).

t is pronounced as in English—*der Tor*; the fool; *das Tor*: the gate. I should like to make a note on the spelling here. Up to about twenty-five years ago it was customary to write *th* in many words instead of *t*. There was no sense in retaining the *h*, and it is now considered incorrect. The *h*, which is never pronounced, is written now only in foreign, mostly Greek, words—*das Theater*, *der Thron*. Students often tell me that they have been unable to find a word beginning with *t* in the dictionary. When I ask them to let me have a look at their dictionary it is invariably a dictionary published before the new spelling was introduced, and the word appears quite properly under *th*, so that if you possess an old dictionary you must make allowances for it.

At the beginning of a word and between vowels *s* is pronounced like the English "z"—*sagen*: to say; *Samuel*. At the end of a syllable or word, however, the pronunciation is the same as ours—*das*: that, the; *Esperanto*. The spelling *ss* or *sz* always denotes an English "s."

A difficult sound to produce at the beginning of words is *z*. We often get the sound in English at the end of a word: rats, cats, mats—*die Zeit*: time; *das Zebra*: the zebra. At the beginning of a word this sound is always spelt *z*, in the middle often *tz*, and at the end often *tz*, too—*schätzen*: to estimate; *der Schmutz*: dirt.

The only other sound left which comes within the dental group is the one which is expressed by the letters *sch*. It is pronounced exactly as the English "sh"—*die Schule*: school.

We have seen that the German dentals do not differ from the English ones. There is a corresponding sound in every case. The spelling, however, is often different, and it is there where the difficulty lies. Remember that *s* at the beginning of a word and between vowels is pronounced like "z," and that a *d* is pronounced like a "t" if it comes at the end of a syllable.

The only pronouncing difficulty is *z* at the beginning of a word. The fact that we have the same sound at the end of words does not make it any easier, as you will see when you try to pronounce words like *Zeit*, *die Zahl* (number), *zählen* (to count).

"Tischbein, Goethes Freund in Italien, hatte ein Zeitlang die Manier, in jedem Menschen, den er traf, Tierzüge zu entdecken. Eines Tages traf er einen Bekannten, dem er seine Ergebnisse über dessen Gesicht schon mitgeteilt hatte und erklärte ihm ganz aufgeregt: 'Bester, ich muss tausendmal um Entschuldigung bitten, ich habe mich über Sie geirrt. Sie sind kein Hund, Sie sind ein Ochse!'"

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SHORT WAVE STATIONS

NOTE: THE FOLLOWING TRANSMISSION HOURS ARE EXPRESSED IN BRITISH SUMMER TIME.

M.	Kc.	Station
85	3529	Zürich (Radio Club) EH0XD.
84.25	3560	Copenhagen (7RL). TUES. and FRI., 11.30 p.m.-1 a.m.
80	3750	Nogent-sur-Seine (F8AV); 0.4 kw.
70	4285	Springfield (Mass.) WBZ.
70	4285	Vienna (OHK2). (Transmits on SUN. for 15 minutes after each hour from 6 p.m. till 1 a.m.)
67.65	4434	Döberitz (AFK) 5 kw. MON., WED., and FRI., 11 a.m. to 12 noon and 7 to 8 p.m.
66.04	4542	Los Angeles (California) 6XAL from 12 midnight, 0.5 kw.
63.04	4542	Cleveland (Ohio) 8XF, 0.5 kw.
65.4	4587	Newark (N.J.) 2XAO, 0.05 kw.
65.18	4602	Newark (New Jersey), 0.5 kw. 2XBA (S.W. of WAAM). Transmits between 12 midnight and 5 a.m. TUESDAYS, THURSDAYS and SATURDAYS.
65.18	4602	San Diego (KFBC).
63	4687	Richmond Hill (New York) WABC, 0.5 kw.
63	4762	Pittsburgh East (Westinghouse Electric) KDKA (U.S.A.).
61.06	4913	Council Bluffs (Iowa) 9XU, 0.5 kw.
61	4918	Paris (Radio LL) GC.
59.96	5003	Bound Brook (N.J.) 3XL, 30 kw.
58.5	5216	New York City (2XE). Relays WABC.
56.7	5291	Nauen (AGI) occasionally after 7 p.m.
54.02	5553	Columbus (Ohio) XJ.
54	5553	Coney Island (N.Y.) 2XBH, 0.15 kw.
54	5555	Brooklyn (N.Y.) WCGV, from 11 p.m.
53.54	5600	Portland (Oregon) 7XAO, 0.1 kw.
52.05	5763	Harrison (Ohio) 8XAL, 0.5 kw.
52.02	5767	Cincinnati (Ohio) WLW. Relays medium wave transmissions from 11.50 p.m. except SUN.
51	5882	Casablanca. AIN. Weather reports, 9.30 a.m. and 8.30 p.m.
50	6000	Karlsborg (Sweden).
50	6000	Russia, RFN. TUES., THURS. and SAT., 1 and 2 p.m.
45	6666	Rome (Italy) IAX. Broadcasts occasionally.
44.4	6696	Vienna, 0.24 kw.
43	6976	Pittsburgh East (Westinghouse Electric) KDKA.
42.80	7009	Constantine (Tunis)—8 KR. SAT., 10 p.m. to midnight.
42.12	7122	Copenhagen, 7RL.
40.20	7463	Lyön (Rhône) YR. Daily except SUN. from 4.30 to 5.30 p.m.
38	7894	Agén.
37.65	7968	Döberitz (AFK)
37.5	8000	Ibarakiken (Japan) JHBB.
37.01	8105	New York (WJD).
37	8108	Radio Vitus. WED., FRI. and SUN., 9 p.m. to 10 p.m.
37	8108	Vienna (EATH). MON. and THURS. at 9.30 p.m.
33	9090	San Francisco (Cal.) 6XAR, from 12 midnight.
32.9	9118	Perth (W.A.) 6AG. 11.30 a.m. and 4 p.m.
32.5	9231	Sydney (2BL).
32.5	9231	Copenhagen 7MK. TUES. and THURS.
32.5	9231	Paris, Eiffel Tower. FL. Time Signal 8.56 a.m. and 8.56 p.m.
32	9375	Zürich (Radio Club) EH0XD.
32	9375	Melbourne (3LO). SUNDAYS, 7.30 p.m. to 9.30 p.m.
32	9375	Johannesburg (JB).
32	9375	Berne (Switzerland) EH00C.
32	9375	Detroit (Mich.), 8XAO, 0.75 kw.
31.93	9395	Bandoeng, Java (Radio Service) ANE. TUES. and THURS., 5.40 p.m. to 7.40 p.m.
31.25	9504	Bergen.
31.5	9523	Helsingfors, 0.3 kw.
31.4	9554	Hilversum, Holland, PCJJ. TUES. and THURS., 5-9 p.m. FRI., 12 mdnt.-3 a.m. SAT., 4-7 p.m.
31.4	9554	Schenectady (General Electric Co.), N.Y., 2XAF, 10 kw. (Aer.). SUN., WED. and FRI., no transmission. MON., 11 p.m. to 4 a.m. TUES., 11 p.m. to 6 a.m. THURS., 11 p.m. to 5.30 a.m. SAT., 11.25 p.m. to 5 a.m. Relays WGY.
30.91	9706	New York (2XAL). TUES., 12 midnight to 5 a.m. WED., 12 midnight to 2 a.m. FRI., 12 midnight to 4 a.m. SAT., 12 midnight to 3 a.m., 0.5 kw.
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24	12,500	Chelmsford (5SW, 15 kw. Aer.). DAILY (except SAT. and SUN.) from 12.30-1.30 p.m. and from 7-11 p.m.
22.99	13,049	Houlton (Maine) 2XAA, after 11 p.m.
22.8	13,158	Fort Wayne (Indiana) WOWO, 1 kw. after 11 p.m.
22.2	13,392	Vienna, 0.24 kw.
22.1	13,574	Richmond Hill (N.Y.) 2XE (S.W. of WABC), after 11 p.m.
21.96	13,661	Schenectady (General Electric Co.), 2XAD. SUN., 11.30 p.m. to 4 a.m. MON., 7 p.m. to 9 p.m. WED., 11 p.m. to 4 a.m. THURS., 7 p.m. to 9 p.m. FRI., 11 p.m. to 4 a.m. Relays WGY WED. and FRI.
18	16,666	Kootwijk (Holland) PCLL. WED., 3 to 5 p.m. and occasionally on MON. & FRI.
17.2	17,441	Nauen (AGC).
17	17,847	Bandoeng, Java (Radio-Malabar) ANH, 30 kw. SAT., 1.40 to 3.40 p.m.
16.02	18,726	Rocky Point (Long Island) 2XG. MON. and FRI., after 5 p.m.
15.93	18,832	Bandoeng, Java (Radio Service) ANE, MON., 1.40 to 3.40 p.m.
15.5	19,354	Nancy (France).

Holidays Abroad: Ways and Means

The Dolomites

By the Rev. FRANK TATCHELL*

THE Dolomites are mountains in the north-east of Italy and have their name from a French geologist, M. de Dolomieu, who spent much time exploring them about the year 1800. . . . To get to them you make first for Innsbruck. Leaving London at 9 o'clock in the morning, you reach Innsbruck at 4 o'clock in the afternoon of the next day, but if you are rich and travel first-class you can leave London at 2 p.m., and, travelling by the train-de-luxe to Vienna, reach Innsbruck at 1 p.m. next day. A first-class ticket to Innsbruck costs £8, and a second-class £5 10s. I myself go third-class and sleep at Paris and Basle, taking two or three days over the little journey. You will, of course, have to have a passport. It should be endorsed for France, Switzerland, Austria and Italy, but you will need no visas.

It is worth while spending a day at Innsbruck if only to see the old church where, among the life-size statues of kings, Arthur of England rather surprisingly has his place and is the handsomest of them all. From Innsbruck you have a six-hours' train journey over the Brenner Pass to Bolzano. If you are on a walking tour get out after the train has toiled up the mountains at Brennero, now the frontier station, and walk along the famous Roman road with the fair country spread before you. Italy is a delightful country to walk in. The roads are excellent and the scenery is constantly changing. Since the war all this land belongs to Italy, but the

and all the prices are put up. In October many of the hotels close down when the countryside begins to be snow-covered and frost-bound, but lately a few hotels have remained open for winter sports.

Bolzano is a good centre for travellers who like to stay at one place all the time. It is a quaint old town with arcaded streets, and is the best place in Europe for buying that delight of our schoolboy days, crystallised fruit. Quite near is Merano, the beautiful town where people go in the autumn for the grape-cure. From Bolzano starts a magnificent new motoring road of 90 miles to Cortina. This is traversed by public motor coaches every day during the summer, and there is no better way of beginning our little tour.

Here you have your first sight of the Dolomites. In colour they are an ashey-white, but at sunrise and sunset they turn to the most lovely colours, rose, and salmon, and copper. There is often a sharp storm in the afternoon followed by a superb sunset, and, for some unexplained reason, certain summits become suddenly luminous an hour or two after the sun has gone down. This has an extraordinary effect and is the more mysterious because the after-glow which might cause it has long since faded from the sky.

This wonderful drive in the public motor from Bolzano to Cortina is usually hurried through in one day, but it is pleasanter to take it in three stages, sleeping at Carezza and Canizei. The scenery is wonderful all the way and at Carezza the hotel is on the banks of one of the most beautiful lakes in the world. There is also a good golf links.

Cortina, the unrivalled gem of the Tyrol, is worthy of a stay of some days. It is, indeed,



towns and people are still of the Austrian type, and the church towers have the typical bulbous copper dome. There was grim fighting in all these mountains and you will often come upon old dug-outs, and trenches. Many of the forests were felled during the war, but their loss is compensated for by the fine strategic roads made by the rival armies. These roads go right into the heart of the country and in difficult places high up in the mountains they are often laid on a bed of tree trunks. There are also three light railways for travellers who do not want to motor or walk.

There are hotels of all sorts and sizes, and the price by the day in the moderate ones is about 7s. 6d. in our money, to which 10 per cent. is added in place of tips. There are cafés in every street, but in Italy they have not the art of making good coffee. The wine to drink hereabouts is Santa Magdalena.

The time to go to the Dolomites is in June and the first half of July when the flowers are at their best, the hay not having been cut. You will walk on gentians, and in the mountain meadows and on the rocks you will see growing wild the flowers we cherish and coddle in our rock gardens in England. The last half of July and August is a time to avoid; this is called the high season; every hotel is crowded

THE DOLOMITES

Having read the Travel Article by the Rev. F. Tatchell, why not send for

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the favourite place of many travellers. You should especially see the sunset view from the Crepa, a rocky headland thrusting out into the valley, and, another day, take the motor along the enchanting road to Lake Misurina. Misurina is quite the best place in the Dolomites for the flowers—but there is no village, only two hotels on the banks of the lake, so you will miss the delightful peasants.

I think you will be pleased with the country-folk hereabouts—they have a curious and



[C.I.T., London.]

Castle Brunnenburg, near Milan

rather disconcerting road-greeting, *State pullita* (Are you clean?) to which you reply, *Sano* (Be healthy). They are superstitious, carrying a charm against the evil eye, that mysterious influence dreaded in so many countries. There are few churches which have not some miracle-working image or relic, decked with flowers and candles and hung round with votive offerings. There are wonderful short-lived thunderstorms, the iron ore of the Dolomites attracting the lightning. If you take shelter in a cottage you may see that the ancient ritual of pouring libations has persisted to our day. When a storm is brewing and the rumble of the thunder draws near, the peasant will pour a few drops of wine on the hearth to conjure the deities of the tempest. The house-leeks grown on the roofs are supposed to keep away the lightning.

The Dolomites are threaded by the river Piave and its tributaries, and our route is now down stream from Cortina along the little river Boite. . . . It is 18 miles down the valley to Pieve de Cadore and there is a good inn to have lunch at Borca. This little hill town of Pieve de Cadore is charmingly situated and quite unspoilt. Titian, the painter, was born here, and there is a fine statue of him in the market place.

Going on down the main valley we pass Longarone, a gay little market town, and reach Belluno, a strongly fortified city guarding the old frontier of Italy. Here at Belluno the Dolomites end.

I think that the route which I have sketched is the best one for a first visit to this delightful stretch of country. There are, however, two little places off the beaten track which I commend to lovers of quiet. These are Caprile, south-west of Cortina, and Madonna di Campiglio in the Brenta Dolomites, north-east of Brescia. But it will be time for most people to be thinking of getting back home, which is easily done by
(Continued at foot of next column.)

Radio Personalities

A poet of no small fame, Ernst Hardt is known throughout Germany more as a writer than as an organiser in the world of broadcasting. It is in this latter capacity, however, that most of our readers will best be able to appreciate his ability. When Hardt took over the direction of the West German Broadcasting Company there were three stations in this district—Elberfeld, Dortmund, and Münster, and the number of listeners (licences) was 120,000. The Elberfeld and Dortmund stations were weak and somewhat out of date; but they were soon replaced by the high-power station of Langenberg, and lately the relay stations of Cologne and Aix-la-Chapelle have been added. The West German broadcasting area is now second in Germany in the number of licences applied for, the listeners numbering 540,000, as against 620,000 in the Berlin district. Before joining the broadcasting company Herr Ernst Hardt was Director-General of the State Theatre in Weimar, from 1919-1924, and Director of the Playhouse in Cologne, from 1924-1926.



Ernst Hardt.

As a writer, many works stand to his credit, some of which have already been broadcast. His best-known plays are *Tantris der Narr* (Tantris the Fool), *Gudrun*, *Schirin und Gertraude*, *König Salome*, and *Tote Zeit* (Dead Time), a drama of youth. He has also published two novels, *Priester des Todes* and *Bunt ist das Leben*. His first works are considered to have opened a new period—the “New Romantic”—in German poetry (about 1898), and in 1908 he received half of the State Schiller Prize and the People's Schiller Prize. Herr Hardt is now in his fifty-second year.



[C.I.T., London.]

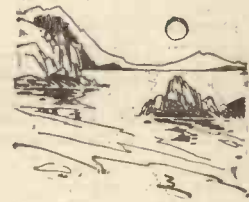
Carezza : Dolomites

train via Vicenza and Milan. However, you are within easy reach of many delightful places if you can spare the time. Venice is close by to the South and a fine boat goes from Venice to Greece every Thursday.

Verona and Lake Garda are just to the West and you might see them and the rest of the Italian lakes on the way home.

But these lakes are so beautiful and full of interest that it is best to leave them for another visit to the beautiful country of Italy.

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Short Wave Wireless Transmission

VII.—Thrice-Round-the-World Signals

By Professor E. V. APPLETON, F.R.S.

THROUGHOUT the present series of articles I have tried to emphasise to my readers the extraordinary "carrying" properties of short waves and their special suitability for long distance transmission. It is quite obvious that up to a certain point this low attenuation of short waves is a most desirable characteristic, but the researches of the last two or three years have shown us that on occasions we could wish it were not so marked, for it gives rise to "echo" effects which often result in mutilated signals. In this article I propose to consider the three types of "echo" signals that are met with in this connection.

Let us consider first the case of the reception of signals both ways round the earth. We imagine a case such as is illustrated in Fig. 1 in which a transmitting station T is communicating with a receiving station R at a distance equal to, say, one quarter of the earth's circumference. Most people would say that, although there are two direct routes from T to R, one *via* A and the other *via* B, the signals received by R from T would come by the shorter path *via* A. In December, 1926, it was announced by Herr E. Quäck of the Telefunken Company in Germany that in an experiment of this kind it had been found that signals came *both* ways round the earth, the signals which had taken the longer path being

The signal sent out from Nauen was received twice at Geltow. One signal had made the short journey of a few miles and the other had travelled completely round the world. This echo effect seems to show best with wavelengths between 15 and 22 metres.

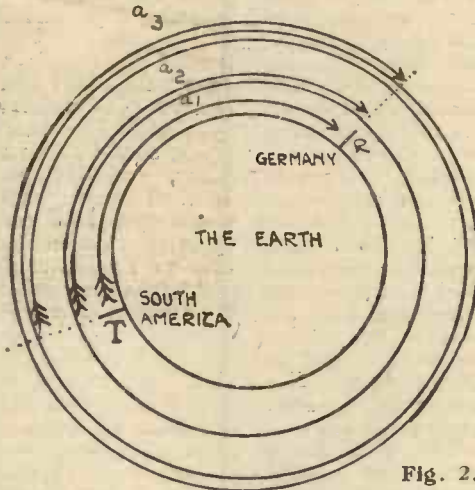


Fig. 2.

At first sight it might appear as if this type of echo would interfere very seriously with short-wave reception, but it will easily be seen that if a *beam* receiving aerial is used, similar to those used in the Government stations for communication with the Dominions, signals arriving in one direction only are received. The position of the reflector of the receiving aerial is, therefore, erected so as to prevent the echo signals from reaching the receiving aerial, and only the waves which have made the shorter of the two journeys from the transmitter to the receiver are received. But, unfortunately, such a precaution is of no avail in protecting the receiving aerial from another type of echo signal, the occurrence of which was first reported also by Herr Quäck.

The second type of echo signal can best be understood by reference to Fig. 2, which illustrates the transmission from South America to Germany on which the effect was observed. A directional transmitter was used in South America (Rio de Janeiro) and it was found that sometimes a single dot sent out by the transmitter was received two or three times. The first signal was due to that following the track marked a_1 in Fig. 2. The second and third signals, since they arrived at intervals of a seventh of a second (which is the time required for a wireless signal to go once round the earth) after the first one, were signals which had followed the tracks a_2 and a_3 respectively. Thus, short-wave signals which have gone three times round the earth may still be sufficient intensity to affect our wireless receivers, so little do the waves lose their energy on their long journey.

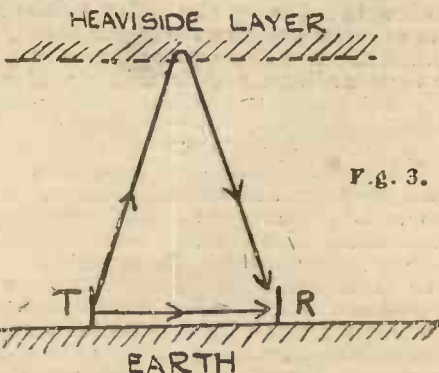


Fig. 3.

(Continued on Page 84 B. col. 1.)



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Technical Difficulties

By "SPARKS"

Couplings for L.F. Amplifiers

"I AM contemplating the construction of a low-frequency amplifier and have been advised to use resistance coupling rather than transformers or chokes. I want good quality, not tremendous strength. Is this advice correct, and, if so, what values should the anode resistances be?"

The advice is undoubtedly sound. From the point of view of quality, resistance coupling is unquestionably better than transformers or chokes. The reason is that a transformer or a choke consists essentially of an inductance coil wound on an iron core. Any inductance, whether wound on an iron core or an air core, has, when used in conjunction with capacity, a resonant frequency, that is to say that the impedance of a combination of inductance and capacity to the passage of an alternating current will be greatest at one particular frequency. The further the frequency of the alternating current is removed from the resonant frequency, the lower will be the impedance offered.

The amplification per stage of an L.F. amplifier depends upon the amplification of the voltage variation in the anode circuit. The greater the impedance (within certain prescribed limits) of the coupling unit in the anode circuit, the greater will be the voltage variation. Obviously, then, the amplification which can be obtained with the combination of inductance and capacity will vary according to the frequency of the voltage variation which it is desired to amplify. For the distortionless amplification of speech and music it is necessary to obtain equal amplification of all sound frequencies which are produced by the human voice and by musical instruments. These fall approximately between the limits of 50 to 10,000 cycles. Suppose that the inductance constituting the primary of a transformer or the winding of a choke had, in conjunction with the capacity which exists between its several thousand turns of wire, a resonant frequency in the region of 5,000 cycles. The introduction of an iron core does to some extent flatten the resonance curve, that is to say that it allows of a reasonably equal amplification of a band extending some distance each side of the actual resonant frequency, but it does not allow of equal amplification over anything like so wide a range as would be required to ensure the proper amplification of the bass notes of an orchestra below say 250 cycles. Consequently we get the state of affairs where there is uneven amplification; for instance, violins in an orchestra might be reproduced with the greatest fidelity and at their proper strength, but the double bass would not be reproduced at anything like its proper strength.

(Continued in col. 3).

(Continued from page 847.)

The third type of echo signal is one obtained only in short distance communication and was first noted by Breit and Tuve in America. Its origin is best seen by reference to Fig. 3. In transmission from T to R signals are received both by means of the ground waves and by means of the sky waves, the latter making the longer journey and, therefore, arriving later. Thus double signals are received, but, as the difference in the two paths is not very large, the time between the arrival of the two signals is only a few thousandths of a second. This kind of echo, though of great importance in assisting us to find the height of the Heaviside Layer, is not likely, therefore, to give trouble in the mutilation of morse signals.

Summarising, we see that the virtues of short waves may at times be positively embarrassing. They sometimes "carry" too far, giving rise to multiple signals. One of the problems for the future is, therefore, the devising of ways and means of eliminating these echo signals in commercial traffic.

Last Week's Log

By "NORTHERNER"

WITH few exceptions, every day throughout the past fortnight has provided a running accompaniment of atmospheric interference to any reception other than from the local station. Occasional silent periods have been observed, but only of short duration, and the "static" has been of all types, from heavy crashes, indicating definite thunderstorms, to the continuous and irritating "pebbles in a rainpipe" kind.

All this drives the listener downwards to stations of lower and lower wavelength until reasonable reception is obtained. Nevertheless in the unexpectedly quiet periods, I have heard some remarkably good signals, such stations as Stuttgart, Prague, Frankfurt, and Budapest providing possibly the best. None of these transmissions has been worth tuning in until dusk, but thereafter they, and of course several others, are moderately easy to receive really well, provided absence of atmospheric permits. In my own case, a fault on the A.C. supply mains in my vicinity curtailed my listening time after sunset for a few days. During daylight hours I avoided the trouble by opening the main switch, and this small hint may be of service to some of the newer listeners.

Milan and Budapest in particular were exceptionally strong on June 1, and each provided very good programmes, yet on the same evening the more regular transmissions such as Langenberg, Frankfurt, and Toulouse were somewhat weaker than usual. This was rather abnormal, since I have observed that almost always after about three days of constant-direction winds, reception is above the average as regards signal strength. Budapest is noteworthy as giving very strong signals after dusk, but up to that time of day I find that he is barely audible. This transmission is comparatively easy to locate, and can subsequently be identified at once by a very distinctive indication signal, apparently from tuning forks in the form of simple chords.

At the opposite end of the medium waveband, Kaiserslautern is a very successful signal, and is much the most satisfactory means, in my case, for hearing the Munich programmes. For the Westdeutscher Rundfunk programmes, I still find Cologne rather stronger than Langenberg, and furthermore the former shows less tendency to fading.

At this period of long daylight evenings, one can never estimate what transmissions will, and will not, be sufficiently strong to be enjoyable, and possibly this uncertainty adds interest for the keener listener. For those not going deeply into radio, I have referred to the matter of variable and weak signals, so that they may refrain from "looking to their sets" further, and with an easy mind realise that signals from distant stations are not what they used to be in the darker portion of the year, and that therefore the receiver cannot be held responsible for somewhat indifferent results.

The long-wave stations do not appear to have lost much in strength of signals, with the possible exception of Motala, but atmospheric, always more prominent on long waves, have compelled me to do no more than listen to these stations for short periods.

I have a note that on one evening recently, during a short lull in the otherwise continuous crackle of atmospheric, I heard the close-down of Stamboul. I think this must have been a freak reception, since daylight had not entirely gone, and I have not heard this particular transmission since February last. Eiffel Tower is practically uniform in strength at any time of the day, but is subject to very bad interference under existing weather conditions.

Turning to short-wave transmissions, I have read with a great deal of interest in this journal (June 1—"The Travelling Listening Post"), that KDKA on 27 metres during March, as

received in the Pacific Ocean by the writer of the article, was never free from a blasting effect. This agrees entirely with the quality as received by me at that time from the same transmission, and it is at least satisfactory to know that some detail of my aerial system, or other unknown element, was not responsible.

I have not heard 2XAD for some little time, probably because I have not troubled to search. 2XAF has been rather variable in strength, and at present does not appear to be a very strong signal. PCJJ also is somewhat weak even in daylight, at which time of day I usually obtain the best strength.

At much lower wavelength, PCLL and Band-oeng (I think ANH), have been heard very well at times, the latter, though scarcely so strong as the station in Holland, being certainly clearer on speech, casual conversation in the vicinity of of the microphone being fully audible.

The German transmitter at Döberitz is a very strong signal, tests with speech being the usual form of procedure, the wavelength being quoted at intervals as 37.65 metres.

Melbourne's special transmission, on 32 metres, to the Australian agriculturists now in Great Britain, was stronger than usual. The special daylight transmission from 3LO on May 27, 7-45 to 8-45 a.m. B.S.T., was scarcely so strong as that mentioned above, but was very much clearer, and signals were of uniform strength throughout the test. In fact, I thought reception was superior to that obtained later the same day, when the usual Sunday evening transmission came over. It is interesting to note that at least one B.B.C. Symphony Orchestra record seems to figure in every S.W. transmission from Melbourne.

(Continued from col. 1.)

Apart from uneven frequency amplification there is another source of distortion to which iron-cored inductances are prone, namely, eddy currents set up in the core itself. It would be out of place to discuss these at great length here and it could not be done without going deeply into the theory of transformer design.

By the use of a resistance in the anode circuit of the valve these sources of distortion are to a large extent dissipated. Resistances for all practical purposes are aperiodic, that is to say there is no resonant frequency, there is no amplification of one particular band of frequency to the exclusion of others, with the result that in a properly designed amplifier, all the instruments in an orchestra receive their proper degree of amplification.

With regard to the proper values of resistance, no hard and fast rule can be laid down because they will depend to some extent upon the type of valve used, the degree of amplification required and the high tension voltage available. But assuming that an "anode bend" rectifier is being used and that the rectifier valve is of a type designed for resistance capacity coupling, the resistance in its anode should have a value of from 100,000 to 250,000 ohms. The value of the resistance in the anode of the first amplifier valve again depends somewhat upon the type of valve used, but there may be slightly lower resistance than that in the rectifier anode circuit, say 80,000 to 150,000 ohms.

Erratum.

In last week's issue, page 812, second column, lines 10 *et seq.*, it was stated that an alternating current having a frequency of 50 cycles, changed its polarity from maximum positive to maximum negative 50 times per second. This, of course, is an error and should read "from zero through maximum positive to maximum negative and back to zero 50 times per second." In the next sentence it was stated that the voltage which was at maximum positive at one moment was at zero one hundredth part of a second later. This, of course, should be a two-hundredth part of a second later, since the variation from maximum positive to zero represents only a quarter of a cycle.

Which Station Was That? ANSWERS TO CORRESPONDENTS

H. Russell (S.W.19): Yes, 3LO (Melbourne), which would be working at that time. J. Ryder (Fairfield): Motala, relaying Stockholm; the latter station worked later than advertised in programmes. G. G. (S.E.1): Aerodrome transmission (900 m.). Avro (Hereford): Huizen (Holland), Church Service. Tara Devi (St. Leonards-on-Sea): Brussels (concert by the station orchestra). Leggatt the Boot (Sevenoaks): No, Göteborg, relaying dance music from Stockholm until 1 a.m. Polly Hargreave (Palmer's Green): Langenberg, relaying gramophone concert from Cologne. Woodbine Cottage (Witney): Yes, Münster relaying Cologne; the chimes are from the studio. Willie (Stamford Hill): Your estimate of WL is very vague, but details would tally with Hriizen (Holland) on 341 m., gramophone records. Short Waver (Shrewsbury): 7MK, Radio Posten, Copenhagen, Denmark. Symmetrical (Addlestone): (a) Possibly Langenberg relaying concert of classical and dance music from Cologne, but cannot confirm as no details are given in the programme. (b) possibly Hamburg, but details are too vague to confirm. Coupon must be sent with each enquiry. Simple Simon (Null): Huizen (Holland) on 341 m. Odd One (Bradford): Motala, relaying Stockholm; working later than advertised in programmes. Searcher (North Harrow): We regret, but we cannot trace; your details and estimate of WL are much too vague. Hillside (Leicester): Copenhagen testing (gramophone records). W. A. S. (Paddington): Leipzig or Stuttgart; both stations were giving a similar programme, but no details are published. W. G. T. (Cork): Your estimate of WL is too vague, inasmuch as continental stations seldom publish details of programmes broadcast after 11 p.m. M. H. Watson (Saffron Walden): (1) PTT Lyons, relaying PTT Marseilles; excerpts from *Les Cloches de Corneville*, (2) possibly Houlton (Maine) on 22.99 m., cannot trace on about 28 m. We must refer you to the terms of your listening licence. A. E. Smith (Ipswich): According to the position of your condensers, we should say this was a topical talk given at Copenhagen, and relayed by Kalundborg; apparently a slightly altered programme. Short Wave (Shrewsbury): (1) yes, 2XAF relaying WGY (Schenectady), received direct, (2) yes, 3LO (Melbourne) received direct. Copper Cube (Willesden): A relay of 5XX; Bremen was the only station advertised to relay foreign stations at that time. Surely your estimate of WL is wrong. Mains (Gatley): (1) Norddeich (Germany) weather report, (2) Radio Maroc, Rabat (416 m.), confirmed by programme. Lowdham: No, this was Huizen. Holland is twenty minutes in advance of B.S.T. Ballyward (Banbridge): (1) U.S.A. station, possibly WJZ (Boundbrook), (2) Copenhagen testing (gramophone records). T. Ellis (Highbury): Copenhagen testing (gramophone records). Trepla (London, E.): Kalundborg, relaying Copenhagen (a test). W. B. H. (Waterlooville): This has been identified as PTT Marseilles on 316 m. Excerpts from *Les Cloches de Corneville* (Planquette). M. E. (Nottingham): Kalundborg, relaying Copenhagen (a test). E. F. H. (Wicken): Kalundborg, relaying Copenhagen. M. Watson (Doncaster): Huizen (Holland), 341 m.; gramophone records possibly of the Wembley Tattoo. T. O. C. Doherty (Colchester): WL wrong; this was Nürnberg relaying Munich. Orchestral concert followed by news and weather; see programme in *World-Radio*. J. P. H. (E.3): An amateur; possibly 2NM, Caterham (Surrey). Benachie (Inverurie): Yes, this was Budapest (gramophone records). Solodyne (Goole): Huizen (Holland) on 341 m., gramophone records, possibly of the Wembley Tattoo. Newtonian (Devon): Apparently Berlin (Witzleben), working later than advertised in programme. F. W. J. (Bermsey): There are now in Europe more than 200 broadcasting transmitters; without some estimate of WL it is impossible to identify the station you heard. Your details are also too vague. Three Valve (Luton): This transmission was not advertised in programmes, but we have reason to believe that it was made by Kalundborg from Copenhagen. It would appear to refer to the recent flight of the American aviators from Alaska to Spitzbergen over the North Pole.

NOTE.—Those who wish to take advantage of our free service by means of these columns must give a **NOM DE PLUME**, in addition to their own name and address. **PROPRIETARY TRADE NAMES MUST NOT BE USED AS NOMS DE PLUME.**

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Continental Programme Events

Sunday, June 10.

- 1.20 p.m. Stockholm.—Changing of the Guard at the Royal Palace.
- 6 " Budapest.—Concert by male voice choir.
- 6 " Leipzig.—"Euryanthe."
- 7.35 " Munich.—"Tales of Hoffmann."
- 7.50 " Hilversum.—"The Barber of Seville."
- 8 " Oslo.—Orchestral concert.
- 8.5 " Copenhagen.—Folksongs.
- 8.15 " Brussels.—Concert.
- 9 " Leipzig.—Russian folk music.

Monday, June 11.

- 7.30 p.m. Frankfurt.—"Martha."
- 8.15 " Stockholm.—Alfresco concert.
- 8.30 " Berlin.—Orchestral concert relayed to Vienna, Prague and Warsaw.
- 8.45 " Radio-Paris.—"Rip."
- 8.50 " Naples.—"Norma."
- 9.30 " Copenhagen.—Modern German music. Songs to the lute by Peter Bach.

Tuesday, June 12.

- 7.20 p.m. Kattowitz.—"Pique Dame."
- 7.45 " Munich.—Haydn programme.
- 8 " Stockholm.—Alfresco concert.
- 8.15 " Leipzig.—Operetta evening.
- 8.30 " Copenhagen.—"Spring in Heidelberg."
- 8.45 " Radio-Paris.—Excerpts from "Don Juan."
- 9.15 " Rome.—"Turandot."

Wednesday, June 13.

- 7 p.m. Prague.—"Fidelio."
- 7 " Vienna.—"The Magic Flute."
- 8.15 " Brussels.—Selections from "Louise."
- 8.15 " Frankfurt.—"Die Traumlinde."
- 8.15 " Stockholm.—"The Demon."
- 8.20 " Königsberg.—"A Dream Waltz."

Thursday, June 14.

- 8.15 p.m. Leipzig.—"Ingeborg" (comedy by Kurt Götz).
- 8.30 " Cracow.—Polish music.
- 8.45 " Milan.—"Adriana Lecouvreur."
- 9 " Langenberg.—"Intermezzo": Symphony in E minor by Prof. Ad. Busch.
- 9 " Vienna.—Relay of the Second Serenade from the Josefsplatz.
- 9.15 " Frankfurt.—"The Showman."
- 9.45 " Copenhagen.—Danish ballet music.

Friday, June 15.

- 7.30 p.m. Berlin.—"Fidelio."
- 7.40 " Hilversum.—Chamber music.
- 7.55 " Copenhagen.—Transmission from Aarhus Cathedral of the Dannebrog Festival for Waldemars Day.
- 8.15 " Leipzig.—"Ernani."
- 8.30 " Radio-Paris.—(1) "Tannhäuser"; (2) Festival Widor.
- 8.40 " Munich.—Richard Strauss evening.
- 8.50 " Naples.—"Hoffmann."
- 9.15 " Vienna.—French operetta and dance music.

Saturday, June 16.

- 7.30 p.m. Langenberg.—"Faust."
- 8 " Munich.—"Three Pairs of Shoes."
- 8 p.m. to 1 a.m. Copenhagen.—Radio ball.
- 8.10 p.m. Königsberg.—Folk music.
- 8.15 " Frankfurt.—"Der Soldat der Marie."
- 8.15 " Vienna.—"The Jew of Toledo."
- 8.30 " Radio-Paris.—(1) Symphony programme; (2) Waltzes of Yesterday and To-day.
- 9.15 " Rome.—"Faust."

GENUINE BRITISH THOMSON HOUSTON

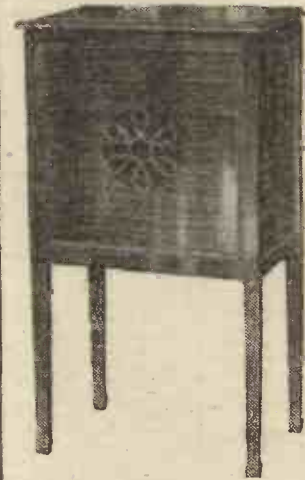
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(5 XX)
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DAVENTRY PROGRAMME

(June 10-16)
(25 kw.)

SUNDAY

- 10.30 a.m.—Time Signal (Greenwich) and Weather Forecast.
- 3.30 p.m.—*Chamber Music*. Iturbi (Pianoforte). The Pro-Arte String Quartet: A. Onnou (1st Violin), L. Halleux (2nd Violin), G. Prevost (Viola), R. Maas (Violoncello).
- 5.20 p.m.—*The Foundations of English Poetry*—XI. Coleridge. Reader, Mr. Robert Harris.
- 5.45—6.30 p.m.—*Bach Cantata*. No. 30. "Give the Hungry Man Thy Bread." Alice Moxon (Soprano), Esther Coleman (Contralto), George Parker (Baritone). The Station Choir and Orchestra, conducted by Herbert A. Carruthers. Relayed from the Alexander Elder Memorial Chapel of the Glasgow Western Infirmary.
- 7.55 p.m.—*St. Martin-in-the-Fields*. The Bells.
- 8.0 p.m.—*The Service*. Address by the Rev. H. R. L. Sheppard, D.D.
- 8.45 p.m.—*The Week's Good Cause*: Appeal on behalf of the Professional Classes Aid Council by Lady Bertha Dawkins.
- 8.50 p.m.—Weather Forecast, General News Bulletin.
- 9.0 p.m.—Local Announcements, Shipping Forecast.
- 9.5 p.m.—*Emilio Colombo and his Orchestra*. Frederic Gregory (Baritone), Alice Lilley (Soprano). Relayed from the Hotel Victoria. Marche Grottesque (Sinding) Frederic Gregory, Harlequin (Sanderson), Emilio Colombo (Violin). Concerto in G minor (Bruch). Slow Movement and Finale. Alice Lilley: Vissi d'arte (I have lived for Art, from "Tosca") (Puccini). Orchestra: Selection from "Pagliacci" (Leoncavallo). Alice Lilley: Volga Boatmen, Pity me, The Shining Moon (Russian Songs) (Traditional). Frederic Gregory: The Second Minuet (Besly). Orchestra: Come pioveva (Gill), Addio a Napoli (Cottrau), Chi siete (Cosentino) (Neapolitan Songs). Emilio Colombo: Serenade (By request) (Drdla), The Canary (By request) (arr. Colombo). Orchestra: Love's Old Sweet Song (Molloy).
- 10.30 p.m.—*Epilogue*, "The Whole Armour of God."
- 10.40—11.0 p.m.—*The Silent Fellowship*. (From Plymouth.)

MONDAY

- 10.15 a.m.—*A Short Religious Service*.
- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
- 11.0 a.m.—*Gramophone Records*.
- 12.0 noon.—*A Ballad Concert*. Lea Felissa (Soprano), T. D. Jones (Pianoforte).
- 12.30 p.m.—*The B.B.C. Dance Orchestra*. Personally conducted by Jack Payne.
- 1.0—2.0 p.m.—*An Organ Recital*. By Harold E. Darke. Relayed from St. Michael's, Cornhill.
- 2.30 p.m.—*Miss Rhoda Power*: "Boys and Girls of Other Days (Eighteenth and Nineteenth Centuries)—V. The Little Emigrant."
- 3.0 p.m.—*Musical Interlude*.
- 3.5 p.m.—*Great Stories from History and Mythology*. Told by Miss Rhoda Power. "Tales from the North—VI. Iduna and the Apples of Youth."
- 3.20 p.m.—*Musical Interlude*.
- 3.30 p.m.—*The Marguerite Morgan Trio*.
- 4.0 p.m.—*The B.B.C. Dance Orchestra*. Personally conducted by Jack Payne.
- 5.0 p.m.—*Household Talk*: Miss Florence Petty (The Pudding Lady): "The Cooking of Vegetables."
- 5.15 p.m.—*The Children's Hour*.
- 6.0 p.m.—*The Gershwin Parkington Quintet*.
- 6.20 p.m.—*Boys' Brigade and Church Lads' Brigade Bulletins*.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast and First General News Bulletin.
- 6.45 p.m.—*Quintet* (contd.).
- 7.0 p.m.—*Mr. James Agate*: Dramatic Criticism.
- 7.15 p.m.—*The Foundations of Music*.
- 7.25 p.m.—*M. E. M. Stéphan*: French Talk.
- 7.45 p.m.—*The Casano Octet*. Teddy Brown (Xylophone).
- 8.0 p.m.—*Mr. J. C. Flugel*: "The Psychology of Food and Dress—I. Primary and Subsidiary Functions of Feeding."
- 8.30 p.m.—*The Casano Octet* (contd.).
- 8.40 p.m.—*A Pianoforte Recital*, by Maurice Cole.

- 9.0 p.m.—Weather Forecast, Second General News Bulletin.
- 9.15 p.m.—*Mr. Desmond MacCarthy*: "Recollections of Samuel Butler."
- 9.30 p.m.—*Local Announcements*; Shipping Forecast.
- 9.35 p.m.—*"Hobson's Choice"*: A Lancashire Comedy in Four Acts by Harold Brighouse. Characters in order of speaking: Alice Hobson (Hilda Bruce-Potter), Maggie Hobson (Edyth Goodall), Vicky Hobson (Grace Edwards), Albert Prosser (Roger Maxwell), Henry Horatio Hobson. Mrs. Hepworth (Dora Gregory), Jim Heeler (Lawrence Baskcomb), William Mossop (Edward Chapman), Ada Figgins (Greta Wood), Timothy Wadlow (Tubby) (A. Carlaw Grand), Fred Beenstock (Herbert Lugg), Dr. Macfarlane (J. Hubert Leslie). Act I.—The interior of Hobson's Bootshop in Chapel Street, Salford. Act II.—The same. Act III.—A room in a cellar in Oldfield Road. Act IV.—Hobson's living-room.
- 11.0 p.m.—12.0 midnight.—*Dance Music*.

TUESDAY

- 10.15 a.m.—*A Short Religious Service*.
- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
- 11.0 a.m.—*Gramophone Records*.
- 12.0 noon.—1.0 p.m.—*Ceremony of Unveiling and Dedication of the Welsh National War Memorial by H.R.H. the Prince of Wales, with a Running Commentary by E. R. Appleton*, relayed from the Alexandra Gardens, Cathays Park. (From Cardiff). Amongst those taking part in the Ceremony are: The Archbishop of Wales; The Rt. Hon. David Lloyd George, O.M., M.P.; The Bishop of Swansea; The Bishop of Llandaff; and Sir Cecil Harcourt-Smith.
- 1.0 p.m.—2.0 p.m.—*Georges Boulanger and his Orchestra*, from the Savoy Hotel.
- 2.30 p.m.—*Sir Walford Davies*: "An Opera in Three Acts (from the Drama by David Belasco). Italian Libretto by Guelfo Cavinini and Carlo Zangarini. English Version by R. H. Elkinn. Music by Puccini. Minnie (Stiles Allen), Jack Rance (Sheriff) (Roy Henderson), Dick Johnson (Ramerrez) (Walter Widop), Nick (Bar-tender at the "Polka") (Herbert Thorpe, Ashby (Agent of the Wells Transport Co.) Joseph Farrington; Miners—Sonora (Stuart Robertson), Trin (Hardy Williamson), Sid (Herbert Cameron), Handsome (Richard Ford), Harry (Kennedy McKenna), Joe (Osmond Davis), Happy (Leonard Ashdowne), Larkens (Sam Harrison); Billy Jackrabbit (an Indian Redskin) (Stanley Riley), Wowlle (Billy's Squaw) (Gladys Palmer), Jake Wallace (a Travelling Camp-Minstrel) (Stuart Robertson), José Castro (a Greaser from Ramerrez's gang) (Samuel Dyson), A Postillion (Hardy Williamson). The Wireless Male Chorus (Chorus-master, Stanford Robinson), The Wireless Symphony Orchestra (Leader, S. Kneale Kelley). Conducted by Percy Pitt.
- 3.15 p.m.—*Musical Interlude*.
- 3.20 p.m.—*M. E. M. Stéphan*: Elementary French.
- 3.50 p.m.—*Musical Interlude*.
- 4.0 p.m.—*William Hodgson's Marble Arch Pavilion Orchestra*.
- 4.15 p.m.—*Mr. Frederick Tawndrot*: "Good and Bad Buildings."
- 4.30 p.m.—*Orchestra* (contd.).
- 5.0 p.m.—*Holidays Abroad*: Miss Joyce Wedgwood—"Holland."
- 5.15 p.m.—*The Children's Hour*.
- 6.0 p.m.—*A Recital of Gramophone Records*, arranged by Mr. Christopher Stone.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—*Gramophone Records*.
- 7.0 p.m.—*Life in the Dominion*: Australia Through a Woman's Eyes.
- 7.15 p.m.—*The Foundations of Music*.
- 7.25 p.m.—Prof. F. W. Bursall "Engines for the Road and the Air—I. General Explanation of Heat and Combustion of Solid, Liquid and Gaseous Fuels." (From Birmingham.)
- 7.45 p.m.—*Vaudeville*. The West African Jubers (in a Folk Song, Dance Songs, and Proverb Song). The Three New Yorkers (in Harmony). Christine Silver in "Which," by Byers Fletcher. Cicely Courtneidge (Musical Comedy and Revue Star from "Clowns in Clover," in "A New Entertainment," assisted by Ivor McLaren), Jack Padbury's Cosmo Club Band, John Kirby (Comedian).
- 9.0 p.m.—Weather Forecast, Second General News Bulletin.
- 9.15 p.m.—*Sir Walford Davies*, "Music and the Ordinary Listener. Series VI—Music in Double Harness."
- 9.35 p.m.—*Local Announcements*, Shipping Forecast.
- 9.40 p.m.—*Peggy Cochrane* (Violin). Myra Hess (Pianoforte).
- 10.30 p.m.—12.0 midnight.—*Dance Music*.

WEDNESDAY

- 10.15 a.m.—*A Short Religious Service*.
- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
- 11.0 a.m.—*Gramophone Records*.
- 12.0 noon.—*A Ballad Concert*. Hayward Webb (Contralto), Frank Southwell (Tenor).
- 12.30 p.m.—*The B.B.C. Dance Orchestra*. Personally conducted by Jack Payne.
- 1.0—2.0 p.m.—*Frascati's Orchestra*, directed by Georges Haeck.
- 2.30 p.m.—*Mr. A. Lloyd James*: "Speech and Language."
- 2.50 p.m.—*Musical Interlude*.
- 3.0 p.m.—*Mr. J. C. Stobart and Miss Mary Somerville*: "The England that Shakespeare Knew—VI. The London of the Court and the City."
- 3.30 p.m.—*Musical Interlude*.
- 3.45 p.m.—*Miss E. C. Clarke*: "Food Values in Cooking—I. What is meant by Food and its Functions."
- 4.0 p.m.—*A Light Classical Concert*. Mary Hilliard (Soprano). The Gershwin Parkington Quartet: David Wise (1st Violin), Tate Gilder (2nd Violin), Anthony Collins (Viola), Gershwin Parkington (Violoncello). Quartet: String Quartet in G minor (Grieg).
- 4.30 p.m.—*Mary Hilliard*: Das alte Lied, Mit einer Primula veris, Mit einer Wasserlilie, Vom Monte Pincio (Grieg).
- 4.38 p.m.—*Quartet*: Italian Serenade (Wolf).
- 4.48 p.m.—*Mary Hilliard*: The Garden of Bamboos, In a Year, The Pavilion of Abounding Joy (Bantock).
- 4.55 p.m.—*Quartet*: String Quarter in B flat ("The Sunrise") (Haydn).
- 5.15 p.m.—*The Children's Hour*.
- 6.0 p.m.—*The B.B.C. Dance Orchestra*. Personally conducted by Jack Payne.
- 6.20 p.m.—*The Week's Work in the Garden*.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—*The B.B.C. Dance Orchestra*. Personally conducted by Jack Payne.
- 7.0 p.m.—*International Affairs*, Sir George Buchanan, "Geneva and the Health of the Nations."
- 7.15 p.m.—*The Foundations of Music*.
- 7.25 p.m.—*Captain A. J. Wetherall*, "A Camping Holiday." (From Dundee).
- 7.45 p.m.—*Vaudeville*.
- 7.55 p.m.—*The Girl of the Golden West* ("La Fanciulla del West")—An Opera in Three Acts (from the Drama by David Belasco). Italian Libretto by Guelfo Cavinini and Carlo Zangarini. English Version by R. H. Elkinn. Music by Puccini. Minnie (Stiles Allen), Jack Rance (Sheriff) (Roy Henderson), Dick Johnson (Ramerrez) (Walter Widop), Nick (Bar-tender at the "Polka") (Herbert Thorpe, Ashby (Agent of the Wells Transport Co.) Joseph Farrington; Miners—Sonora (Stuart Robertson), Trin (Hardy Williamson), Sid (Herbert Cameron), Handsome (Richard Ford), Harry (Kennedy McKenna), Joe (Osmond Davis), Happy (Leonard Ashdowne), Larkens (Sam Harrison); Billy Jackrabbit (an Indian Redskin) (Stanley Riley), Wowlle (Billy's Squaw) (Gladys Palmer), Jake Wallace (a Travelling Camp-Minstrel) (Stuart Robertson), José Castro (a Greaser from Ramerrez's gang) (Samuel Dyson), A Postillion (Hardy Williamson). The Wireless Male Chorus (Chorus-master, Stanford Robinson), The Wireless Symphony Orchestra (Leader, S. Kneale Kelley). Conducted by Percy Pitt.
- 9.0 p.m.—Weather Forecast, Second General News Bulletin.
- 9.15 p.m.—*Mr. S. K. Ratcliffe*: "Choosing the Candidates for the United States Presidency."
- 9.30 p.m.—*Local Announcements*, Shipping Forecast.
- 9.35 p.m.—*The Girl of the Golden West* (contd.). Acts II. and III.
- 10.50 p.m.—12.0 midnight.—*Dance Music*.

THURSDAY

- 10.15 a.m.—*A Short Religious Service*.
- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
- 11.0 a.m.—*Gramophone Records*.
- 12.0 noon.—*Light Music*. Corelli Winddeat's Octet, Maud Bostock (Soprano).
- 1.0—2.0 p.m.—*Gramophone Records*.
- 2.30 p.m.—*Mr. Eric Parker*: "Out of Doors from Week to Week—VII. Along the River."
- 3.0 p.m.—*Evensong*. From Westminster Abbey.
- 3.45 p.m.—*Mr. F. J. Broomhead*: "Poultry Keeping—Egg, Production as a Home Industry."
- 4.0 p.m.—*An Organ Recital*. By Frank Newman. Relayed from Lozells Picture House, Birmingham.
- 4.30 p.m.—*A Ballad Concert*. Elsie Wynn (Contralto), Frederick Steger (Tenor), Harold Fairhurst (Violin).
- 5.15 p.m.—*The Children's Hour*.
- 6.0 p.m.—*Ministry of Agriculture Fortnightly Bulletin*.
- 6.15 p.m.—*Market Prices for Farmers*.
- 6.20 p.m.—*Musical Interlude*.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast and First General News Bulletin.
- 6.45 p.m.—*Musical Interlude*.
- 7.0 p.m.—*Mrs. M. A. Hamilton*: "New Novels."
- 7.15 p.m.—*The Foundations of Music*.
- 7.25 p.m.—*Prof. W. N. Tattersall*: "Nature's Reaction to Man—I. The Balance of Nature." (From Cardiff.)
- 7.45 p.m.—*A Programme of Music for Female Voices*. The Wireless Chorus and Small Orchestra, conducted by Stanford Robinson. Betty Humby (Pianoforte). Orchestra: Overture, "Theodora" (Handel).
- 7.52 p.m.—*Female Voices*, Two Horns and Harp: Four Songs (Op. 17) (Brahms). 1. I hear a Harp. 2. Come away, death. 3. Greetings. 4. Song from Ossian's Fingal.
- 8.7 p.m.—*Betty Humby*: Rondo in A minor (No. 20) (Mozart).
- 8.15 p.m.—*Female Voices*, Strings and Harp: Five Songs of Innocence (Hely-Hutchinson). 1. Piping down the Valleys. 2. The Lamb. 3. Infant Joy. 4. Spring. 5. The Little Boy Lost.
- 8.21 p.m.—*Orchestra*: Divertimento No. 15 in B flat for Strings and two Horns (Mozart). Allegro—Theme and Variations—Minuet—Andante—Allegro molto.
- 8.31 p.m.—*Female Voices and Harp*: Choral Hymns from the Rig Veda (3rd Group) (Holst). 1. Hymn to the Dawn. 2. Hymn to Venä. 4. Hymn of the Travellers.
- 8.48 p.m.—*Betty Humby*: Two Scottish Dances (Tobias Matthay), The Drummer; The Braes o'Mar The Cuckoo (Daquin).
- 8.52 p.m.—*Unaccompanied Songs*: The Hawthorn Tree (Folk Song) (arr. Gerrard Williams), Finnish Lullaby (Palmgren, arr. Maurice Jacobson), There was a Pig (Folk Song) (arr. Percy Grainger). Orchestra: Mock Morris for String Orchestra (Percy Grainger).
- 9.0 p.m.—Weather Forecast, Second General News Bulletin.
- 9.15 p.m.—*Mr. Vernon Bartlett*: "The Way of the World."
- 9.30 p.m.—*Local Announcements*; Shipping Forecast.
- 9.35 p.m.—*Charlot's Hour—XXI*: A Light Entertainment, specially devised and arranged by the well known theatrical director, Andre Charlot.
- 10.35 p.m.—12.0 midnight.—*Dance Music*.
- 10.15 a.m.—*A Short Religious Service*.
- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
- 11.0 a.m.—*Gramophone Records*.
- 12.0 noon.—*A Sonata Recital*: Miriam Anglin (Violoncello), Dorothy Callender (Pianoforte).
- 12.30 p.m.—*An Organ Recital*, by Leonard H. Warner.
- 1.0 p.m.—2.0 p.m.—*Lunch-Time Music*: The Hotel Metropole Orchestra.
- 3.0 p.m.—*Mr. J. C. Stobart and Mr. Ernest Young*: "Empire History and Geography: History—'Other Empires'; Geography—'The East Indies and the Malay Peninsula.'" (Continued).
- 3.25 p.m.—*Musical Interlude*.
- 3.30 p.m.—*Plays to Schools*: "Brother Sun" (Housman), and "The Locked Chest" (Masefield).
- 4.30 p.m.—*A Ballad Concert*: Laura Moore (Contralto), Balbina Braynne (Pianoforte).
- 5.0 p.m.—*Mrs. Marion Cran*: A Garden Talk, "The Scents of the Garden."
- 5.15 p.m.—*The Children's Hour*.
- 6.0 p.m.—*Frank Westfield's Orchestra*.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—*Orchestra* (Continued).
- 7.0 p.m.—*Mr. G. A. Atkinson*: "Seen on the Screen."
- 7.15 p.m.—*The Foundations of Music*.
- 7.25 p.m.—*Prof. J. Dover Wilson*: "Six Tragedies of Shakespeare (An Introduction for the Plain Man)—I. Shakespeare our Common Heritage."
- 7.45 p.m.—*Vaudeville*: Dookson and Cookson (Duets), Willie Rouse ("Wireless Willie"), Ursula Hughes (Light Ballads), Sidney Fairbrother (Characters: I have met). The B.B.C. Dance Orchestra, Personally conducted by Jack Payne.
- 8.30 p.m.—*Royal Academy of Music Concert*: The Virtuoso String Quartet: String Quartet (John B. McEwen) (First Performance)
- 9.0 p.m.—Weather Forecast, Second General News Bulletin. Road Report.
- 9.15 p.m.—*Local Announcements*; Shipping Forecast.
- 9.20 p.m.—*Speech by The Rt. Hon. The Earl of Balfour, O.M.*, on the occasion of the Tenth Anniversary Dinner of the English-Speaking Union, relayed from the Hotel Victoria.
- 9.50 p.m.—*A Military Band Concert*: The Wireless Military Band, conducted by B. Walton O'Donnell. Frank Titterton (tenor), (Pianofortes, Victor Hely-Hutchinson and Gordon Bryan). Band: Grand March from "The Crown of India" (Elgar), Three Fugal Fancies (Victor Hely-Hutchinson, arr. Gerrard Williams).
- 10.5 p.m.—*Frank Titterton*: Drink to me only with thine eyes (arr. Quilter), My Dreams (Tosti).
- 10.12 p.m.—*Band*: Children's March (Grainger) (First performance in England), "Over the Hills and Far Away" (Grainger), Lyric Suite (Grieg). 1. The Shepherd Boy. 2. Norwegian Rustic March. 3. Nocturne. 4. March of the Dwarfs.
- 10.35 p.m.—*Frank Titterton*: Ah! depart, image fair (from "Manon") (Massenet), Oh! Land entrancing ("L'Africana") (Meyerbeer).
- 10.42 p.m.—*Victor Hely-Hutchinson and Gordon Bryan*: Musette de Traverny (Couperin), Hermundeur Illi (Faeroe Island Dance-Folk Song) (arr. Percy Grainger), Valse Triste (Op. 41, No. 2) (Glière), Scherzo (Op. 4) (Coëdès-Mongin).
- 10.52 p.m.—*Band*: Polish Dance No. 1 (Scharwenka).
- 11.0 p.m.—12.0 midnight.—*Dance Music*.
- 10.15 a.m.—*A Short Religious Service*.
- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
- 1.0—2.0 p.m.—*The Carlton Hotel Octet*, directed by Rene Taponnier.
- 3.30 p.m.—*The Band of the Royal Air Force*. Conducted by Flight-Lieut. J. Amers. Marion Bowers (Soprano). Harry Costigan (Baritone). Band: March, "In Old Quebec" (arr. A. W. Hughes) (Vive la Canadienne and O Canada). Overture, "The Mill on the Cliff" (Reissiger). Marion Bowers: Prince Charming ("The Vicar of Wakefield" (Liza Lehmann), Cupid Passes By (Oliver). Band: Selection from "Iolanthe" (Sullivan). Harry Costigan: To-morrow, In Summertime on Bredon (Fred Keelic). Band: Slow Waltz and Pizzicato from Ballet "Sylvia" (Delibes). The Rustle of Spring" (Sinding). Marion Bowers: Shepherds Gay (Sanderson), Song of the Little Folk (Eric Coates), Love is the Wind (MacFadyen). Band: Ballet Music from "William Tell" (Rossini). Harry Costigan: Off to Philadelphia (Battisen Haynes), Song of the Toreador (Bizet). Band: Fantasia, "Bacchanalia" (Finck) (On Popular Drinking Songs, old and new).
- 5.15 p.m.—*The Children's Hour*.
- 6.0 p.m.—*An Organ Recital* by Reginald Foort. From the Palladium.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—*Vaudeville*.
- 7.0 p.m.—*Mr. Basil Maine*: Next Week's Broadcast Music.
- 7.15 p.m.—*The Foundations of Music*.
- 7.25 p.m.—*Col. Philip Trevor*: Eye-Witness Account of the first Test Trial.
- 7.45 p.m.—*A Musical Comedy Programme*: Beatrice Richmond (Soprano), Kingsley Lark (Baritone). The Wireless Orchestra, conducted by John Ansell.
- 9.0 p.m.—Weather Forecast, Second General News Bulletin.
- 9.15 p.m.—*Mr. A. B. Valentine*, "Holidays in Britain—V. The Western Coasts of Scotland." (Continued).
- 9.30 p.m.—*Local Announcements*, Shipping Forecast.
- 9.35 p.m.—*Variety*: David Wise (Solo Violin). Hubert Eisdel (Tenor). Ivan Firth and Phyllis Scott (Old Time Songs and Duets). Elspeth Douglas Reid (Impersonations). Claud Hulbert and Enid Trevor (Comedy Duo).
- 10.35 p.m.—12.0 midnight.—*Dance Music*.

DAVENTRY (EXPERIMENTAL) PROGRAMME

(5 GB) (491·8 metres : 610 kc.) (25 kw.) (June 10—June 16)

SUNDAY

- 3.30 p.m.—A Military Band Concert. The Wireless Military Band, conducted by B. Walton O'Donnell.
- 5.20—5.45 p.m. (see 5XX).
- 5.55 p.m.—Religious Service (see 5XX).
- 8.45 p.m.—The Week's Good Cause. Appeal on behalf of the Birmingham Hospitals' Contributory Scheme by Alderman A. H. James (Lord Mayor of Birmingham).
- 8.50 p.m.—Weather Forecast, General News Bulletin.
- 9.0 p.m.—An Orchestral Concert.—The Birmingham Studio Augmented Orchestra (Leader, Frank Cantell). Conducted by Joseph Lewis. Overture in D minor (Handel), orchestrated by Elgar.
- 9.10 p.m.—Mollie Byrne (Soprano) and Orchestra: Bell Song from "Lakmé" (Delibes).
- 9.17 p.m.—Orchestra: Suite, "Cephalus and Procris" (Grétry).
- 9.30 p.m.—Sheridan Russell (Violoncello) and Orchestra: Symphonic Variations (Boellman).
- 9.45 p.m.—Orchestra: Three Dances from "King Richard II" (Percy Pitt).
- 10.0 p.m.—Mollie Byrne: Lullaby (Cyril Scott), Silver (Armstrong Gibbs), Nymphs and Sylphs (Bemberg). Sheridan Russell: Aria di chiesa (Church Air) (Stradella, arr. Bazelaire), Alman (Anon., 16th Century, arr. Craxton), Le jeu du Papillon (Butterfly at play) (Delune), Arietta (d'Andrieu).
- 10.17 p.m.—Orchestra: Selection from Suite of Ballet Music, "In Fairyland" (Cowen).
- 10.30 p.m.—Epilogue.

MONDAY

- 3.0 p.m.—The B.B.C. Dance Orchestra. Personally conducted by Jack Payne. Ernest Melvin (Light Ballads).
- 4.0 p.m.—Lozells Picture House Organ. Frank Newman (Organ), Alec Shanks (Baritone).
- 5.0 p.m.—A Ballad Concert. Molly Iverson (Soprano), John Van Zyl (Baritone), Adelina Leon ("Cello").

TUESDAY

- 3.0 p.m.—Paul Maulder's Rivoli Theatre Orchestra. From the Rivoli Theatre.
- 4.0 p.m.—A Military Band Programme: The Birmingham Military Band, conducted by W. A. Clarke, Norris Stanley (Violin), Charles Cardle (Entertainer).
- 5.45 p.m.—The Children's Hour.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Jack Padbury's Cosmo Club Band.
- 7.15 p.m.—A Light Concert: Constant Izard (Violin), Winifred Izard (Violoncello), Kenneth Stær (Tenor).
- 8.0 p.m.—A Debate.
- 9.0 p.m.—An Orchestral Concert: Edith Furnedge (Contralto); the Wireless Orchestra (Leader, S. Kneale Kelley), conducted by John Arsell.
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15—11.15 p.m.—Ballad Concert: The Birmingham Studio Chorus, conducted by Joseph Lewis, Lorraine Tombo (Pianoforte), William Heselbine (Tenor).

WEDNESDAY

- 3.0 p.m.—Chamber Music (from Birmingham): Maurice Cole

- (Pianoforte), Winifred Small (Violin).
- 4.0 p.m.—The B.B.C. Dance Orchestra, personally conducted by Jack Payne; Christine Hawkes (Concertina Solos); Rose Maryl (Irish Humour).
- 5.45 p.m.—The Children's Hour.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Light Music: Jessie Hewson (Soprano), Leonard Ashdowne (Baritone), W. L. Trytel and his Octet.
- 8.0 p.m.—A Light Instrumental Concert. Pattison's Salon Orchestra, directed by Norris Stanley. Relayed from the Café Restaurant, Corporation Street, Birmingham, Charles Badham (Pianoforte).
- 9.0 p.m.—Variety (from Birmingham): The Old-time Singers, Cedric Sharpe (Violoncello), Tom Clare (Entertainer at the Piano).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15—11.15 p.m.—Dance Music.

THURSDAY

- 3.0 p.m.—A Studio Concert. Frank Phillips (Baritone). The Old English Chamber Orchestra. Conducted by Fred Adlington.
- 4.30 p.m.—Lozells Picture House Orchestra. Conducted by Paul Rimmer. Chatterly Ingram (Contralto), Frank Newman (Organ).
- 5.45 p.m.—The Children's Hour.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—The B.B.C. Dance Orchestra. Personally conducted by Jack Payne. Nellie o'List, Ernest Melvin (Light Ballads).
- 8.0 p.m.—Vaudeville. (From Birmingham). Toni Farrell (Synchronizations at the Piano), Arthur Clifford (Entertainer), John Pidoux (Banjo), Gable and Banks (In Mimicry), Philip Brown's Dominoes Dance Band.

FRIDAY

- 3.0 p.m.—An Organ Recital. By Leonard H. Warner. From St. Botolph's, Bishopsgate. Evelyn Arden (Soprano).
- 4.0 p.m.—The B.B.C. Dance Orchestra. Personally conducted by Jack Payne. Vincent Sternoyd (Entertainer), Christine Hawkes (Concertina Solos).
- 5.45 p.m.—The Children's Hour.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Light Music. Phyllis Woolfe (Mezzo-Soprano), Christopher Mayson (Baritone), The Charles Trimby Sextet.
- 8.0 p.m.—A Light Orchestral Concert. The Birmingham Studio Orchestra, conducted by Joseph Lewis: Herbert Langley (Baritone).
- 9.15 p.m.—A Recital. Sinclair Logan (Baritone), and William Primrose (Violin). William Primrose's Twelfth Violin Concerto in E (Vivaldi).
- 9.22 p.m.—Sinclair Logan: St. Agnes Morn (Purcell, arr. G. Shaw), So sweet is she (arr. Dolmetsch), Now

- is the month of maying (Morley).
- 9.30 p.m.—William Primrose: Giboulée (Muriel Herbert), Tambourin Chinois (Kreisler).
- 9.38 p.m.—Sinclair Logan: And so I made a Villanelle (Cyril Scott), Sweet and Twenty (Warlock), Foreboding (Boughton), I have twelve oxen (Ireland).
- 9.45 p.m.—Poems read by Mr. Robert Harris.
- 10.0 p.m.—Weather Forecast, Second General News Bulletin, Road Report.
- 10.15—11.15 p.m.—Dance Music.

SATURDAY

- 3.30 p.m.—Variety. Nicol Pentland (in Scots Recitations), Niedzielski (Pianoforte), Sara Arony (Songs of Reminiscences at the Piano), The Cleff Trio, in Part Songs.
- 4.30 p.m.—Dance Music. Paul Raffman and his Band. Alice Moxon (Soprano) in Light Songs.
- 5.45 p.m.—The Children's Hour.
- 6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Light Music. The Birmingham Studio Orchestra, conducted by Frank Cantell. Eda Kersey (Violin).
- 8.0 p.m.—"Paste," a short story by Henry James, read by Mr. H. S. Ede.
- 8.30 p.m.—Chamber Music. Dorothy Helmrich (Mezzo-Soprano), Nicholas Roth (Violin), George Roth (Violoncello), Endre Petri (Pianoforte).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15 p.m.—Sports Bulletin.
- 10.20—11.15 p.m.—Some Old-fashioned Dances. The Birmingham Studio Orchestra, conducted by Joseph Lewis. With an Interlude of Old Time Songs by Nellie Finch (Soprano).

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain)

- Radio Barcelona (EAJ). WL 344.8 m. (870 kc.); 1.5 kw.
- 12.0 noon.—Chimes and Weather.
- 1.30 p.m.—Concert of Trio Music.
- 6.0 p.m.—Exchange Quotations.
- 6.10 p.m.—Orchestral Selections.
- 6.30 p.m.—Tenor Song Recital. 1. Selection from "La Favorita" (Donizetti). 2. Selection from Act 3 of "Il Trovatore" (Verdi). 3. Selection from Act 3 of "La Tosca" (Puccini).
- 7.0 p.m.—Talk on "Francisco Espoz y Mina".
- 7.20 p.m.—Orchestral Selections. 1. Serenata (Delmas). 2. Selection from "La Dolores" (Bretón). 3. Serenata Morisca (Chapi).
- 7.50 p.m.—Soprano Song Recital. 1. Il Pescatore canta (Tosti). 2. Selection from Act 2 of "La Tosca" (Puccini). 3. Se tu m'ami, se tu sospiri (Pergolesi). 4. Selection—Il Piccolo Marat (Mascagni).
- 8.20 p.m.—Orchestral Selections. 1. Czardas (Michiels). 2. Prelude and Mazurka (Delibes-Mouton). 3. Valse de la Poupee (Delibes-Mouton).
- 8.40 p.m.—Sports and Close Down.

BERGEN (Norway)

- Kringkastingselskap. WL 369.9 m. (811 kc.); 1.5 kw.
- 10.30 a.m.—Religious Service.
- 12.30 p.m.—Weather and News.
- 5.0 p.m.—Service from St. John's.
- 8.0 p.m.—Concert: 1. Suite lyrique (Karganoff). 2. Andantino from the Fourth Symphony (Tchajkovsky). 3. Natha Vals (Tchajkovsky). 4. Angel's Dream (Rubinstein).
- 8.30 p.m.—Choral Concert.
- 9.0 p.m.—Talk, "A journey through North Russia," by A. Konwensky.
- 9.30 p.m.—The Exhibition Orchestra.
- 10.0 p.m.—Weather, News and Time.
- 10.15 p.m.—Dance Music Programme.
- 12.0 midnight (approx.)—Close Down.

BERLIN (Germany)

- Königswusterhausen. WL 1,250 m. (240 kc.); 35 kw.

- 6.30 a.m.—3.0 p.m.—Programme relayed from Voxhaus.

- 3.0 p.m.—Talk for Photographers.
- 3.30—6.30 p.m.—Programme relayed from Voxhaus.
- 6.30 p.m.—Talk, "The German State Railway and its Passengers."
- 7.0 p.m.—Talk, "Modern Evangelical Church Music," by Prof. Moser.
- 8.30 p.m.—Programme from Voxhaus.

BERLIN (Germany)

- Voxhaus. WL 484.6 m. (619 kc); 4 kw.
- 6.30 a.m.—Orchestral Concert.
- 9.0 a.m.—Sacred Morning Recital.
- 11.30 a.m.—Orchestral Concert from the Grosse Schauspielhaus. 2. Pianoforte quartet selections, (a) Tambourin (Rameau), (b) Petruschka, (c) Russian Dance (Zakín). 3. Soprano Solo from "The Huguenots" (Meyerbeer). 4. Pianoforte Quartet Selections, (a) The White Village, (b) Vo-do-de-o, (c) Valencia. 4. Variations on "A Carnival in Venice" (Benedict). 5. Pianoforte Duets, (a) Song on the piano; Dreams of Hawaii, (c) Jazz. 6. Soprano Solo from "La Bohème" (Puccini). 7. Pianoforte Quartet Selections, (a) Ain't she Sweet, (b) Americana.
- 1.45 p.m.—Congress of the German Engineering Association from Essen.
- 3.30 p.m.—Agricultural Programme.
- 5.0 p.m.—Instrumental Concert. 1. Quartet in F major, Op. 18, No. 1 (Beethoven). 2. Violin Solos, (a) Adagio (Grazioli), (b) The Cuckoo (Daquin). 3. Zwei Märchenbilder for Viola (Schumann). 4. Canzonetta from the Quartet in E flat major (Mendelssohn). 5. Cello Solos, (a) Romance, (b) Minuet (Becker), (c) Espagnole (Glazounov). 6. Violin Solos, (a) Two Slavonic Dance Melodies in E minor (Dvorák), (b) Mazurek (Dvorák). 7. "Movements from the String Quartet (Verdi).
- 7.0 p.m.—Talk, "The Practical Life of a Local Newspaper Reporter."
- 7.30 p.m.—Talk, "The History and Importance of Ju-Jitsu."
- 8.0 p.m.—Talk, "Persian Women."
- 8.30 p.m.—Variety Concert, followed by News, Time and Weather.

- 10.30 p.m.—Dance Music Programme.
- 12.30 a.m. (Mon. approx.)—Close Down.

BERNE (Switzerland)

- Radio-Berne. WL 411 m. (730 kc); 1.5 kw.
- 10.30 a.m.—Protestant Address.
- 1.0 p.m.—Time and Weather.
- 1.5 p.m.—Orchestral Concert.
- 2.30 p.m.—Talk, "Blossoms and Bees."
- 3.30 p.m.—The Kursaal Orchestra.
- 8.0 p.m.—Time and Weather.
- 8.5 p.m.—Humorous Half-Hour.
- 8.30 p.m.—Orchestral and Vocal Programme. News, Sports Notes and Weather in the Interval.
- 10.35 p.m. (approx.)—Close Down.

BRATISLAVA (Czecho-Slovakia)

- Radio Bratislava. WL 300 m. (1,000 kc); 0.5 kw.
- Transmits at intervals from 9.0 a.m.
- 7.0 p.m.—Academy Programme.
- 9.0 p.m.—Dramatic Selections.
- 10.20 p.m.—Exhibition Programme. Relayed from Britnn.
- BRESLAU (Germany)
- Schlesische Funkstunde. WL 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (909 kc).
- 8.45 a.m.—Carillon from Christ Church.
- 11.0 a.m.—Catholic Morning Recital.
- 12 noon.—Concert of Chamber Music. 1. Trio in G major, Op. 9, No. 1 (Beethoven). 2. Trio in B flat major (Schubert). 3. Scherzo from the Trio in A minor, Op. 77b (Reger).
- 1.45 p.m.—Congress of the German Engineering Association from Essen.
- 3.0 p.m.—Gardening Hints by A. Greis.
- 3.10 p.m.—Hints for Chess Players.
- 3.25 p.m.—Reading of Fairy Stories.
- 3.45 p.m.—English Reading from "The Aran Islands" (Synge).
- 4.25 p.m.—Relay of the Finals for the "Flying Grand Prix" of Silesia, Music in the Intervals.
- 6.55 p.m.—Weather, followed by Talk on "The Migration of Bees."
- 7.30 p.m.—Talk by Arnold Hahn.
- 8.30 p.m.—Concert. 1. First movement from the Concerto for

- clarinet in E flat minor (Weber).
- 2. Tenor songs (Schumann and Wolf).
- 3. Five Songs (Brahms).
- (a) Von ewige liebe, (b) Feldeinsamkeit, (c) Alte liebe, (d) Vergeliches Ständchen, (e) Der Schmiried.
- 4. Concertino-clarinet Solo (Reiniger).
- 5. Tenor Songs (Strauss): (a) Morgen, (b) Traum in der Dämmerung, (c) Ständchen.
- 10.0 p.m.—Announcements, followed by Programme from Voxhaus.
- 12 midnight (approx.)—Close Down.

BRÜNN (Czecho-Slovakia)

- Komarov. WL 441.2 m. (680 kc); 3 kw.
- 9.0 a.m.—Church Music. 1. Passacaglia (Frescobaldi). 2. Selection (Stradella). 3. Fantasia and Fugue (Bach). 4. Messiah (Handel). 5. Prelude and Fugue (Bach). 6. "Elias" Overture (Mendelssohn).
- 10.0 a.m.—Agricultural Report.
- 10.30 a.m.—Talk, "American Agriculture."
- 11.0 a.m.—Concert Programme.
- 12.0 noon.—Programme from Exhibition.
- 3.0 p.m.—Exhibition Programme.
- 4.30 p.m.—Talk for Workers.
- 6.0 p.m.—German Transmission.
- 7.0 p.m.—Programme from Bratislava.
- 9.0 p.m.—Exhibition Programme.
- 10.0 p.m.—Programme from Prague.
- 10.20 p.m.—Exhibition Programme.

BRUSSELS (Belgium)

- Radio Belgique. WL 508.5 m. (590 kc); 1.5 kw.
- 5.0 p.m.—Dance Music from the St. Sauveur Palais de Danse.
- 6.0 p.m.—Children's Programme.
- 6.30 p.m.—Trio Concert: 1. "The Calife de Bagdad" —Overture (Boieldieu). 2. Selection from "Le Jongleur de Notre Dame" (Massenet). 3. Dryades, for Pianoforte (Behault). 4. Serenade (Widor). 5. Le petit élf ferme l'œil (Schmitt). 6. Third Romance (Fauré). 7. Andante for Cello (Grieg). 8. Selection from "Tristan and Isolde" (Wagner). 9. Liebeslied, for Violin (Kreisler). 10. Danses (Dvorák).
- 7.30 p.m.—Le Radio-Chronique.
- 8.15 p.m.—Concert: 1. Selection from "Si j'étais Roi" (Adam). 2. "The

- Red Rose" song from "M. Beaucaire" (Messager). 3. Selection from "The Merry Widow" (Lehár).
- 4. Duet from "A Waltz Dream" (Strauss). 5. Cocorico (Ganne). 6. (a) When I see you (Hamy), (b) Marvellous (de Rose), (c) Why shouldn't I love you? (Hamy). 7. Ciboulte (Hahft). 8. (a) Vladivostok (Bee and Packay), (b) That naughty Charleston (Hamy), (c) Carridas spanish (Hamy). 9. Selection from "Rose Marie" (Friml). 10. Selection from "The Count of Luxembourg" (Lehár). 11. "No No Nanette" (Youmans).
- 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)

- Magyar Telefon Hírmondó és Radio R.T. WL 557.1 m. (538 kc); 25 kw.
- 9.0 a.m.—News and Beauty Hints.
- 10.0 a.m.—Service relayed from the University Church.
- 12.0 noon.—Carillon, Time, Weather and Pianoforte Music.
- 3.30 p.m.—Talk, "Pig Rearing."
- 4.0 p.m.—Reading of Fairy Stories.
- 4.45 p.m.—Time and Weather.
- 5.0 p.m.—Humorous Talk, followed by Sports Notes.
- 6.0 p.m.—Concert by a Male Voice Choir. Relayed from "Margaret's Island."
- 7.50 p.m.—Sports and Running Notes.
- 8.0 p.m.—A Comedy by Paul Cavault, followed by Time, Sports Notes and Tzigane Music. Relayed from the Hotel Britannia.
- 12.0 midnight (approx.)—Close Down.

COLOGNE (Germany)

- Westdeutscher Rundfunk. WL 283 m. (1,060 kc); 4 kw.
- 9.0 a.m.—Evangelical Morning Recital
- 11 a.m.—1.45 p.m.—See Langenberg.
- 1.45 p.m.—Programme relayed from Essen (See Langenberg).
- 3.10 p.m.—Wireless Literature.
- 3.30 p.m.—See Langenberg Station.
- 4.30 p.m.—Concert of Wind-Instruments. 1. Quintet, Op. 9 (Beethoven). 2. Variations on "Reich mir die Hand, mein Leben" (Beethoven). 3. Sestet for Five Wind-Instruments and Pianoforte, Op. 45 (Blümler).

Programmes for Sunday.—(Cont.)

5.45 p.m.—German-Swiss Swimming Championship, relayed from Bielefeld.
6.10 p.m.—Programme from Münster. (See Langenberg Station).
7.35 p.m.—Talk for Workers.
8.0 p.m.—Sports Notes.
8.15 p.m.—Choral Concert. 1. "Euristeo"—Overture (Hasse). 2. Soprano Solo from "Alceste" (Glück). 3. Mixed Choir, String Orchestra and Organ—Ave verum (Mozart). 4. Concerto in F major (Handel). 5. Die vier Weltalter—Symphony (Dittersdorf). 6. Three Character Pieces (Hoffmann). (a) Ruhe im Schatten einer Ruine, (b) Ballade, (c) Im Sonnenschein. 7. Choir and Orchestra—Die Liebe ist überall (Weinzierl). 8. Serenade No. 4 in F major (Volkmann). 9. Three Bagatelles for String Orchestra (Kaun). (a) Liebeslied, (b) Mondnacht, (c) Minuet. 10. Male Voice Choir with Orchestra—Ertelied (Fried). Followed by Sports Notes, Musical Selections and Dance Music Programme.
12 midnight (approx.).—Close Down.

COPENHAGEN (Denmark)
Copenhagen Radio. WL 337.4 m. (889 kc); 1 kw. Relayed by Kalundborg on 1,533.8 m. (260 kc).
10.0 a.m.—Divine Service.
2.0 p.m.—Divine Service relayed from the Garrison Church.
3.50 p.m.—Afternoon Concert.
5.30 p.m.—Programme for Children.
6.0 p.m.—Town Hall Chimes.
6.50 p.m.—Weather, News and Time.
7.30 p.m.—Talk, "The Various Uses of Flying Machines."
8.0 p.m.—Town Hall Chimes.
8.5 p.m. (approx.).—Concert. 1. Hussar's Reveille March. 2. King Christian IX. Honour March (Lumbye). 3. Danish Cannon. 4. Fantasia on Danish Soldier Songs (Nielsen). 5. Valse militaire (Norup). 6. Military March (Borregaard). 7. Eight Soldier Songs. 8. Homage March (Allin). 9. Signal Gallop. (Pöckel). 10. Infantry Retreat. 11. Artillery Retreat. News.
9.45 p.m.—Orchestral Concert 1. Military March No. 4 (Elgar). 2. "The Corsair"—Overture. (Berlioz). 3. Ballet Music from "Othello" (Verdi). 4. Piedmontese Dance (Sinigaglia). 5. Waltz from "Hansel and Gretel" (Humperdinck). 6. Rhapsody No. 1. (Liszt). 7. Entry March of the Boyards (Halvorsen).
10.45 p.m.—Dance Music Programme relayed from Nimb's Restaurant.
12 midnight.—Town Hall Chimes.
12.30 a.m. (Monday) (approx.).—Close Down.

CORK (Ireland)
Cork Broadcasting Station (6CK). WL 400 m. (750 kc); 1.5 kw.
8.30 p.m.—Concert by the No. 2 Army Band, Mrs. A. Young (Mezzo-Soprano), Percy Bilsbury (Tenor) and Mr. A. Young (Baritone).
11.0 p.m.—National Anthem, followed by Close Down.

CRACOW (Poland)
Polskie-Radio. WL 567 m. (529 kc); 1.5 kw.
7.35 p.m.—Talk, "Tatry in Polish Tales, Legends and Poetry."
8.0 p.m.—Fanfare and Sports Notes.
8.5 p.m.—Talk, "Polish Humorous Literature" by Mr. J. Madey.
8.30 p.m.—Concert. 1. Selection from "A Masked Ball" (Verdi). 2. Selections from "La Bohème" (Puccini). 3. Prologue from "I Pagliacci" (Leoncavallo). 4. Scene from the First Act of "La Tosca" (Puccini). 5. (a) Selection from "A Masked Ball" (Verdi), (b) Aria from "Zingari" (Leoncavallo). 6. Love Scene from the First Act of "Madame Butterfly" (Puccini).
10.0 p.m.—Programme from Warsaw.
10.30 p.m.—Restaurant Concert.
11.30 p.m. (approx.).—Close Down.

DUBLIN (Ireland)
Dublin Broadcasting Station (2RN). WL 319.1 m. (940 kc); 1.5 kw.
8.30—11.0 p.m.—Concert from Cork.

FRANKFURT-am-MAIN (Germany)
Südwestdeutscher Rundfunk. WL 429 m. (690 kc); 4 kw. Relayed by Cassel on 252.1 m. (1,190 kc.).
8.0 a.m.—Sacred Morning Recital.
11.30 a.m.—Talk for Parents.
12.0 noon.—Concert from Cassel: 1. Overture in D major (Hungerland).

2. Mondnacht in Glarus (Kollmaneck). 3. Abendständchen (Ritter). 4. Guitar Solos: (a) Fantasia; (b) Minuet (Sor). 5. Flora Fantasia (Satori). 6. Variation on "Verlassen bin i" (Koschat). 7. Dance of the Butterflies (Hungerland). 8. Frei weg—March (Latann).
1.45 p.m.—Relay of the Congress of the German Engineering Association, from Essen.
3.0 p.m.—Children's Programme.
4.30 p.m.—Pianoforte Concerto in E flat major (Mozart).
6.0 p.m.—Talk and Reading.
7.30 p.m.—Through the Zoo—the New Aquarium, by Dr. Lavin.
8.30 p.m.—Orchestral Concert: 1. Divertimento in D major (Mozart). 2. La musica notturna di Madrid (Bocherini). 3. Song. 4. "Claire de lune" (Debussy). 5. Selections from "The Damnation of Faust" (Berlioz). 6. A Summer Night in Madrid (Glinka). 7. Ballet suite from "Naimona" (Lalo). 8. Song. 9. From the Symphony "Im Walde" (Raff). Followed by Dance Music from Voxhaus.

FREE STATE OF DANZIG.
WL 272.7 m. (1,100 kc); 0.75 kw.
9.0 a.m.—Programme from Königsberg.
10.10 a.m.—Programme from Cologne.
11.0 a.m.—Weather Forecast.
11.15 a.m.—Instrumental Concert. 1. Lothringer March (Game). 2. "Morning, Noon and Night"—Overture (Suppé). 3. Waltz from "Polenblut" (Nedbal). 4. Selections from "Tannhäuser" (Wagner). 5. Under African Skies (Jessel). 6. The Hour—Ballad (Löwe). 7. Selection from "Preciosa" (Weber). 8. Zwei Rosenlieder (Eulenberg). 9. Potpourri of Russian Folk Melodies (Artemeff). 10. Japanese Lantern Dance (Moshitomo). 11. Was die Wandervogel singen (Morena). 12. Der Diplomat (Sousa).
12.55—6.0 p.m.—Programme relayed from Königsberg.
6.0 p.m.—Reading from the Poems of Gustav Kross.
6.30 p.m.—Talk on Forestry.
7.10—10.30 p.m.—Programme relayed from Königsberg.
10.30 p.m.—Programme from Voxhaus.
12 midnight (approx.).—Close Down.

HAMBURG (Germany)
Norag (ha, in Morse). WL 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297 m. (1,010 kc); and Kiel, 255 m. (1,176 kc).
Transmits at intervals from 6.30 a.m.
11.0 a.m.—Talk, "Behind the Scenes of a Theatre in the pre-Christian Era," by Dr. Funk.
11.30 a.m. (Hamburg and Kiel).—Restaurant Ostermann Concert.
12.30 p.m.—Talk on "The Exchange."
1.45 p.m.—Opening of the Congress of the German Engineering Association in Essen, from Essen.
5.0 p.m.—Café Wallhof Concert.
7.0 p.m.—Talk, "A Cruise with the 'Oceana' up the Nile."
7.30 p.m.—Talk, "Modern Gymnastics for Women," by Franz Weststedt.
7.40 p.m.—Sports Notes and Weather.
8.0 p.m.—Concert. 1. "The Marriage of Figaro"—Overture (Mozart). 2. Address. 3. Duet for Soprano and Baritone: Ach englisch Schäferin. 4. Duet: Old French pastorale. 5. Poem. 6. Rocco Tänze. 7. Tenor Song: Ergötzliches Zeit (Krieger). 8. Air from "Der Zauberbaum" (Glück). 9. Recitation. 10. Orchestral Selection. 11. Old Viennese Rocco Song. 12. Ballet Suite (Glück-Mottl). 13. (a) Lob des Kaffees (Haydn), (b) Ode vom Kamillente (Gabler), (c) Wer much haben will, (d) Lied des Meissner Figürchen (Greiner). 14. Recitations. 15. Quartet, (a) Rosen auf den Weg getreut, (b) Gute Nacht, liebste Anna Dorothee.
10.0 p.m. (approx.).—News and Topical Events.
10.30 p.m. (Hamburg and Kiel).—Café Wallhof Concert.

HILVERSUM (Holland)
Algemene Vereeniging Radio-Omroep. WL 1,069 m. (280 kc); 5 kw.
10.10 a.m.—Divine Service.
12.10 p.m.—Concert of Trio Music.
1.40 p.m.—The Hawaiian Radio Five.
2.40 p.m.—Concert of Vocal and Instrumental Selections.
4.10 p.m.—Recital of the Pianoforte Sonatas of Beethoven. Illustrative Talk by Mr. Schmidt.
5.40 p.m.—The "Kling" Ensemble;

7.40 p.m.—Time, Weather and News.
7.50 p.m.—"The Barber of Seville"—Opéra-comique (Rossini).
10.40 p.m. (approx.).—Close Down.

HUIZEN (Holland)
WL 1,870 m. (160 kc); 4 kw.
9.10 a.m.—Sacred Concert.
10.10 a.m.—Divine Service.
1.10 p.m.—Concert of Trio Music.
2.10 p.m.—Talk on "Literature."
3.10 p.m.—Vocal Quartet Concert.
4.40 p.m.—Service for Hospitals.
6.30 p.m.—Divine Service from the Reform Church at Amsterdam.
8.0 p.m.—Talk by Prof. Brandsma.
8.55 p.m.—Vocal and Orchestral Concert.
11.25 p.m.—Epilogue and Close Down.

JUAN-LES-PINS (France)
Radio LL. WL 230 m. (1,304 kc); 0.25 kw.
1.0 p.m.—Symphony Concert: 1. Retour du printemps (Waldteufel). 2. Ten Minutes for Children. 3. Chant sans paroles (Tchaikovsky). 4. Selection from "Peer Gynt" (Grieg). 5. La Sérénade (Tosti). 6. Selection from "La Bohème" (Puccini). 7. Berceuse (Gretschmannoff). 8. Rip (Planquette).
9.0 p.m.—News. Selection from "I Pagliacci" (Leoncavallo).
10.0 p.m.—Dance Music Programme.
10.30 p.m. (approx.).—Close Down.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. WL 303 m (990 kc); 4 kw.
9.0 a.m.—Morning Recital.
10.10 a.m.—Programme from Cologne.
11.0 a.m.—Weather Forecast.
11.15 a.m.—Programme from Danzig.
12.55 p.m.—Time and Weather.
1.45 p.m.—Programme from Voxhaus.
3.0 p.m.—Chess Problems Talk.
3.45 p.m.—Programme for Children.
4.15 p.m.—Concert. 1. "The Mute of Portici"—Overture (Auber). 2. Selection from "Si j'étais Roi" (Adam). 3. Ariete die Tochter der Luft (Bach). 4. Russian Dance No. 7 (Bortkiewicz). 5. From Southern Spheres (Fresco). 6. Delirium Walker (Strauss). 7. Serenata appassionata (Elvesta). 8. Hohomolo (Reeves).
6.0 p.m.—Programme from Danzig.
6.30 p.m.—Programme from Danzig.
7.10 p.m.—"Humour in World Literature—Don Quixote."
8.0 p.m.—Variety Concert of Vocal and Instrumental Music.
10.0 p.m.—Weather and News.
10.30 p.m.—Programme from Voxhaus.
12 midnight (approx.).—Close Down.

KOVNO (Lithuania)
Radio Kaunas. WL 2,000 m. (150 kc); 15 kw.
12.0 noon.—Time and Carillon.
12.3 p.m.—Weather, and Sacred Music.
12.30 p.m.—Programme for Children.
7.15 p.m.—Tzigane Music Programme.
7.30 p.m.—Talk on a Health Subject.
8.0 p.m.—Talk by Mr. Kuzmickis.
8.30 p.m.—Time, Weather, followed by Political Review.
9.30 p.m.—Variety Concert.

LAHTI (Finland)
WL 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 275.9 m. (798 kc); 1.2 kw.
8.0 a.m.—Divine Service.
10.50 a.m.—Musical Selections.
11.50 a.m.—Weather and Time.
12.0 noon.—Service (in Swedish).
5.57 p.m.—Time and Weather.
6.10 p.m.—News, followed by Concert. 1. "Phédre"—Overture (Masse-net). 2. Carnaval (Guiraud). 3. "La Princesse Jaune"—Overture (Saint-Saëns).
6.50 p.m.—Recital of Songs.
7.10 p.m.—Orchestral Concert: 1. Melodies from "Die Faschingsfee" (Kalman). 2. Hungarian Dances (Brahms). 3. Herbstweisen (Waldteufel). 4. Melodies from "Der Zarewitsch" (Lehár). 5. Melodies from "Paganini" (Lehár). 6. Viola Solos.
8.45 p.m.—News in Finnish and Swedish.
9.15 p.m.—Relay from a Restaurant.

LANGENBERG (Germany)
Westdeutscher Rundfunk. WL 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc).
9.0 a.m.—Programme from Cologne.
11.0 a.m.—Talk on "Albrecht Dürer," relayed from Düsseldorf.
11.25 a.m.—Talk on "Taxation," relayed from Münster.
11.45 a.m.—Open-Air Concert from Düsseldorf. 1. March and Chorus from "Judas Maccabæus" (Handel). 2. "Pique-Dame"—Over-

ture (Suppé). 3. Serenade for Flute and French Horn (Titi). 4. Selection from "Samson and Delilah" (Saint-Saëns). 5. Spring Serenade (Lacombe). 6. Selection for Two Trumpets—Die Wald-vogelein-Polka (Seb. Mayr). 7. Waldeufeleien—Potpourri (Kling). 8. Aufzug der Stadtwache—Character Sketch (Jessel). 9. Tattoo (Machts). 10. Regimental March (Jurek).

1.45 p.m.—General Meeting of the German Engineering Association, from Essen. Programme of Talks. 1. Esprit de corps in the Engineering Profession. 2. Art and Technique.
3.10 p.m.—Programme from Cologne.
3.30 p.m.—Chess Talk from Düsseldorf.
3.50 p.m.—Pianoforte Selections from Bach's "Wohltemperiertes Klavier" relayed from Düsseldorf.
4.30 p.m.—Programme from Cologne.
5.45 p.m.—German-Swiss Swimming Championship, relayed from the Town Baths, Bielefeld.
6.10 p.m.—Commemoration Festival—Annette Droste, from Münster.
7.35 p.m.—12 midnight.—Programme from Cologne.

LEIPZIG (Germany)
Mitteldeutscher Rundfunk. WL 366 m. (818 kc); 4 kw. Relayed by Dresden on 275.2 m. (1,090 kc.).
8.30 a.m.—Church Organ Recital.
9.0 a.m.—Sacred Morning Recital.
11.0 a.m.—Open Air Concert.
12.0 noon.—Talk, "Sick Animals."
1.45 p.m.—Relay of the Congress of the German Engineering Association from Essen.
3.0 p.m.—Orchestral Concert.
4.0 p.m.—Selections and Recital from the works of Verhaeren.
6.0 p.m.—"Euryanthe" Opera in Three Acts (Weber), relayed from the National Theatre, Weimar.
9.0 p.m.—Concert of Russian Balalaika Folk Music; 1. Mjud—March. 2. Russian Folk Melodies. 3. The Red Sarafan (Warlamoff). 4. Chinese Dance (Erzmiatli). 5. Volgalied (Rasin). 6. Potpourri of Russian Student Songs. 7. Aria from "Pique Dame" (Tchaikovsky). 8. "Poljanka"—Russian Folk Song. 9. Russian Sailors' March. 10. Potpourri of Russian Folk Songs. 11. Kasbeck—Caucasian Song. 12. Gelzerkaja—Russian Dance Song. 13. Russian Folk Song Potpourri. 14. Song from "Fiametta" (Minkus). 15. Russian Folk Song. 16. Es scheint der Mond—Folk Song.
11.0 p.m.—Programme from Voxhaus.
12.30 a.m. (Mon., approx.).—Close Down.

MADRID (Spain)
Union Radio (EAJ7). WL 374 m. (802 kc); 1.5 kw.
11.30 a.m.—Concert by the Municipal Band from the Parque del Retiro.
2.0 p.m.—Orchestral Concert: 1. Alegrias—Paso doble (Canonge). 2. Chopinista—Fox-trot (Doncet). 3. La guardia amarilla (Jiménez). 4. Interlude by Luis Medina. 5. Rhapsody in F, No. 1 (Liszt). 6. Selection from "La parranda" (Alosno). 7. De la España clásica—Dance (Font and De Anta).
3.0 p.m.—Municipal Band Concert from the Hotel Nacional, Madrid.
7.0 p.m.—Programme for Children.
8.0 p.m.—Dance Music Programme. Programme relayed by San Sebastian (EAJ78). 335 m. (895 kc).
10.0 p.m.—Chimes and Time.
10.5 p.m.—Choral Concert of Sacred Music relayed from the Masa Coral at Madrid.
12.30 a.m. Mon. (approx.).—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. WL 549.3 m. (546 kc); 7 kw.
10.30 a.m.—Concert of Sacred Music.
12.30 p.m.—The Radio Quartet.
3.30 p.m.—Concert. 1. Scènes napolitaines (Massenet). 2. Soprano Solos: (a) Serenata (Schubert), (b) Notturmo (Ravasenga). 3. Baritone Solos: (a) The Two Grenadiers (Schumann), (b) Aria from "Elijah" (Mendelssohn). 4. Selection from "Hansel and Gretel" (Humperdinck). 5. Popular Argentine Songs. 6. Signore ascolta la mia parola—Baritone Solo (Raff). 7. Soprano Solo from "Mignon" (Thomas). 8. Quintet Selections: (a) Nocturne (Garnowsky), (b) Tutti in maschera (Pedrotti).
4.45 p.m.—Programme for Children.
5.15 p.m.—Dance Music Programme from the Cova Restaurant.
8.45 p.m.—Talk, "Rome and Carthage."
9.0 p.m.—"Adriana Lecouvreur"—Opera (Cilea). Sports Notes and News in the Interval.
11.45 p.m. (approx.).—Close Down.

MUNICH (Germany)
Deutsche Stunde in Bayern. WL 536 m. (559 kc); 4 kw. Relayed by Augsburg on 566 m. (530 kc); Kaiserlautern, 204.1 m. (1,470 kc); and Nürnberg, 241.9 m. (1,240 kc).
11.0 a.m.—Chimes and Weather.
11.30 a.m.—Talk, "The Solstice."
12.0 noon.—Orchestral Concert from Nürnberg.
1.5 p.m.—Time and Weather.
1.10 p.m.—Programme Announcements.

1.15 p.m.—Lesson in Morse.
1.45 p.m.—Meeting of the German Engineering Association, from Essen.
3.40 p.m.—Trotting Races. Relayed from Daggling.
4.0 p.m.—Trio Concert. 1. "The Bohemian Girl"—Overture (Balfe). 2. Selection from "Faust" (Gounod). 3. Sea Breezes (Leoncavallo). 4. Bavarian Waltz (Frank). 5. The Mill (Gillet). 6. Serenade (Müller). 7. Gnomens-reigen (Bazzini).
4.45 p.m.—Race Relay (continued).
6.10 p.m.—Mendelssohn Concert. 1. Concerto for Violin and Orchestra in E minor, Op. 64. 2. Selections from "A Midsummer Night's Dream." 3. Concerto for Pianoforte in G minor, Op. 25.
7.20 p.m.—Talk on "The Tales of Hoffmann."
7.35 p.m.—"The Tales of Hoffmann"—Opera (Offenbach). Relayed from the Munich National Theatre.
10.0 p.m.—Announcements and News.
10.30 p.m.—Concert by the Hungarian Orchestra from the Hotel Deutscherhof.

NAPLES (Italy)
Unione Radiofonica Italiana (INA). WL 333.3 m. (900 kc); 1.5 kw.
10.0 a.m.—Concert of Sacred Music.
4.45 p.m.—Programme for Children.
5.0 p.m.—Concert of Variety Music.
8.45 p.m.—Wireless Lesson.
8.50 p.m.—Concert of Vocal and Instrumental Selections.
10.0 p.m.—Sports Notes.
10.55 p.m.—Calendar, Programme Announcements and Close Down.

OSLO (Norway)
Kringkastingselskapet. WL 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 566 m. (530 kc); Porsgrund, 500 m. (600 kc.); Fredrikstad, 435 m. (680 kc.); and Notodden, 412 m. (728 kc.); and Rjukan, 448 m. (670 kc.).
10.50 a.m.—Chimes and Divine Service.
6.30 p.m.—Vocal and Pianoforte Recital (Eivind Groven).
7.15 p.m.—News and Talk.
8.0 p.m.—Concert: 1. Osterdal March (Halvorsen). 2. Osterdal (Mortensen). 3. Zorohayda (Scendsen). 4. Norwegian Melodies (Haaland). 5. Gavotte (Larsen). 6. Tordenskjold March (O. Borg).
9.0 p.m.—Stein Balstad reads from his own works.
9.30 p.m.—Dance Music from Hamar.
10.0 p.m.—Topical Events, News and Weather Report.
10.30 p.m.—Accordion Recital.
11.0 p.m.—Dance Music Programme.
12.0 midnight (approx.).—Close Down.

PARIS (France)
Eiffel Tower (FL). WL 2,650 m. (113 kc); 5 kw.
8.50 a.m.—Time Signal on 32.5 m. (9,231 kc).
10.26 a.m.—Time Signal on 2,650 m.
6.45 p.m.—"Le Journal Parlé," Talks on "Police Memoirs," "Health" and "Events in Sport."
8.10 p.m.—Weather Forecast.
8.30 p.m.—Concert. 1. Quartet for Violin, Viola, Cello and Flute (Mozart). 2. Songs: (a) Au bord de la Fontaine (Wekerlin), (b) Aux plaisirs, aux délices (Guedron), (c) La Rôtisserie de la Reine Pédauque (Levadé). 3. Cello Solos: (a) Adagio (Haydn), (b) Chanson à berceur (Schmitt). 4. Melodies (Schumann): (a) Dawn, (b) Die Rose; (c) Die Lili, (d) Taube. 5. Songs (a) Quand mes yeux, (b) Au bord des ondes assise. At 8.56 p.m.—Time Signal on 32.5 m. (9,231 kc).
9.30 p.m.—Educational Programme. Talks on "The Family—Woman and the Law," and "What is said and what is not said," etc.
11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)
Petit Parisien. WL 340.9 m. (880 kc); 0.5 kw.
8.45 p.m.—Gramophone Selections, Talk, Announcements and News.
9.0 p.m.—Concert. 1. "Tannhäuser"—Overture (Rossini). 2. Scarf Dance from "La Source" (Delibes). 3. "Symphony Orchestra" (a) First Part of Symphony No. 1

Programmes for Sunday.—(Cont.)

in B flat major (Schumann), (b) Suite in C (Bach). 4. Selection from "Romeo and Juliet" (Gounod). 5. Chanson napolitaine, from "Le Timbre d'argent" (Saint-Saëns). 6. Sarabande and Farandole from "Russes d'Amour" (Glazounov). News in the Intervals.

PARIS (France)

Radio-Paris (CFR). WL. 1,750 m. (171 kc); 3 kw. 8.0 a.m.—News and Press Review. 12.0 noon.—Religious Address, Sacred Concert, and News. 12.45 p.m.—Concert. 1. Bilboquet Programme. 2. Orchestral Programme: (a) "La Chaste Suzanne" (Gilbert), (b) Gavotte (Saint-Saëns), (c) Rose-Marie (Friml), (d) Ay-ay-Ay (Freire), (e) Mandolinata (Paladilho). 4.30 p.m.—Dance Music, News. 8.0 p.m.—Agricultural Report, News. 8.30 p.m.—Concert. 1. (a) Dolly (Fauré), (b) Selection from "Le Roi de Lahore" (Massenet). 2. (a) Chanson de mon village, (b) Melodies, with Violin Accompaniment, (a) Chère nuit, (b) Clair de lune (Fauré). 3. Les deux musiciens sans place (Hervé). News.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw. Relayed at intervals on 93 m. (4,762 kc); and 27 m. (11,111 kc). Transmits at intervals from 3.45 p.m. 12.0 midnight.—Time and Divine Service from the Episcopal Church. 1.15-3.30 a.m. (Mon., approx.)—Programme from WJZ, New York. 1.15 a.m.—Collier's Radio Programme. 2.15 a.m.—Utica Jubilee Singers. 3.0 a.m.—High Spots of Melody. 3.45 a.m.—Baseball Scores. Time. 4.0 a.m. (approx.)—Close Down.

POSEN (Poland)

Polskie-Radio. WL. 343 m. (874 kc); 1.5 kw. Transmits at intervals from 10.15 a.m. 5.50 p.m.—Programme for Children. 6.30 p.m.—Talk in French on "François Villon and the Lyric." 6.50 p.m.—Talk, "Silva Rerum."

7.10 p.m.—Talk on "Provincial Life." 7.40 p.m.—Programme of Talks. 8.0 p.m.—Programme from Warsaw. 8.30 p.m.—Concert. 1. (a) Cantata for Mixed Choir (Poradowsky), (b) Mixed Choir—Calme du soir (Prosnak). 2. Soprano Solos. 3. Mixed Choir: (a) Deux Cerises (Nowowiejsky), (b) Madrigal for Mixed Choir (Poradowsky). 4. Tenor Solo. 5. Two Songs for Male Choir. 6. Soprano Solos. 7. Choir. 10.0 p.m.—Time, News, Weather, Sports Notes and Variety Items. 10.50 p.m.—Dance Music Programme, relayed from the "Palais Royal."

PRAGUE (Czechoslovakia)

Strasnice. WL. 348.9 m. (860 kc); 5 kw. 9.0 a.m.—Church Music from Brünn. 10.0 a.m.—Agricultural Report. 11.0 a.m.—Concert Programme. 12.0 noon.—Programme from Brünn. 1.5 p.m.—Industry and Trade Review, followed by News. 4.0 p.m.—Programme from Brünn. 5.30 p.m.—Talk for Workers. 6.0 p.m.—German Transmission. 7.0 p.m.—Programme from Bratislava. 9.0 p.m.—Dramatic Selections. 10.0 p.m.—Time and News, followed by programme from Brünn.

ROME (Italy)

Unione Radiofonica Italiana (IRO). WL. 450 m. (666 kc); 3 kw. 10.15 a.m.—Concert of Sacred Music. 1.30 p.m.—Concert of Trio Music. 5.0 p.m.—Studio Concert. 6.0 p.m.—Dance Music Programme from the "Casinetta." 8.30 p.m.—Sports Notes and News. 8.58 p.m.—Time Signal. 9.10 p.m.—Concert. 1. The "New World" Symphony (Dvorák). 2. Talk on Art and Literature. 3. Una notte a Taormina (Mulè). 4. Don Juan—Symphonic Poem (R. Strauss). 5. Fashion Talk. 6. Aria for Cello (Percora). 7. Come nei bei giorni—Cello Solo (Popper). 8. Scherzo for Cello (Van Goens). 9. Novelletta (Martucci). 10. Finlandia—Symphonic Poem (Sibelius). 11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw. Relayed by 2XAD on 21.96 m. (13,661 kc) from 10.30 p.m. Transmits at intervals from 4.0 p.m. 10.30 p.m.—String Orchestra with Soloist, relayed from New York. 11.0 p.m.—"Stetson Parade"—American Legion Band from Boston. 12.0 midnight.—Musical Programme, followed by Capitol Theatre Programme relayed from New York. 2.0 a.m. (Monday)—Talk on "Our Government," by David Lawrence. 2.15 a.m.—Atwater Kent Programme, followed by Biblical Drama, both relayed from New York. 3.15 a.m. (approx.)—Close Down.

STAMBOUL (Turkey)

Radio-Stamboul. Société Anonyme Turque de Téléphonie sans fil. WL. 1,180 m. (254 kc); 5 kw. 4.30 p.m.—Orchestral Programme. 5.15 p.m.—Stock Market Quotations. 7.15 p.m.—Concert of Turkish Music. 8.0 p.m.—Weather and Time. 8.15 p.m.—Turkish Music Programme. 9.0 p.m.—Concert from works of Franck, Debussy, Fauré, Berlioz and R. Strauss. 10.30 p.m.—News and Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1,380 m. (217 kc); Göteborg, 416 m. (721 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc). 11.0 a.m.—Divine Service. 1.20 p.m.—Military Band Concert. 5.0 p.m.—Programme for Children. 5.55 p.m.—Chimes and Divine Service. 7.15 p.m.—A Play (Strindberg). 8.45 p.m.—Open Air Band Concert. News and Weather in the Interval. 10.30 p.m. (approx.)—Close Down.

STUTT GART (Germany)

Süddeutscher Rundfunk. WL. 379.7 m. (790 kc); 4 kw. 11.0 a.m.—Musical Morning Recital. 12.0 (noon)—Promenade Concert, followed by Gramophone Music. 1.45 p.m.—Conference of the German Engineering Association, from Essen. 3.0 p.m.—Orchestral Concert.

6.0 p.m.—Time and Sports Notes.

6.15 p.m.—Oscar Ludwig Brandt Programme. 1. Scherzo from the Quintet in C major, Op. 163 (Schubert). 2. Recitations, (a) Der verlorene Sarg (Schäfer), (b) Das Lachen am Sarg (Kutzleb). 3. Songs, (a) Der Tod, (b) Der Selbstmord (arr. Rosenberg), (c) Der betäubte Witwer (Gellert). 4. Orchestral Selection from "Eine Kleine Nachtmusik" (Mozart) and Recitation: Die kleine Blanche-fleur (Bartsch). 5. Recitations, (a) Gedächtnisfeier (Heine), (b) Der auferstehende Zecher (Hafis), (c) Songs, Mondnacht (Schumann), (d) Auf dem Kirchhofe (Brahms). News. 8.15 p.m.—Variety Concert. 1. "Banditenstreich" — Overture (Suppé). 2. Humorous Variation on "Was kommt dort von der Höh" (Suppé). 3. (a) Der Zeisig (Wittig), (b) Die Lerche (Strange), (c) Die Nachtigall (Alabieff). 4. Russian Dance (Tchaikovsky). 5. Humorous Items. 6. Kadettenstreich—Intermezzo (Jessel). 7. "The Pyjamas"—Farce (Gustav Goes). 8. Wie einst im Mai—Fox-trot. 9. Ich hab' im Mai von der Liebe geträumt. (Doelle). 10. Humorous Item. 11. Tamara (Robitschek). 12. Eine schöne weisse Chrysanthe (Roscn). 13. Nur ein leises Du (Svayn). 14. Humorous Item. 15. Tausend rote Rosen (Benatzky). 16. Lass doch dem Kind den Luftballon. 17. Pour l'amour (Kalman). 18. Einmal kommt die Liebe (Doelle). 19. Das Lied vom Baden—Fox-trot. News and Sports Notes.

TOULOUSE (France)

Radiophonie du Midi. WL. 389.6 m. (770 kc); 3 kw. 12.45 p.m.—Concert of Guitar Selections and Dance Music. 2.0 p.m.—Divine Service and Psalms. 8.30 p.m.—"Werther" Opera Selections (Massenet). 9.10 p.m.—Concert of Waltzes. 9.50 p.m.—Military Music. 1. Salut des aigles (Gourdin). 2. Batterie d'Austerlitz. 3. La Dolores (Breton). 4. La Grande Jota. 5. Pas cadensé des sans-culottes (Gourdin). 6. Debout les Morts. 7. Indian March. 8. Le Bombardier (Parès). 9. La

Nationale (Blois). 10. La Marseillaise. 10.15 p.m.—"North African Journal" Report and Close Down.

VIENNA (Austria)

Radio-Wien. WL. 577 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Relayed by Innsbruck on 294.1 m. (1,020 kc); and Klagenfurt on 272.7 m. (1,100 kc). 10.30 a.m.—Organ Recital. 1. Introduction and Passacaglia on a Theme by Haydn (Dité). 2. Sicilian (Bach). 11.0 a.m.—Concert. 1. The Fourth Symphony in F minor (Tchaikovsky). 2. Old Italian Songs. 3. Concerto for Violin (Goldmark). 4. Oriental Dance from "Maria Magdala" (Hans). 4.0 p.m.—Orchestral Concert. 4.30 p.m.—Programme from the Freudenau Rennplatz. 6.15 p.m.—Talk on Travel. 7.0 p.m.—Chamber Music. 1. Sonata for Cello in F major, Op. 99 (Brahms). 2. Songs. 8.5 p.m.—"Die gefesselte Phantasie"—Play (F. Raimund).

WARSAW (Poland)

Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw. 10.15 a.m.—Relay from Kattowitz. 12.0 noon.—Time, Fanfare and News. 4.0 p.m.—Agricultural Programme. 5.0 p.m.—Popular Concert. 7.10 p.m.—Talk. "On the Banks of the Adriatic," by Prof. Janowski. 8.15 p.m.—Orchestral Concert of Popular Music. 1. "The Merry Wives of Windsor"—Overture (Nicolai). 2. Vienne s'amuse—Waltz (Komzak). 3. Introduction and Barcarolle from "The Tales of Hoffmann" (Offenbach). 4. Czardas from "Le Fantôme du Palatin" (Grossmann). 5. Soloist Selections. 6. Pour le cœur et l'âme (Kozak). 7. Les Charmes de la Syrène (Waldteufel). 8. Ou fleurissent les citrons—Waltz (Strauss). 9. Gavotte (Helmburger). 11. March of the Gladiators (Fucik). 10.0 p.m.—Time, News and Weather. 10.30 p.m.—Dance Music Programme from the "Oaza" Restaurant. 11.30 p.m. (approx.)—Close Down.

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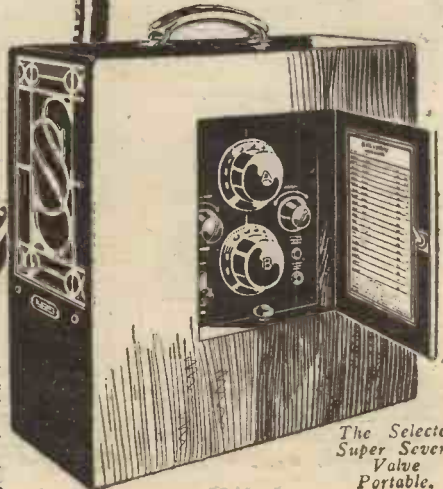
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PROGRAMMES FOR MONDAY (June 11)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain)

Radio Barcelona (EAJ). WL 344.8 m. (870 kc); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Sextet Selections. 1. Miss Dolly (Demon). 2. Selection from "Lucia di Lammermoor" (Donizetti). 3. El ultimo romantico—Mazurka (Soutullo and Vert). 4. Chanson folle (Franceschi-Salabert). 5. Boston (Worsley). 8.30 p.m.—Shakespeare Tales—"The Taming of the Shrew." 9.0 p.m.—Exchange Quotations and News Bulletin followed by Weekly Review of Topical Events in Verse. 9.15 p.m.—Programme of Sardanas. 10.0 p.m.—Chimes and Weather. 10.5 p.m.—Concert. 1. L'Estany de Banyoles (Sancho Marraco). 2. Selection (Perez Moya). 3. Corpus (Vidal Roda). 4. La Filadora (Alfonso). 5. Els gegants de Reus—Poem (Batalla). 6. El petit baiet (Bataller). 7. La Sardana gran (Morera). 11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)

Kringkastingskap. WL 360.9 m. (811 kc); 1.5 kw. Transmits at intervals from 11.15 a.m. 8.0 p.m.—Concert: 1. "Zaide" Overture (Mozart). 2. "Cavalleria Rusticana" (Mascagni). 3. Romance (Sibelius). 4. Espanita—Spanish Waltz (Rosey). 5. Souvenir de Chopin (Fetras). 9.0 p.m.—L. Josephsen, Song Recital. 9.30 p.m.—Talk, "A Journey Through South Russia," by A. Konwensky. 10.0 p.m.—Weather, News and Time. 10.15 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königsruherhaus. WL 1,250 m. (240 kc); .35 kw. Transmits at intervals from 12.0 noon. 5.0 p.m.—Programme from Voxhaus. 6.0 p.m.—Talk, "The Small German Town in Literature." 6.30 p.m.—English Language Lesson. 6.55 p.m.—Agricultural Talk. 7.20 p.m.—Talk on Technology. 8.30 p.m.—Programme from Voxhaus.

BERLIN (Germany)

Voxhaus. WL 484.6 m. (619 kc); 4 kw. Transmits at intervals from 10.10 a.m. 5.0 p.m.—Orchestral Concert: 1. "Der Schauspielerdirektor"—Overture (Mozart). 2. Gedanken aus der Ferne (Boyer). 3. Whimsical Charms (Fresco). 4. Selection from "Tosca" (Puccini). 5. Abenlind (Schumann). 6. Siegfried's Love Song from "The Valkyrie" (Wagner). 7. Tom the Rhymer—Ballad (Lowe). 8. Selection from "The Bird Fancier" (Zeller). 9. Nocturne (Chopin). 10. Grüss an Losonczech Lehár. 11. Asra (Königsberger). 6.45 p.m.—Talk, "Great German Actors and Actresses." 7.10 p.m.—Talk, "Men and Work." 7.35 p.m.—Talk, "New Buildings." 8.0 p.m.—Wireless Technical Talk. 8.30 p.m.—Concert, S.B. Vienna Prague and Warsaw: 1. "Der Freischütz"—Overture (Weber). 2. Selections from "Oberon" (Weber). 3. Selections from "A Midsummer Night's Dream" (Mendelssohn). 4. "Lohengrin" Prelude (Wagner). 5. Siegfried's Idyll (Wagner). 6. Aria from "The Twilight of the Gods" (Wagner), followed by News, Time and Weather.

BERNE (Switzerland)

Radio-Berne. WL 411 m. (730 kc); 1.5 kw. Transmits at intervals from 1.0 p.m. 8.0 p.m.—Time and Weather. 8.50 p.m.—English Half-hour. 8.50 p.m.—Programme from Zurich. 9.20 p.m.—The Kursaal Orchestra. News and Weather in the Interval. 10.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)

Schlesische Funkstunde. WL 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (909 kc.). Transmits at intervals from 11.15 a.m. 6.25 p.m.—Talk on "Modern Harvesting Machinery," by Dr. H. Wagner. 7.25 p.m.—Talk, "Is a Flight into Space Possible?" by O. Baumann.

7.50 p.m.—Topical Events Review, 8.30 p.m.—Chamber Music. 1. Sonata for Violin and Piano, in E minor, Op. 122 (Reger). 2. Piano-forte Solo (Reger). 9.15 p.m.—"Confessions"—Reading from Oscar Wilde and Strindberg. 10.0 p.m. (approx.)—Close Down.

BRÜNN (Czecho-Slovakia)

Komarov. WL 441.2 m. (680 kc); 3 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—German Transmission. 6.25 p.m.—Agricultural Report. 6.40 p.m.—Talk, followed by Cabaret Show Programme. 8.30 p.m.—Programme from Voxhaus. 10.20 p.m.—Exhibition Programme.

BRUSSELS (Belgium)

Radio Belgique. WL 508.5 m. (590 kc); 1.5 kw. 5.0 p.m.—Gramophone Selections. 5.30 p.m.—Café Metropole Concert. 6.0 p.m.—Talk, "History of Music." 6.15 p.m.—Talk, "A few words à propos of elegance and breeding." 6.30 p.m.—Trio Concert. 1. March (Novi). 2. Ariane (Massenet). 3. Mélancolie et humoresque, for piano-forte (Chaminade). 4. Intermezzo (Hazen). 5. Serenade (Schubert). 6. Pour toujours (Waldeufel). 7. Souvenir, for violin (Drda). 8. Queen Mary's Song (Elgar). 9. Globe Trotter (Siede). 10. Confidence (Rasse). 11. La fileuse, for Cello (Dunkler). 12. Tails up (Braham). 7.30 p.m.—Le Radio Chronique. 8.15 p.m.—Concert. 1. Prelude and Intermezzo from "Cavalleria Rusticana" (Mascagni). 2. (a) Rhapsody Appassionato, (b) Amaryllis, (c) Bacchanale à Montmartre (Ketelbey). 5. Song. 6. Selection from "A Waltz Dream" (Strauss). 7. Entr'acte (Haydn Wood). 8. Violette (Montague Phillips). 9. Wood Nymphs (Coates). 10. Song. 11. You gave me (H. Wood). 12. Long ago (Elliot). 13. Summer noon (Longborough). 14. I think of you, my sweet (H. Wood). 15. Allegretto, for flute (Gaubert). 16. Waltz from "La Cocarde de Mimi Pinson" (Goublier). 17. Rhapsody, for clarinet (D'Ollone). 18. Ballet Music from "Faust" (Gounod). In the Interval, Topical Talk. 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)

Magyar Telephon Hirmonde es Radio R. T. WL 557.1 m. (538 kc); 2.5 kw. Transmits at intervals from 9.0 a.m. 7.10 p.m.—German Language Lesson. 7.40 p.m.—Talk, "American Travellers." 8.15 p.m.—Instrumental and Vocal Concert—Soprano and Cello. 9.45 p.m.—Time and News, followed by Concert of Tzigane Music. 12.0 midnight (approx.)—Close Down

COLOGNE (Germany)

Westdeutscher Rundfunk. WL 283 m. (1,060 kc); 4 kw. Transmits at intervals from 10.15 a.m. 1.5 p.m.—Concert of Chamber Music. 4.10 p.m.—Talk for Women. 4.40 p.m.—Lesson in Singing. 5.15 p.m.—Relay from Bonn (See Langenberg). 6.0 p.m.—Orchestral Concert. 1. The Liberty Bell—March (Souza). 2. Im Reiche der Venus—Waltz (Gröschel). 3. Selections from "Light Cavalry" (Suppé-Schlippe). 4. Baritone Solos. 5. (a) Rosen-serenade (Artok). (b) Pantomime (Friml-Artok). (c) Nordische Suite (Torjussen). (d) Morgenstimmung. (e) An den Frühling. (f) Trauminsel. (g) Norway—Peasant March. 7.20 p.m.—Spanish Language Lesson. 7.45 p.m.—Dialogue between Mother and Child. 8.5 p.m.—Report on the Olympic Football Match at Amsterdam. 8.15 p.m.—"Vogel der Zoo"—The Zoo in Music. 1. Orchestral Selection—"The Thieving Magpie"—Overture (Rossini). 2. Recitation, Animals once again (Hoefer). 3. The Bird-Cage. (d) The Canary (Poljakin). (e) The Nightingale (Dach). (f) The Sparrow (Leifhelm). (g) The Thrush (Sack). (h) The Curlew (Pigeon). (i) The Cuckoo (Couperin). 4. The Insect Cases (a) The Moth (Emil Strauss). (b) The Butterfly (Grieg). (c) The Beetle (Trausil). (d) The Bee

(Schubert). 5. The Reptile House. (a) The Black Salamander (Kayssler). (b) The Tortoise (Trausil). (c) The Turtle (Saint-Saëns). 6. Domestic Animals, (a) The Chicken (Mussorgsky). (b) The Sheep (Werfel). (c) Cats (Storm). (d) The Hen (Rameau). (e) The Pig (v. Vegesack). (f) The Cow (v. Vegesack). (g) The Oxen (Haydn). 7. Beasts of Prey, (a) Beasts of Prey (v. Hindenburg). (b) The Eagle (MacDowell). (c) The Bear and the Leopard (Günther). (d) The Lion (Saint-Saëns). (e) The Panther (Rainer Maria Rilke). (f) The Monkey (Steinberg). (g) The Camel (Werla). (h) The Elephant (Saint-Saëns), followed by the Prayer to go to Heaven with the Donkeys (Jammes) and St. Francis' Sermon to the Birds (Liszt). After the Concert Report on the Olympic Football Match at Amsterdam, News and Announcements, Sports Notes and Musical Selections. 12. midnight (approx.)—Close Down.

7.25 p.m.—Economics Talk, Weather. 8.0 p.m.—Singing Lesson. 9.0 p.m.—Programme for Germans abroad, followed by News Bulletin and Silent Night.

COPENHAGEN (Denmark)

Copenhagen Radio. WL 337.4 m. (889 kc); 1 kw. Relayed by Kalundborg on 1,153.8 m. (260 kc). Transmits at intervals from 7.30 a.m. 7.0 p.m.—News, Exchange and Time. 7.20 p.m.—Talk on the Occasion of Waldemar's Day, "The Flag and its Significance," by Otto Larsen. 7.40 p.m.—Talk, followed by Eight Summer Songs (Jacobsen). 8.40 p.m.—Reading and News. 9.30 p.m.—Concert of Modern German Music. 1. Eight Songs to the Lute. 2. Three Selections from Shakespeare's "Much Ado About Nothing" (Korngold). 3. Prelude to the Second Act of "Alpenkönig und Menschenfeind" (Blech). 4. Cradle Song from "The Treasure Seeker" (Schreker). 5. Waltz from "Rosenkavalier" (R. Strauss). 6. Eight Songs to the Lute. 11.0 p.m. (approx.)—Close Down.

7.25 p.m.—Economics Talk, Weather. 8.0 p.m.—Singing Lesson. 9.0 p.m.—Programme for Germans abroad, followed by News Bulletin and Silent Night.

CORK (Ireland)

Cork Broadcasting Station (6CK). WL 400 m. (750 kc); 1.5 kw. 2.30 p.m.—Weather, Stock Market Report and Gramophone Records. 6.15 p.m.—Programme from Dublin.

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CRACOW (Poland)

Polskie-Radio. WL 567 m. (529 kc); 1.5 kw. Transmits at intervals from 12.0 noon. 7.5 p.m.—Agricultural Bulletin. 7.15 p.m.—Variety Items and News. 7.30 p.m.—French Language Lesson. 8.0 p.m.—Farfare from Notre Dame. 8.5 p.m.—Talk, "The struggle, without surgical intervention, against the manifestations of old age." 8.30 p.m.—Programme from Berlin. 10.0 p.m.—Programme from Warsaw.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). WL 310.1 m. (940 kc); 1.5 kw. Transmits at intervals from 1.30 p.m. 6.15 p.m.—Children's Corner. 7.0 p.m.—Gramophone Concert. 7.20 p.m.—News, followed by Irish Lesson by Sile Ní Dhubhain. 7.45 p.m.—Reading from Dickens. 8.0 p.m.—An Orchestral Overture. 8.20 p.m.—"The Perfect Marriage"—Sketch by Elizabeth Young. 8.50 p.m.—Vocal and Instrumental Variety: Jean Bertin and Company. 9.35 p.m.—Daphne Garratt (Violinist). 9.45 p.m.—Recital of Gaelic and Anglo-Gaelic Songs by May Martell. 10.0 p.m.—"Ceilidh Trio" Recital. 10.30 p.m.—Weather and Close Down.

FRANKFURT-am-MAIN (Germany)

Südwestdeutscher Rundfunk. WL 429 m. (699 kc); 4 kw. Relayed by Cassel, on 252.1 m. (1,190 kc). Transmits from 4.30 p.m. 6.15 p.m.—Wireless Notes and other announcements. 6.30 p.m.—Talk on "Animal Friendships" by Hans Schomburgk. 7.0 p.m.—Talk: "The History Museum in Frankfurt," by Dr. Woelcke. 7.30 p.m.—"Martha"—Opera (Flo-tow) from the Opera House.

HAMBURG (Germany)

Norag (ha, in Morse). WL 306 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover 297 m. (1,010 kc); and Kiel 255 m. (1,176 kc). Transmits at intervals from 5.45 a.m. 6.30 p.m.—Königsruherhaus Relay. 7.0 p.m.—Orchestral Music.

HILVERSUM (Holland)

Algemeene Vereeniging Radio Omroep. WL 1,069 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Lunchtime Trio Music. 4.20 p.m.—Programme for Children. 5.40 p.m.—The Rentmeester Trio. 6.55 p.m.—French Language Lesson. 7.25 p.m.—Police Information. 7.40 p.m.—Concert. 1. "Il re-pastore"—Overture (Mozart). 2. Ballet Music from "Ali Baba" (Cherubini). 3. Chanson et danse (Tareghni). 4. Baritone Solos. 5. Selection from "La Gioconda" (Ponchielli). 6. Festival March from the Concerto for Piano-forte in flat major (Beethoven-Wieprecht). 7. Baritone Solos. 8. Soirées de Vienne (Schubert-Liszt). 9. Serenata à la Sevillanita (Magliani). 10. Potpourri of the Works of Jos. Strauss (Fetras). 11. An Indian Wedding—Interlude (Percy). 12. Sons of the Brave March (Bridgod) Weather and News in the Interval.

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11.0 a.m.—Exchange and Music. 11.30 a.m.—Exchange and News. 11.59 a.m.—Time and Weather. 12.15 p.m.—Shipping Forecast. 5.57 p.m.—Time, Weather and News. 6.15 p.m.—Orchestral Concert. 1. March (Blumenberg). 2. "The Bronze Horse"—Overture (Auber). 3. Melodies from "Il Trovatore" (Verdi). 4. Suite (de Micheli). 5. Souvenir de Cairo (Armand). 6. Valse (Strauss). 7. Scènes napolitaines (Massenet). 8. Carnaval (Guiraud). 9. "A Summer Night in Madrid"—Overture (Glinka). 10. "Oberon"—Overture (Weber). 8.45 p.m.—News in Finnish and Swedish. 9.15 p.m.—Relay from a Restaurant

LANGENBERG (Germany)

Westdeutscher Rundfunk. WL 470.9 m. (637 kc); 2.5 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. 1.5—5.15 p.m.—Programme from Cologne. 5.15 p.m.—Educational Talk, from the Educational Academy, Bonn. 6.0 p.m.—12.0 midnight.—Programme from Cologne.

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Programmes for Monday.—(Cont.)

10.55 p.m.—Programme Announcements, followed by Close Down. OSLO (Norway) Kringkastingselskapet. WL. 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 566 m. (530 kc); Porsgrund, 500 m. (600 kc); Fredriksstad, 435 m. (680 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc). 7.15 p.m.—News and German Lesson. 8.0 p.m.—Talk, "Foreign Affairs." 8.30 p.m.—Orchestral Concert. 9.30 p.m.—Choral Song Recital. 1.0 p.m.—Weather, News and Talk on Topical Events. 10.30 p.m.—Talk, "Hawaii in Former Days," by Mme. Martens. 11.0 p.m. (approx.)—Close Down.

PARIS (France) Eiffel Tower (FL). WL. 2,650 m. (113 kc); 5 kw. 8.56 a.m.—Time Signal on 32.5 m. (9,231 kc). 10.26 a.m.—Time Signal on 2,650 m. 6.45 p.m.—"Le Journal Parlé." Talks: "The Theatre of the Week," "Art," and "New Things in Wireless." 8.10 p.m.—Weather Forecast. 8.30 p.m.—"Les Saltimbanques"—Selection (Ganne) and Selection from "Poet and Peasant" (Suppé). At 8.56 p.m. Time Signal on 32.5 m. 9.30 p.m.—Educational Programme. Talks on "Electricity" etc. 11.26 p.m.—Time Signal on 2,650 m.

PARIS (France) Radio-Paris (CFR). WL. 1,750 m. (171 kc); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert. 1. Petite Suite d'Orchestre (Bizet). 2. Menuet viv (Ganne). 3. Selection from "La Tosca" (Puccini). 4. Ronde des Lutins (Razigade). 5. Entr'acte de la Habanera (Laparra). 6. Le Chant du souvenir (Filippucci). 7. Intimité (Golestan). 8. "The Count of Luxembourg" (Lehár). News. 1.30 p.m.—Market Prices, Bourse. 3.30 p.m.—Exchange Quotations. 3.35 p.m.—Literary and Musical Programme. 1. Incantation (Chausson).

2. Three 'Cello Solos (Büsser). 3. "La demoiselle élie"—Prelude (Debussy). 4. The Legend of St. Francis—Pianoforte solo (Liszt). 5. Aux Eroïtes (Duparc). 6. Sonata for Violin (Grieg). 7. La Fille de Roland (Rabaud). 4.45 p.m.—Exchange and News. 8.0 p.m.—Agricultural Report. 8.15 p.m.—Exchange and News. 8.30 p.m.—Talk on Horticulture. 8.45 p.m.—"Rip" (Planquette). News in the Intervals.

PITTSBURGH (U.S.A.) Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw. Relayed at intervals on 63 m. (4,762 kc) and 27 m. (11,111 kc). Transmits at intervals from 2.45 p.m. 11.15 p.m.—Symphony Orchestra from the William Penn Hotel. 11.55 p.m.—Baseball Announcements. The following programme relayed from WJZ, New York:— 12.30 a.m. (Tuesday)—Roxy's Gang. 2.0 a.m.—"Riverside" Programme. 2.30 a.m.—"Marimba Melodies." 3.0 a.m.—Time and Works of Great Composers. 3.30 a.m.—Telechron Time, Weather, Baseball Scores and Close Down.

POSEN (Poland) Polskie-Radio. WL. 343 m. (874 kc); 1.5 kw. Transmits at intervals from 1.0 p.m. 7.15 p.m.—French Language Lesson. 7.35 p.m.—Talk: "The Importance and Activities of the Savings Bank." 8.0 p.m.—Finance Notes. 8.30 p.m.—Programme from Warsaw. 10.0 p.m.—Time, News, Weather and Variety Selections. 10.50 p.m. (approx.)—Close Down.

PRAGUE (Czechoslovakia) Strasnice. WL. 348.9 m. (860 kc); 5 kw. Transmits at intervals from 11.0 a.m. 5.50 p.m.—German Transmission. 6.15 p.m.—Agricultural Report. 6.25 p.m.—Talk for Workers. 7.0 p.m.—Cabaret Show Selections. 8.30 p.m.—Programme from Voxhaus. 10.0 p.m.—Time, and News, followed by Orchestral Selections.

ROME (Italy) Unione Radiofonica Italiana. WL. 450 m. (666 kc); 3 kw. Transmits at intervals from 1.30 p.m. 8.30 p.m.—French Language Lesson. 8.58 p.m.—Time, News, Exchange. 9.15 p.m.—Concert of Light Music. 1. "Pique Dame"—Overture (Suppé). 2. Characteristic Piece (Percy). 3. Tenor Songs: (a) Sienté Marl (Valente), (b) Mandulinata e Napule (Tagliaferr). 4. "Un amoreto de Goldoni a Feltre"—One-Act Comedy in the Venetian Dialect (Pilotto). 5. Siberiana—Soprano and Tenor Duet (Mucci). 6. Scugnissa—Soprano and Tenor Duet (Costa). 7. La piccola bionda Fritzi—Spanish One-step (Rotter and Stransky). 8. Tenor Solos: (a) Fantasia e surdате (Valente), (b) Napule e niente-chiu (Lama). 9. Clarinet Solo. 10. Songs and Imitations. 11. Messicana (Liberati). 12. Soprano and Tenor Duets: (a) Vagabonda (Zuccoli), (b) Nadila (Anzelmo). 13. Waltz Suite for Orchestra (Bayer). 11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.) General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw. Relayed by 2XAF on 31.4 m. (9,554 kc) from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Stock Reports. News. 11.25 p.m.—Baseball Announcements. 11.30 p.m.—Dinner Music relayed from the Hotel Van Curler. 12.25 a.m. (Tues.)—Baseball Scores. 12.30 a.m.—The General Electric Merchandise Department Programme. 1.30-4.0 a.m.—Programme relayed from New York. 1.30 a.m.—"The A. and P. Gipsies." 2.30 a.m.—"The General Motors Family Party" Programme. 3.30 a.m.—"Time to Retire, Boys." 4.0 a.m.—Time and Close Down.

STAMBOUL (Turkey) Radio-Stamboul. Société Anonyme Turque de Téléphonie sans fil. WL. 1,180 m. (254 kc); 5 kw. Transmits at intervals from 4.30 p.m. 7.15 p.m.—Turkish Musical Programme. In the Interval, Weather and Time. 9.0 p.m.—Concert. 1. Selection from "Lakmé" (Delibes). 2.

Sonata for Violin and Pianoforte (Schumann). 10.30 p.m.—News and Close Down.

STOCKHOLM (Sweden) Radiotjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1,380 m. (217 kc); Göteborg, 416 m. (721 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545 m. (550 kc). Transmits at intervals from 12.35 p.m. 6.30 p.m.—Topical Talk. 6.50 p.m.—Pianoforte Solos. 7.15 p.m.—Literary Programme. 7.45 p.m.—Talk, "Adult Education." 8.15 p.m.—Concert of Light Music. 9.15 p.m.—News and Weather. 9.40 p.m.—Talk in German. 10.0 p.m. (approx.)—Close Down.

STUTT GART (Germany) Süddeutscher Rundfunk. WL. 379.7 m. (790 kc); 4 kw. Transmits at intervals from 12.30 p.m. 6.0 p.m.—Time and Weather Report. 6.15 p.m.—Talk, "Humorous Broadcasting Experiences," by T. Brandt. 6.45 p.m.—Wireless Notes and News. 7.15 p.m.—Economics, Finance and Exchange Notes and News. 7.45 p.m.—Time and Weather Report. 8.0 p.m.—Bach Concert. 1. Concerto in A minor. 2. Concerto in D major. 3. Concerto in C major. Followed by Variety Programme from Freiburg, 574.7 m. (522 kc); News Bulletin.

TOULOUSE (France) Radiophonie du Midi. WL. 389.6 m. (770 kc); 3 kw. Transmits at intervals from 10.15 a.m. 8.30 p.m.—Concert. 1. Réverie (Schumann)—Cello Solo. 2. Mélodie (Rubinstein). 3. Spanish Serenade for Violin (Chaminade). 4. The Spanish Symphony for Violin (Lalo). 5. Waltz "Faust" (Liszt). 6. "Euryanthe"—Overture (Weber). 7. Selections from "Carmen" (Bizet). 8. En la Relojeria (Orth). 9. Selection from "Una caza en la Selva Negra" (Woelker). 10. "Coriolan"—Overture (Beethoven). 6. "Poet and Peasant" Overture (Suppé). 12. March from "Tannhäuser" (Wagner). 9.10 p.m.—Organ Recital from the Works of Bach. 1. Concerto. 2. Prelude in E minor. 3. Prelude in G minor. 4. Prélude sobre.

9.30 p.m.—Dance Music Programme. 10.15 p.m.—"North African Journal" Report and Close Down.

VIENNA (Austria) Radio Wien. WL. 577 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Relayed by Innsbruck on 204.1 m. (1,020 kc), and Klagenfurt, on 272.7 m. (1,100 kc). Transmits at intervals from 11.0 a.m. 6.30 p.m.—Talk on "The New Public Educational Museum," by Dr. Röck. 7.0 p.m.—Talk on "Josef Selleny—the Creator of the Viennese Stadt Park." 7.30 p.m.—Talk by Georg M. Marton. 8.0 p.m.—Reading from Josef Misson. 8.30 p.m.—Concert from Berlin.

WARSAW (Poland) Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 12.0 noon. 6.15 p.m.—Dance Music Programme from the Café Gastronomja. 7.5 p.m.—Agricultural Report. 7.15 p.m.—Variety Selections. 7.35 p.m.—French Language Lesson. 8.15 p.m.—Concert from Voxhaus. In the Interval: News in French. 10.0 p.m.—Time, Weather and News. 10.30 p.m. (approx.)—Close Down.

WILNO (Poland) Polskie Radio. WL. 435 m. (689 kc); 0.5 kw. Transmits at intervals from 12.0 noon. 6.15 p.m.—Selections of Light Music. 7.5 p.m.—Programme for Children. 7.30 p.m.—Talk in Ruthenian. 8.30 p.m.—Programme from Warsaw. 10.0 p.m.—Programme from Warsaw, followed by News.

ZURICH (Switzerland) Radio-Genossenschaft. WL. 588.2 m. (510 kc); 1 kw. Transmits at intervals from 12.30 p.m. 7.47 p.m.—Talk, "Thrifty House-keeping," by Frau Mühlemeier. 8.15 p.m.—Orchestral Music. 8.45 p.m.—"The Farewell Supper"—Play (Arthur Schnitzler). 9.15 p.m.—Viennese Operetta Programme by Station Orchestra. 10.0 p.m.—Weather and News. 10.15 p.m. (approx.)—Close Down.

Advertisement for the 'Brown' Loud Speaker. The ad features a large illustration of a man in a bullfight arena, with a bull and spectators. Text includes: 'Round the World with the BROWN', 'The "Brown" Cabinet Loud Speaker: Price £6 6 0', 'In Spain (Land of the Toreadors)', 'The "Brown" has a large following in the land where "manaña" is the rule. Good music is fittingly appreciated where life is care free and easy. That is why the faultless reproduction of the "Brown" Loud Speaker is recognised and appreciated by the sensitive Spanish ear. All over the world the "Brown" gives pleasure to discriminating listeners—it is so very true.', 'They listen to the BROWN', and 'The Loud Speaker on which the sun never sets!'.

PROGRAMMES FOR TUESDAY (June 12)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain) Radio Barcelona (EAFJ). WL. 344.8 m. (870 kc); 1.5 kw.

Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Closing Prices. 6.10 p.m.—For Women. 1. Fashions. 2. Useful Hints.

6.30 p.m.—Sextet Selections. 1. Hispania—One-Step (Dotras Fors). 2. Selection from "Los Gavilanes" (Guerrero-Pacheco). 3. Noche loca—Java (Alonso). 4. Dulce Caricia—Waltz (Gillet).

8.40 p.m.—Elementary English Lesson. 9.0 p.m.—Exchange and News. 9.5 p.m.—Orchestral Selections. 1. Joyeuse Marche (Chabrier-Rudd). 2. Extasie (Ganne). 3. Minuet from the First Suite of "L'Arlesienne" (Bizet).

9.30 p.m.—Selections from the Plays "Amores y Amorios" (Alvarez Quintano) and "Los Chatos" (Mundz Seca).

9.45 p.m.—Orchestral Selections. 1. Waltz from "Der Rosenkavalier" (Strauss). 2. Parade der Dickbauche—March (Aubert).

10.0 p.m.—Chimes and Weather. 10.5 p.m.—Concert of Swiss Music. 1. Sonata in E for Violin and Piano-forte (Gagnelin). 2. Etude in D (Mottu). 3. Piano-forte Solo—Veneciana (Mottu). 4. Etude in A flat—Humoresque (Mottu). 5. Songs: (a) Les Feuilles sont mortes (Doret). (b) La Cloche (Doret). 6. Piano-forte Solo—Prelude and Fugue (Reymond). 7. Songs (Jacques Dalcroze): (a) Solitude, (b) Le petit village.

11.15 p.m. (approx.)—Close Down.

BERGEN (Norway) Kringkastingselskapet. WL. 369.9 m. (811 kc); 1.5 kw.

Transmits at intervals from 11.15 a.m. 7.30 p.m.—Notes on the football match, "Bran" v. Göteborg.

9.10 p.m.—Orchestral Music. 1. Overture in C minor (Schubert). 2. Acceleration Waltz (Strauss). 3. Country Idyll (Kjerulf).

9.30 p.m.—Talk, "The Catacombs and Churches of Rome." 10.0 p.m.—Weather, News and Time. 10.15 p.m. (approx.)—Close Down.

BERLIN (Germany) Königs-wusterhausen. WL. 1,250 m. (240 kc); 35 kw.

Transmits at intervals from 12 noon. 5.0 p.m.—Programme from Leipzig. 6.0 p.m.—Talk, "Dramatic Art throughout the Ages—The Old French Theatre and its Effect in Germany." Scenes from "Le Malade Imaginaire" (Moliere).

6.30 p.m.—Elementary French Lesson. 6.55 p.m.—Talk, "The 50th Anniversary of Germany's Entrance into the Berlin Congress."

8.0 p.m.—Programme from Voxhaus.

BERLIN (Germany) Voxhaus. WL. 484.6 m. (619 kc); 4 kw.

Transmits at intervals from 10.10 a.m. 7.0 p.m.—Talk, "Things Worth Seeing in Germany," by Dr. Marcus.

7.30 p.m.—Talk, "The Great World Powers in Relation to their Political and Economical Importance—France."

8.0 p.m.—Concert from the "Philharmonie." 1. (a) Einsamkeit, (b) Hymne an das Leben. 2. (a) Traum an der Siegfriedquelle (Wiesner), (b) Hagen (Walspruch). 3. Abend, Nacht und Morgen—Epic Cantata from the "Edda" for Choir, Op. 33 (Moldenhauer). 4. Four Ballads and Songs, Op. 41, for Choir: (a) Barbarossa, (b) Der unberrittliche Hauptmann, (c) Der unerrittliche Hauptmann, (d) Freiheitsgesang, followed by News, Time, Weather and Sports Notes.

BERNE (Switzerland) Radio-Berne. WL. 411 m. (730 kc); 1.5 kw.

Transmits at intervals from 1.0 p.m. 8.0 p.m.—Time and Weather. 8.5 p.m.—Talk, "Through the Alleys and Streets of Old Berne."

9.0 p.m.—Programme from Lausanne. 9.30 p.m.—The Kursaal Orchestra. News and Weather in the interval. 10.35 p.m. (approx.)—Close Down.

BRESLAU (Germany) Schlesische Funkstunde. WL. 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz, on 329.7 m. (909 kc).

Transmits at intervals from 11.15 a.m. 6.30 p.m.—Elementary French Lesson. 7.25 p.m.—Review of Art and Literature.

7.50 p.m.—Biology Talk by A. Hahn. 8.30 p.m.—Franz Baumann Song Recital—Works of Roellnghoff, Simon, Silcher, Glück, Brückner, Neefe, Werner and Schumann.

10.15 p.m.—News and Wireless Notes, followed by Close Down.

BRÜNN (Czecho-Slovakia) Komarov. WL. 441.2 m. (680 kc); 3 kw.

Transmits at intervals from 11.0 a.m. 6.0 p.m.—Time, German Transmission.

6.25 p.m.—Agricultural Report. 7.0 p.m.—Slovakian Programme. 8.0 p.m.—Popular Music Programme. 9.0 p.m.—Exhibition Programme. 10.0 p.m.—Programme from Prague. 10.20 p.m.—Exhibition Programme.

BRUSSELS (Belgium) Radio Belgique. WL. 508.5 m. (590 kc); 1.5 kw.

5.0 p.m.—Organ Recital. 5.30 p.m.—Café Metropole Concert. 6.0 p.m.—French Language Lesson. 6.30 p.m.—Trio Concert. 1. Ma chance (Nasr). 2. Selection from "La Bohème" (Puccini). 3. Nocturne for Piano-forte (Chopin). 4. La petite Manon (Hirschmann). 5. Mary Lou (Lymann). 6. Sérénade de Marcello (de Behault). 7. Serenade for Violin (Toselli). 8. Susie's feller (Lew Brown). 9. Berceuse (Brumagne). 10. Ursule (Profés). 11. Nocturne, for Cello (Strauwen). 12. Oriental Suite (Grégh).

7.30 p.m.—Le Radio Chronique. 8.0 p.m.—Concert. Arranged by the Royal Zoological Society, Antwerp. 1. Torch Light March (Meyerbeer). 2. Concert Overture, No. 2 (Stadt-feld). 3. Selection from "The Prophet" (Meyerbeer). 4. Festival March (D'Haeger). 5. La grande Paques russe (Rimsky-Korsakoff). 6. Stabat Mater (Rossini). 7. Czardas, No. 2 (Michiels). 8. Rule Britannia Overture (Wagner). In the interval: Topicalities. After the Concert, News Bulletin.

BUDAPEST (Hungary) Magyar Telephon Hírmondó es Radio R.T. WL. 557.1 m. (538 kc); 25 kw.

Transmits at intervals from 9.0 a.m. 7.0 p.m.—Wireless Notes and News. 8.20 p.m.—Trotting Race Notes. 8.30 p.m.—Instrumental and Vocal Concert, including Humorous Music.

10.0 p.m.—Time, News and Dance Music from the Hotel Ritz. 12 midnight (approx.)—Close Down.

COLOGNE (Germany) Westdeutscher Rundfunk. WL. 283 m. (1,060 kc); 4 kw.

Transmits at intervals from 10.15 a.m. 1.5 p.m.—Orchestral Concert. 3.40 p.m.—Programme for Children. 4.0 p.m.—Child of Misfortune and Fortune's Child—"Play for Children (Blachetta).

4.45 p.m.—See Langenberg Station. 5.30 p.m.—Talk on "Actors." 6.0 p.m.—Concert: 1. Germanenblut—March (Blankenburg). 2. "Leicester"—Overture (Auber). 3. Die Werber—Waltz (Lanner). 4. Selections from "The Tales of Hoffman" (Offenbach). 5. Anbetung (Schmalstich). 6. Liebes-sang (Croen): 7. Pat und Patachon—Intermezzo (Lindsay-Theimer).

7.20 p.m.—French Conversation. 7.45 p.m.—Talk by Dr. Haberland. 8.5 p.m.—Report on the Olympic Football Match at Amsterdam. 8.15 p.m.—Dance Music Programme. 9.0 p.m.—"The Race"—Wireless Musical Play (Kneip), followed by Report on the Olympic Football Match at Amsterdam, News, Sports Notes and Silent Night.

COPENHAGEN (Denmark) Copenhagen Radio. WL. 337.4 m. (880 kc); 1 kw. Relayed by Kalundborg on 1,153.8 m. (260 kc).

Transmits at intervals from 7.30 a.m. 7.0 p.m.—News, Exchange and Time. 7.20 p.m.—Talk on "Art Treasures." 8.0 p.m.—Chimes and Reading. 8.20 p.m.—Introductory Talk to the following transmission. 8.30 p.m.—"Spring in Heidelberg"—Musical Play (Warden-Löhner), relayed from the Phoenix Theatre. 11.0 p.m. (approx.)—Close Down.

CORK (Ireland) Cork Broadcasting Station (6CK). WL. 400 m. (750 kc); 1.5 kw.

2.30 p.m.—Weather, Stock Market Report, and Gramophone Records. 6.15 p.m.—Programme from Dublin.

GRACOW (Poland) Polskie Radio. WL. 567 m. (529 kc) 1.5 kw.

Transmits at intervals from 12 noon. 5.45 p.m.—Programme from Warsaw. 7.5 p.m.—Agricultural Report. 7.15 p.m.—Variety Selections. 7.30 p.m.—Relay from Kattowitz. 10.0 p.m.—Programme from Warsaw. 10.30 p.m.—Restaurant Concert. 11.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland) Dublin Broadcasting Station (2RN). WL. 319.1 m. (940 kc); 1.5 kw.

Transmits at intervals from 1.30 p.m. 6.15 p.m.—Programme for Children. 7.0 p.m.—Gramophone Selections. 7.20 p.m.—News, and Famine Talk. 7.45 p.m.—Spanish Language Lesson. 8.0 p.m.—Dina Copeman (Pianist) and Signor Grossi (Violinist). 8.25 p.m.—Station Augmented Orchestra.

8.35 p.m.—P. McGuinness (Baritone). 8.45 p.m.—Rhona Clarke (Pianist). 9.0 p.m.—Music Talk by H. R. White. 9.15 p.m.—French and Italian Operatic Music by the Augmented Orchestra.

9.45 p.m.—Percy Whitehead (Baritone). 9.55 p.m.—Celeste Orchestra Items. 10.10 p.m.—Percy Whitehead (Baritone). 10.20 p.m.—Augmented Orchestra. 10.30 p.m.—News, and Close Down.

FRANKFURT-am-MAIN (Germany) Süddeutscher Rundfunk. WL. 429 m. (699 kc); 4 kw. Relayed by Cassel on 252.1 m. (1,190 kc).

Transmits at intervals from 12.30 p.m. 6.0 p.m.—Talk, "The Centenary of the Death of Prince Karl August of Weimar" on June 14, from Cassel, by Dr. H. Schleichert. 6.30 p.m.—Talk on "Diabetes." 7.0 p.m.—Talk, "Educational Problems."

7.45 p.m.—English Language Lesson. 8.15 p.m.—Piano-forte Recital, from Cassel. 1. (a) Scherzo in E flat minor, Op. 4. (b) Intermezzo in E flat minor, Op. 118 (Brahms). 2. Homage to Rameau (Debussy). 3. Capricetti Op. 36 (Tsch). 4. "Dante"—Fantasia quasi Sonata (Liszt).

9.15 p.m.—Reading from Jens Peter Jacobsen, followed by Gramophone Selections.

HAMBURG (Germany) Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc), Hanover, 297 m. (1,010 kc), and Kiel, 255 m. (1,176 kc).

Transmits at intervals from 5.45 a.m. 5.25 p.m. (Hamburg, Bremen and Hanover)—Dialogue, "In a Wallpaper Factory."

6.0 p.m.—Programme of Waltzes. 6.45 p.m.—Talk for Housewives. 7.0 p.m.—Talk, "Mixed Marriages and Their Effect on Nationality."

7.25 p.m.—Talk for Farmers, by A. Volbeding, from Kiel, News. 8.0 p.m.—Concert from Hanover. 1. "Aleste"—Overture (Glück). 2. Piano-forte concerto in G major (Mozart). 3. Symphonia in E flat major, No. 3 (Haydn). 4. Concert suite from "Idomeneo" (Mozart). 5. Viennese Dances (Beethoven). 6. Overture in D major (Schubert), News. 10.30 p.m. (approx.)—(Hamburg and Kiel)—The Norag Jazz Orchestra and Close Down.

HELINGSFORS (Finland) WL. 375.9 m. (798 kc); 1.2 kw.

6.15 p.m.—Programme of Talks. 6.50 p.m.—Programme from Lahti.

HILVERSUM (Holland) Algemeene Vereeniging Radio Omroep. WL. 1,069 m. (280 kc); 5 kw.

11.40 a.m.—Police Information. 12.10 p.m.—Lunchtime Trio Music. 12.40 p.m.—Fashion Talk for Women. 5.40 p.m.—The Rentmeester Trio. 6.55 p.m.—German Language Lesson. 7.25 p.m.—Police Information. 7.40 p.m.—Concert. 1. Toccata and Fugue in D minor (Bach). 2. Contralto Solos, (a) Aria from "Samson" (Handel), (b) Ich halte treulich still (Bach).

Organ Solos, (a) Canzona gregorienne (Boëllmann), (b) Religious March. 4. Contralto Solos, (a) L'Angelus (Bourgault), (b) Entre le bœuf et l'âne gris, (c) Jésus chasse les marchands du temple Jérusalem, (d) Agnus Dei (Bizet). 5. Sonata in F sharp minor (Kloek). 6. Doubt—Organ Solo. 7. Contralto Solos, (a) Der skreg en fugl (Sinding), (b) Morgenhymne (Henschel), (c) The Lord's Prayer (Benoit).

8.55 p.m.—Orchestral Concert. 1. "The Merry Wives of Windsor"—Overture (Nicolai). 2. Ballet des parfums (Popy). 3. Czardas (Monti). 4. Adoration (Filipucci). 5. Selection from "The Queen of Sheba" (Gounod). 6. The First Thoughts—Waltz (Lanner). 7. Horrid! (Kohlman). 8. Chin-Chin Blues (Thurban). 9. March. News and Weather in the Interval.

HUIZEN (Holland) WL. 341 m. (870 kc); 4 kw. (Until 6.40 p.m.). Transmits from 6.40 p.m. on 1,870 m. (160 kc).

1.10 p.m.—Concert of Trio Music. 6.40 p.m.—Gramophone Selections. 8.10 p.m.—Ecclesiastical Latin Lesson. 8.40 p.m.—Vocal and Orchestral Concert and Talk.

JUAN-LES-PINS (France) Radio LL. WL. 230 m. (1,304 kc); 0.25 kw.

1.0 p.m.—Symphony Concert. 9.0 p.m.—News, Orchestral Music and Talk by M. Maurice Blanchard. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany) Ostmarken Rundfunk. WL. 303 m. (990 kc); 4 kw. Relayed by Danzig on 272.7 m. (1,100 kc).

Transmits at intervals from 6.15 a.m. 6.25 p.m.—Talk, "Michael Pogorzelsky."

7.0 p.m.—Talk, "From Otto Lilienthal to the Aviation of To-day." 7.30 p.m.—Elementary Spanish Lesson. 8.5 p.m.—Grotesque Historical Sketches: (a) Pious Aeneas, (b) The Episode in Aulis, (c) The Grecian Urn, (d) Alexander's Steed (Maurice Baring).

9.15 p.m.—Variety Item Concert. 10.15 p.m.—Weather, News, Sports. 10.30 p.m.—Orchestral Concert. 1. "Pique Dame"—Overture (Suppé). 2. Potpourri from "Von Pontius bis Pilatus" (Morana). 3. Lieder der Liebesnacht—Waltz (Lincke). 4. Grüss mir mein Wein (Kalmann). 5. Légende d'Amour (Bece). 6. El Capitán—March (Souza). 11.30 p.m. (approx.)—Close Down.

KOVNO (Lithuania) Radio Kaunas. WL. 2,000 m. (150 kc); 15 kw.

Transmits at intervals from 12.0 noon. 7.30 p.m.—German Language Lesson. 8.15 p.m.—Talk, "Berlin in Summer." 8.45 p.m.—Time, Weather and News. 9.0 p.m.—Concert. 1. Salve Imperator (Fück). 2. Das Glöckchen des Eremiten" (Mailart). 3. Sphärenklänge—Waltz (Strauss). 4. Arab Intermezzo (Suleik). 5. "The Merry Wives of Windsor"—Selection (Lauriskus). 6. Die Schöne Galathée"—Overture (Suppé). 8. Danse des Odaliques (Palachke). 9. Serenade (Aitchen). 10. "Coppélia"—Selection (Delibes). 11. "Victorious Eagle" (Rosey).

LAHTI (Finland) WL. 1,522.8 m. (197 kc); 25 kw.

11.0 a.m.—Exchange and Music. 11.30 a.m.—Exchange and News. 11.59 a.m.—Time and Weather. 12.15 p.m.—Shipping Forecast. 5.57 p.m.—Time, Weather and News. 6.15 p.m.—Programme of Talks. 6.50 p.m.—Orchestral Concert. 1. Dance improvisation (Kuula). 2. Two Finnish Dances (Kuula). 3. Finnish Melodies (Kuula). 4. Valsette et polka (Maasalo). 5. "Cello Solos." 6. Prelude (Rachmaninoff). 7. Mélodie (Rachmaninoff). 8. (a) Serenade, (b) Vision (Gounod). 9. Melodies from "Atta" (Verdi). 10. Spanish Dance (Saint-Saëns). 11. Trot de Cavallerie (Rubinstein). 8.45 p.m.—News in Finnish and Swedish. 9.15 p.m.—Relay from a Restaurant.

LANGENBERG (Germany) Westdeutscher Rundfunk. WL. 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc).

Transmits at intervals from 10.15 a.m. 1.5—4.45 p.m.—Programme from Cologne. 4.45 p.m.—Talk from Düsseldorf, "The Aim and System of German Instruction." 5.30 p.m.—Programme from Cologne, followed by Silent Night.

LAUSANNE (Switzerland) Société Romande de Radiophonie. WL. 680 m. (441 kc); 1.5 kw.

Transmits at intervals from 6.45 a.m. 8.01 p.m.—Concert: 1. "Iphigenia in Aulis"—Overture (Glück). 2. Sonata for Flute (Handel). 3. Violin Solos, Prelude to "Le Deluge" (Saint-Saëns). 4. Bocagere, for flute (Demisville). 5. Rigaudon de Dardanus (Rameau). 6. Andante for flute (Mozart). 7. Symphony in C major (Beethoven). 8.30 p.m.—Literary News. 8.45 p.m. (approx.)—Close Down.

LEIPZIG (Germany) Mitteldeutscher Rundfunk. WL. 366 m. (818 kc); 4 kw. Relayed by Dresden on 275.2 m. (1,090 kc).

Transmits at intervals from 10.0 a.m. 4.30 p.m.—Chamber Music Concert. 1. String Quartet in D major (Mozart). 2. (a) Nachgelassener Quartetsatz (Schubert), (b) Serenade for String Quartet (Wolf). 3. String Quartet in D major, Op. 11 (Tchaikovsky). 6.5 p.m.—Talk for Women. 6.30 p.m.—Relay from Königswusterhausen. 7.0 p.m.—Talk, "Floral Decoration."

7.30 p.m.—Talk, "Animal Biology." 8.0 p.m.—Weather and Time. 8.15 p.m.—Concert of Operetta Music. News and Sports Notes. 10.15 p.m.—"From World Literature"—"Cupid and Psyche." 11.15 p.m.—Dance Music Programme. 12.0 midnight (approx.)—Close Down.

MADRID (Spain) Union Radio (EAJ7). WL. 374 m. (802 kc); 1.5 kw.

Transmits at intervals from 11.45 a.m. 7.0 p.m.—Orchestral Concert. 1. Gigantes y cabezudos (Caballero). 2. Selection from "Falstaff" (Verdi). 3. Selection from "Gipsy Love" (Lehar). 4. Talk on "Gabriel and Galán." 8.0 p.m.—Dance Music Programme. Programme relayed by San Sebastian EA78, 335 m. (895 kc).

10.0 p.m.—Chimes and Exchange. 10.5 p.m.—"Ernan"—Opera (Verdi). 12.20 a.m. (Wed., approx.)—News. 12.30 a.m. (approx.)—Close Down.

MILAN (Italy) Unione Radiofonica Italiana. WL. 540.3 m. (546 kc); 7 kw.

Transmits at intervals from 12.15 p.m. 7.47 p.m.—German Language Lesson. 8.35 p.m.—Time, and Variety Concert: 1. "Coriolan"—Overture (Beethoven). 2. "Finlandia"—Symphonic Poem (Sibelius). 3. "Mistica" (Tirindelli). 4. "Don Juan"—Serenade (Mozart). 5. Two Etudes (Chopin). 6. Marina (Musella). 7. Verse Recital. 8. Soprano Solos: (a) Amor de Gaucho (Pontini); (b) "Clavelitos"—Spanish Song (Valverde). 9. "A Masked Ball"—Baritone Solo (Verdi). 10. Piano-forte Solos: (a) Serenata a Dispetto (Cilea); (b) Impresione (Pozzoli). 11. Soprano Solos: (a) "Dear Name" from "Rigoletto" (Verdi); (b) "The Sunshine of your Smile"—In English (Ray). 12. "Cendrillon"—March (Massenet).

10.55 p.m.—News, followed by Dance Music relayed from the Fiaschetteria Toscana, Milan. 11.30 p.m. (approx.)—Close Down.

MUNICH (Germany) Deutsche Stunde in Bayern. WL. 536 m. (559 kc); 4 kw. Relayed by Augsburg on 566 m. (530 kc); Kärntnerlautern, 204.1 m. (1,470 kc); and Nürnberg on 241.9 m. (1,240 kc).

Transmits at intervals from 12.55 p.m. 6.30 p.m.—Talk, "The Chemical Construction of the World." 7.0 p.m.—Talk, "Thinkers and Idealists—Max Weber's Life." 7.45 p.m.—Haydn Recital. 1. Concerto for Cello and Orchestra

for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. 1.5—4.45 p.m.—Programme from Cologne. 4.45 p.m.—Talk from Düsseldorf, "The Aim and System of German Instruction." 5.30 p.m.—Programme from Cologne, followed by Silent Night.

LAUSANNE (Switzerland) Société Romande de Radiophonie. WL. 680 m. (441 kc); 1.5 kw. Transmits at intervals from 6.45 a.m. 8.01 p.m.—Concert: 1. "Iphigenia in Aulis"—Overture (Glück). 2. Sonata for Flute (Handel). 3. Violin Solos, Prelude to "Le Deluge" (Saint-Saëns). 4. Bocagere, for flute (Demisville). 5. Rigaudon de Dardanus (Rameau). 6. Andante for flute (Mozart). 7. Symphony in C major (Beethoven). 8.30 p.m.—Literary News. 8.45 p.m. (approx.)—Close Down.

LEIPZIG (Germany) Mitteldeutscher Rundfunk. WL. 366 m. (818 kc); 4 kw. Relayed by Dresden on 275.2 m. (1,090 kc).

Transmits at intervals from 10.0 a.m. 4.30 p.m.—Chamber Music Concert. 1. String Quartet in D major (Mozart). 2. (a) Nachgelassener Quartetsatz (Schubert), (b) Serenade for String Quartet (Wolf). 3. String Quartet in D major, Op. 11 (Tchaikovsky). 6.5 p.m.—Talk for Women. 6.30 p.m.—Relay from Königswusterhausen. 7.0 p.m.—Talk, "Floral Decoration."

7.30 p.m.—Talk, "Animal Biology." 8.0 p.m.—Weather and Time. 8.15 p.m.—Concert of Operetta Music. News and Sports Notes. 10.15 p.m.—"From World Literature"—"Cupid and Psyche." 11.15 p.m.—Dance Music Programme. 12.0 midnight (approx.)—Close Down.

MADRID (Spain) Union Radio (EAJ7). WL. 374 m. (802 kc); 1.5 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Orchestral Concert. 1. Gigantes y cabezudos (Caballero). 2. Selection from "Falstaff" (Verdi). 3. Selection from "Gipsy Love" (Lehar). 4. Talk on "Gabriel and Galán." 8.0 p.m.—Dance Music Programme. Programme relayed by San Sebastian EA78, 335 m. (895 kc).

10.0 p.m.—Chimes and Exchange. 10.5 p.m.—"Ernan"—Opera (Verdi). 12.20 a.m. (Wed., approx.)—News. 12.30 a.m. (approx.)—Close Down.

Programmes for Tuesday.—(Cont.)

in D major. 2. "Ariadne auf Naxos"—Cantata. 3. Symphony in E flat major No. 10. 9.0 p.m.—*Concert* from *Nürnberg*. 1. Vom Fels zum Meer—March (Jessel). 2. "Die Nürnberger Puppe"—Overture (Adam). 3. A Sketch. 4. Brüderlein fein—Waltz (Fall). 5. Selection from "Carmen" (Bizet). 6. Die Friedenstaube—Intermezzo (Lincke). 7. Galop (Blon). 10.25 p.m.—Announcements and News.—Close Down.

NAPLES (Italy)
Unione Radiofonica Italiana (1 NA). WL. 333.3 m. (900 kc); 1.5 kw.
Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time, Harbour Notes. 8.50 p.m.—*Orchestral Concert*: 1. Le donne curiose—Symphony (Usiglio). 2. Spring Song (De Nardis). 3. Serenade (Siede). 4. "Boccaccio"—Selection (Suppé). 9.30 p.m.—*Relay from a Theatre* 10.55 p.m.—Programme Notes. 11.0 p.m. (approx.)—Close Down.

OSLO (Norway)
Kringkastingselskapet. WL. 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 566 m. (530 kc); Porsgründ, 500 m. (600 kc); Fredrikstad, 435 m. (680 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc). 6.15 p.m.—Talk for Women. 6.55 p.m.—Shorthand Dictation. 7.15 p.m.—News and Elementary English Language Lesson. 8.0 p.m.—Poultry Talk by M. Graendsen. 8.30 p.m.—Talk on "Joseph Haydn." 9.0 p.m.—Orchestral Concert. 10.0 p.m.—Weather, News Bulletin. 10.15 p.m.—Talk on "Topical Events." 10.30 p.m. (approx.)—Close Down.

PARIS (France)
Eiffel Tower (FL). WL. 2,650 m (113 kc); 3 kw.
8.56 a.m.—Time Signal on 32.5 m. (9,231 kc).
10.26 a.m.—Time Signal on 2,650 m.
6.45 p.m.—"Le Journal Parlé" Talks, "Popular Novels," "Books to read," and "Wireless," etc. 8.10 p.m.—Weather Forecast.

8.30 p.m.—*Concert*. 1. Ode au printemps — Choral Selection (Ronsard). 2. Songs, (a) Serenade (Gauthier), (b) Venise la rouge (de Musset). 3. Pastorale on a Popular Chant for Soloists and Strings. 4. Songs, (a) Kyrie Eleison, (b) Agnus Dei (Verlaine). 5. Cantique (Chancereul). 6. O Salutaris—Song. 7. Ave Maria—Song. 8. Prelude for String Quartet and Pianoforte. At 8.56 p.m., Time Signal on 32.5 m. 9.30 p.m.—Educational Programme. Talks on "French West Africa," "Travel Memoirs" and "Greece Ancient and Modern," etc. 11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)
Petit Parisien. WL. 340.9 m. (880 kc); 0.5 kw.
8.45 p.m.—Gramophone Selections, Talk, Announcements, and News. 9.0 p.m.—*Concert*. 1. "La Perle du Brésil"—Overture (David). 2. Petite Suite (Büsser). 3. Symphony Orchestra; (a) Ma Mère l'Oie (Ravel), (b) Entr'acte from "Ariane et Barbebleue" (Dukas). 4. "Hiawatha"—Ballet (Coleridge Taylor). 5. Poursuites (Bousquet). 6. Finale from "Lakmé" (Delibes). News in the interval.

PARIS (France)
Radio-Paris (CFR). WL. 1,750 m. (171 kc); 3 kw.
Transmits at intervals from 7.30 a.m. 12.30 p.m.—*Concert*. Part I. Selections from the Works of d'Ambrósio. 1. Napoli serenade. 2. Nocturne. 3. Madrigal. 4. Paysanne. 5. Concerto in B minor. Part II. Selections from the Works of Boellmann. 1. Menuet gothique. 2. Nocturne. 3. Symphonic Variations for "Cello." 4. Ronde française. News. 1.50 p.m.—Market Prices. Bourse. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—*Concert*. 1. Callirhoe (Chaminade). 2. Concerto in F for Violin (Lalo). 3. Menuet sentimental (Brun). 4. Pianoforte Solos, (a) Divan (Poldini), (b) Valse élégante (Staub). 5. Feuille d'album (Chabrier). 6. Sonata for "Cello" (Sachs). 7. Bertrand de Born (Casadesu).

4.45 p.m.—Exchange and News. 8.0 p.m.—Agricultural Report. 8.15 p.m.—Exchange and News. 8.30 p.m.—Talk on Literature. 8.45 p.m.—*Concert*. 1. "Don Juan"—Opera Selection (Mozart). 2. Concerto for Violin and Orchestra. 3. "Johnny sets the tune." News in the interval.

PITTSBURGH (U.S.A.)
Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw. Relayed at intervals on 63 m. (4,762 kc); and 27 m. (11,111 kc). Transmits at intervals from 2.45 p.m. 11.15 p.m.—Symphony Orchestra from the William Penn Hotel. 11.55 p.m.—Baseball Announcements. 12.0 midnight.—Telechron Time and the Four One Minute Men. 12.30 a.m. (Wed.)—Haller's Programme. 1.0—3.30 a.m. (approx.)—Programme relayed from WJZ, New York. 1.0 a.m.—Stromberg-Carlson Hour. 1.30 a.m.—Orchestras that Differ. 2.0 a.m.—Dickens' Characters. 2.30 a.m.—"Rhythmic Ripples." 3.0 a.m.—Longine Time and "Happiness Programme" by the "Merry Maytag Ramblers." 3.30 a.m.—Sacred Song Recital. 4.0 a.m.—Telechron Time, Weather, Baseball Scores and Close Down.

POSEN (Poland)
Polskie-Radio. WL. 343 m. (874 kc); 1.5 kw.
Transmits at intervals from 7.0 a.m. 7.20 p.m.—Relay from Kattowitz. 10.30 p.m.—Time and Variety. 10.50 p.m.—News and Weather. 11.0 p.m.—Dance Music Programme from the Palais Royal Restaurant. 12 midnight (approx.)—Close Down.

PRAGUE (Czechoslovakia)
Slovakia)
Strasnice. WL. 348.9 m. (860 kc); 5 kw.
Transmits at intervals from 11.0 a.m. 6.25 p.m.—Talk for Workers. 7.0 p.m.—Slovakian Talk. 8.0 p.m.—Weather, News, and Selections of Popular Music. 10.0 p.m.—Time, News, Orchestra

ROME (Italy)
Unione Radiofonica Italiana. WL. 450 m. (666 kc); 3 kw.
Transmits at intervals from 1.30 p.m.

8.30 p.m.—English Language Lesson. 8.58 p.m.—Time, News, Exchange. 9.15 p.m.—"Turandot"—Opera (Puccini)—Acts 1 and 2. In the interval—Topical Review. 11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)
General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw. Relayed by 2XAF on 31.4 m. (9,554 kc); and from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Stock Reports. News. 11.25 p.m.—Baseball Announcements. 11.30 p.m.—Dinner Music Programme from the Hotel Ten Eyck, Albany. 12.0 midnight—"Voters' Service," relayed from Washington. 12.30 a.m. (Wednesday)—"Soconyland Sketches," from New York. 1.0 a.m.—WGY Agricultural Programme. 1.30—4.30 a.m.—Programme relayed from New York. 1.30 a.m.—"Seiberling Singers." 2.0 a.m.—"The Eveready Hour." 3.0 a.m.—"Clicquot Club Eskimos." 3.30 a.m.—Time and "Rolf's Palais d'Or Orchestra." 4.30 a.m.—Dance Music Programme relayed from Buffalo, N.Y. 5.0 a.m.—Shea's Buffalo Orchestra. 6.0 a.m. (approx.)—Close Down.

STAMBOUL (Turkey)
Radio-Stamboul. Société Anonyme Turque de Telephonie sans fil. WL. 1,180 m. (254 kc); 5 kw.
Transmits at intervals from 4.30 p.m. 7.15 p.m.—Turkish Musical Programme. In the Interval, Weather. 9.0 p.m.—Tzigane and Jazz Concert. 10.30 p.m.—News and Close Down.

STOCKHOLM (Sweden)
Radiotjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1380 m. (217 kc); Göteborg, 416 m. (721 kc); Malmö, 260.9 m. (1150 kc); and Sundsvall, 545.6 m. (550 kc). Transmits at intervals from 12.35 p.m. 6.30 p.m.—Concert of Light Music. 7.30 p.m.—Talk on "Swimming and Life-Saving" in water. 8.0 p.m.—Open Air Concert. 9.0 p.m.—Talk on Gardening. 9.15 p.m.—News and Weather. 9.40 p.m.—Talk, "Travels in the Sahara Desert." 10.10 p.m. (approx.)—Close Down.

STUTTGART (Germany)
Süddeutscher Rundfunk. WL. 379.7 m. (790 kc); 4 kw.
Transmits at intervals from 12.30 p.m.—7.15 p.m. 7.45 p.m.—Time, Weather and South German Wireless Notes. 8.10 p.m.—Recitations. 1. Tiefenfahrt (Wieprecht). 2. Schrämhunde kreischen (Wohlgemuth). 3. Schlagende Wetter (Wohlgemuth). 4. Das Grubenpferd (Paul Zech). 5. Brand in der Strecke (Kania). 6. Die Rose (Klose). 7. Lied der Kohlenhauer (Engelke). 8. Ausfahrt (Josef Voss). 8.45 p.m.—Operatic Programme, followed by Recitations, News.

TOULOUSE (France)
Radiophonie du Midi. WL. 389.6 m. (770 kc); 3 kw.
Transmits at intervals from 10.15 a.m. 8.30 p.m.—The Eighth Symphony in Six Parts.—Selection (Beethoven) 9.0 p.m.—*Concert* from the works of Rossini. 9.50 p.m.—Accordion Recital. 10.15 p.m.—"North African Journal." Report and Close Down.

VIENNA (Austria)
Radio Wien. WL. 577 and 517.2m. (520 and 580 kc.); 1.5 and 5 kw. Relayed by Innsbruck on 294.1 m. (1,020 kc), and Klagenfurt on 272.7 m. (1,100 kc). Transmits at intervals from 11.0 a.m. 7.0 p.m.—Advanced French Lesson. 7.30 p.m.—Advanced English Lesson. 8.5 p.m.—Adolf Kirchl Programme in commemoration of his 70th birthday. "Abschied"—for male voice choir. 2. Bagatellen. 3. Songs. 4. "Rothaarig ist mein Schätzelein"—for male voice choir. 9.5 p.m.—*Concert* by the "Original London Savoy Jazz"—directed by Teddy Sinclair.

WARSAW (Poland)
Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw.
Transmits at intervals from 12 noon. 7.5 p.m.—Programme from Cracov. 7.30 p.m.—Relay from Kattowitz. 10.0 p.m.—Time, Weather, and News. 10.30 p.m. (approx.)—Close Down.

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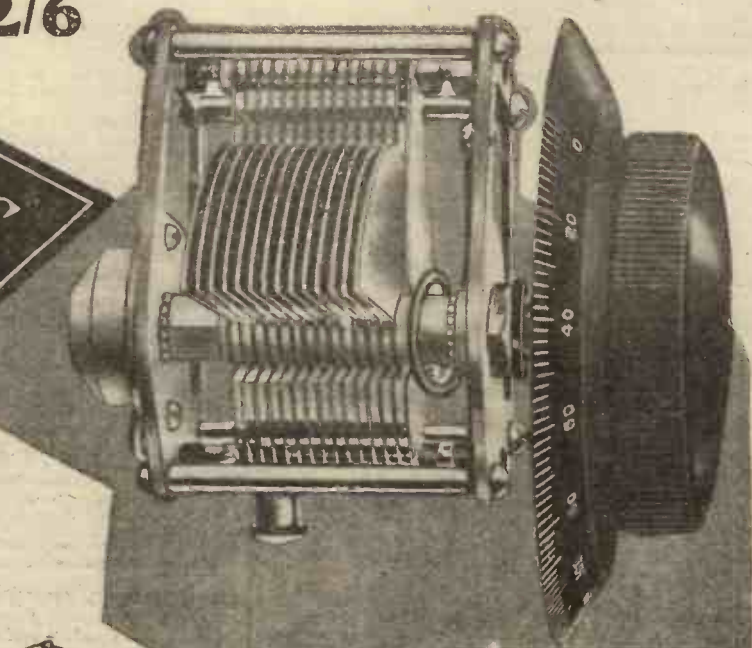
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PROGRAMMES FOR WEDNESDAY (June 13)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain)
Radio Barcelona (EAJ1). WL 344.8 m. (870 kc); 1.5 kw.
Transmits at intervals from 11.0 a.m. to 6.0 p.m.—Exchange Closing Prices.
6.10 p.m.—Sextet Selections: 1. La Troya—Two Step (Patinio). 2. Selection from "Hamlet" (Thomas-Alder). 3. La Electricidad—Mazurka (Coto). 4. Envolée—Caprice (Volpatti, Jun.). 5. C'est l'heure bleue—Waltz (Picquet).
8.30 p.m.—Castilian Grammar Lesson
9.0 p.m.—Exchange and News.
9.5 p.m.—Orchestral Selection—Turandot—Overture (Puccini).
9.0 p.m.—Dance Music Programme.
10.0 p.m.—Chimes and Weather.
10.5 p.m.—Choral Recital—Missa Solennis (Beethoven).

BASLE (Switzerland)
Basler Radio-Genossenschaft. WL 1,000 m. (300 kc); 0.25 kw.
8.30 p.m.—Time and Weather.
8.35 p.m.—Concert. Recital of French German and Italian. Songs of today and yesterday, and recitations.
9.50 p.m.—News and Close Down.

BERGEN (Norway)
Kringkastingselskap WL 369.9 m. (811 kc); 1.5 kw.
Transmits at intervals from 11.15 a.m. to 8.0 p.m.—Orchestral Music. 1. Petite suite romantique (Bath). 2. Caravane hindoue (Popy). 3. Moonshine (Mac Dowell). 4. Valse romantique (Heinecke).
8.30 p.m.—Concertina Recital.
9.0 p.m.—Programme from Oslo.
9.30 p.m.—Soprano Songs.
10.0 p.m.—Weather, News and Time.
10.15 p.m.—Concert from the Norwegian Exhibition.
11.30 p.m. (approx.)—Close Down.

BERLIN (Germany)
Königswusterhausen. WL 1,250 m. (240 kc); 35 kw.
4.30 p.m.—Talk, "The Destiny of a Nineteenth Century Artist."
5.0 p.m.—Programme from Hamburg.
6.0 p.m.—Talk, "American Credit Policies," by Dr. Feilau.
6.50 p.m.—Advanced French Lesson.
6.55 p.m.—Talk on Electro-Technology.
7.20 p.m.—Talk, "Introduction to the Study of Music."
8.0 p.m.—Talk, "Objects and Purposes of Criticism."
8.15 p.m.—Relay from Frankfurt.
10.0 p.m.—Programme from Voxhaus.

BERLIN (Germany)
Voxhaus. WL 484.6 m. (619 kc); 4 kw.
Transmits at intervals from 10.10 a.m. to 6.45 p.m.—Talk by Jaro Jaretski.
7.10 p.m.—Talk, "The Basis of Optimism," by Th. Kapstein.
7.35 p.m.—Talk, "Rambling and Hostels for Young People."
8.0 p.m.—Talk and Recitations.
9.15 p.m.—Cello Recital. 1. Serenade No. 3 in D minor for String Orchestra and Cello, Op. 69 (Volkmann). 2. Fantasia on Russian Airs, Op. 7 (Davidoff). 3. Rokoko Variations, Op. 33, for Cello and Orchestra (Tchaikovsky). Followed by News, Time, Weather, and Sports Notes.
10.30 p.m.—Waltz and Charleston Programme.

BERNE (Switzerland)
Radio-Berne. WL 411 m. (730 kc); 1.5 kw.
Transmits at intervals from 1.0 p.m. to 8.0 p.m.—Time and Weather.
8.5 p.m.—Talk, "From the Life of Rosa Luxemburg," by Dr. Schmid.
9.30 p.m.—Programme from Basle.
9.20 p.m.—The Kursaal Orchestra. News and Weather in the Interval.
10.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)
Schlesische Funkstunde. WL 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (909 kc).
Transmits at intervals from 11.15 a.m. to 6.30 p.m.—Königswusterhausen Relay.
7.25 p.m.—Talk on Legal Subject.
7.50 p.m.—Talk, "The Plague of the Distillery, relayed from Gleiwitz."
8.30 p.m.—Military Concert from the Südpark Restaurant: 1. March of the King's Grenadiers (Mehring). 2. "Giralda"—Overture (Adam). 3. Solveig's Song (Grieg). 4. "Frühlingsstimmen" (Strauss).

5. "Oberon"—Selections (Weber). 6. "Entry of the Guests" from "Tannhäuser" (Wagner). 7. Minuet (Beethoven). 8. Spanish Dances Nos. 2 and 5 (Moszkovsky). 9. From Rhine to Danube (Rhode). Military March No. 27.

BRÜNN (Czecho-Slovakia)
Komasov. WL 441.2 m. (680 kc); 3 kw.
Transmits at intervals from 11.0 a.m. to 6.0 p.m.—German Transmission.
6.25 p.m.—Agricultural Report.
6.40 p.m.—Czech Literature.
7.0 p.m.—Concert: 1. Maximilian Robespierre (Litolf). 2. Siegfried Idyll from "Siegfried" (Wagner). 3. Selection from "The Queen of Sheba" (Goldmark). 4. Humoresque, Op. 36, No. 1.
8.0 p.m.—Yugo-Slavian Programme. Talk, Recitations, Vocal and Instrumental Music.
10.0 p.m.—Programme from Prague, followed by Exhibition Programme.

BRUSSELS (Belgium)
Radio Belgique. WL 508.5 m. (590 kc); 1.5 kw.
5.0 p.m.—Dance Music from the St. Sauveur Palais de danse.
6.0 p.m.—Talk, "Belgian History."
6.15 p.m.—Talk by M. Bouckaert.
6.30 p.m.—Chamber Music: Trio (Mozart). 2. Caprice for Piano (Mendelssohn). 3. Trio (Lalo).
7.30 p.m.—Le Radio Chronique.
8.15 p.m.—Selection from "Louise"—Opera (Charpentier). In the interval, Talk: "The Liège Ardennes."
10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)
Magyar Telephone Hirmondo es Radio R.T. WL 557.1 m. (538 kc); 25 kw.
Transmits at intervals from 9.0 a.m. to 7.0 p.m.—Answers to Letters.
8.0 p.m.—"Elsevir" Play (Hevesi).
10.15 p.m.—Time and News, followed by Tzigane Music from the Britannia.

COLOGNE (Germany)
Westdeutscher Rundfunk. WL 283 m. (1,060 kc); 4 kw.
Transmits at intervals from 10.15 a.m. to 1.5 p.m.—Orchestral Concert: 1. "Lodoiska"—Overture (Cherubini). 2. Entr'acte to Shakespeare's "Richard the Third" (Volkmann). 3. 2nd and 3rd Movements from the Violin Concerto in G minor—Regnerus Ringnald (Bruch). 4. Slavonic Rhapsody in D major (Dvorak). 5. Ball Scene from "Die Abenteuer einer Neujahrnacht" (Heuberger). 6. Valse—Caprice (Riemenschneider). 7. Festmarsch (Riff).
3.15 p.m.—Talk on "Women and the Advertising Profession."
4.15 p.m. (Only for Aix-la-Chapelle, Cologne and Langenberg)—Book Review.
4.45 p.m.—Talk, "The Free-Lance and the Reporter"—relayed from "Das Haus in der Sonne" Isert, Westwald.

5.30 p.m.—Talk, "Poets and Players."
6.0 p.m.—See Langenberg Station.
7.20 p.m.—Reading for Workers.
7.45 p.m.—See Langenberg Station.
8.5 p.m.—Report on the Olympic Football Match at Amsterdam.
8.15 p.m.—Orchestral Concert: 1. "The Water-Carrier"—Overture (Cherubini). 2. An Dich—Waltz (Waldteufel). 3. Selection from "Samson and Delilah" (Saint-Saens). 4. Meeresbrandung (Leoncavallo). 5. Torch Dance No. 1 (Meyerbeer). 6. Reminiscences of Grieg (Urbach). 7. Violin Solo—Concerto (Beethoven). 8. "Naila"—Intermezzo (Delibes-Doppler). 9. First Suite from "L'Arlesienne" (Bizet). 10. Folk Songs and Fairy Tales (Komzack). 11. Potpourri from "Madame Pompadour" (Fall). Followed by Football Report, News, Sports Notes and a Concert from Essen.
12.0 midnight (approx.)—Close Down.

COPENHAGEN (Denmark)
Copenhagen Radio. WL 337.4 m. (889 kc); 1 kw. Relayed by Kalundborg on 1,153.8 m. (260 kc).
Transmits at intervals from 7.30 a.m. to 7.0 p.m.—News, Exchange, and Time.
7.30 p.m.—Agricultural Talk, "Grass and Hay," by C. O. Jørgensen.
8.0 p.m.—Town Hall Chimes.
8.5 p.m. (approx.)—Selections for String Orchestra. 1. Minuet from "Berenice" (Handel). 2. Tambourin (Grétry). 3. Serenade

(Haydn). 4. Minuet from the Serenade, "Eine kleine Nachtmusik" (Mozart). 5. Gavotte (Gossac).

8.30 p.m.—Danish Poets' Programme, followed by Announcements.
9.45 p.m.—Orchestral Concert. 1. "William Tell"—Overture (Rossini). 2. Four Selections from "L'Arlesienne"—Suite 1 (Bizet): (a) Prelude, (b) Minuet, (c) Adagio, (d) Carillon. 3. Torch-light Dance from "Feramors" (Rubinstein). 4. Elegy (Massenet). 5. Hungarian Rhapsody No. 2 (Liszt).
10.45 p.m.—Dance Music Programme.
12 (midnight)—Town Hall Chimes.
12.30 a.m. (Thurs., approx.)—Close Down.

CORK (Ireland)
Cork Broadcasting Station (6CK). WL 400 m. (750 kc); 1.5 kw.
2.30 p.m.—Weather, Stock Market Report and Gramophone Records.
6.15 p.m.—Programme from Dublin.

CRACOW (Poland)
Polski-Radio. WL 567 m. (529 kc); 1.5 kw.
Transmits at intervals from 12.0 noon to 5.45 p.m.—Programme for Children.
6.15 p.m.—Programme from Warsaw.
7.5 p.m.—Agricultural Report.
7.15 p.m.—Variety Selections.
7.35 p.m.—Answers to Correspondents.
8.0 p.m.—Fanfare and News.
8.30 p.m.—Programme from Warsaw.
10.30 p.m.—Restaurant Concert.
11.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)
Dublin Broadcasting Station (2RN). WL 319.1 m. (940 kc); 1.5 kw.
Transmits at intervals from 1.30 p.m. to 6.15 p.m.—Programme for Children.
7.0 p.m.—Programme for Women.
7.20 p.m.—News, and Irish Lesson.
8.0 p.m.—The Station Orchestra.
8.15 p.m.—The Iona Church Choir, conducted by T. Logier.
8.30 p.m.—Instrumental Variety.
8.45 p.m.—The Iona Church Choir.
9.0 p.m.—Harry O'Donovan and Company in "Whimsicalities."
9.15 p.m.—Request—Orchestral Music.
9.30 p.m.—Eileen Gunning (Soprano).
9.45 p.m.—Jack McGarvey (Banjo).
10.0 p.m.—The Orchestra and Joseph O'Neill (Tenor) in Selections from Leoncavallo and Bizet.
10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany)
Süddeutscher Rundfunk. WL 429 m. (699 kc); 4 kw. Relayed by Cassel on 252.1 m. (1,190 kc).
Transmits at intervals from 12.15 p.m. to 6.15 p.m.—Wireless Notes and other announcements.
6.45 p.m.—Illustrated Chess Talk.
7.15 p.m.—French Language Lesson.
8.0 p.m.—Talk on Natural Science.
8.15 p.m.—"Die Taumlied"—Play (Wilhelm Fladt). Followed by Schubert Concert: 1. Songs. 2. Quartet. 3. Songs.

HAMBURG (Germany)
Norag (ha, in Morse). WL 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297 m. (1,010 kc); and Kiel, 255 m. (1,176 kc).
Transmits at intervals from 5.45 a.m. to 5.0 p.m.—Concert of Loewe Ballads.
6.0 p.m.—Orchestral Selections.
6.45 p.m.—Talk on Chess Problems.
7.0 p.m.—Talk in North German Dialect, by Prof. Wossido.
7.25 p.m.—Talk, "The Olympic Games in Amsterdam" Weather.
8.0 p.m.—Living Animals Before the Microphone—Frogs and Toads.
9.0 p.m.—"Animal Voices in Music," followed by News Bulletin.
10.30 p.m. (approx.)—(Hamburg and Kiel)—Café Wallhof Concert.

HILVERSUM (Holland)
Algemeene Vereeniging Radio Omroep. WL 1,069 m. (280 kc); 5 kw.
11.40 a.m.—Police Information.
12.10 p.m.—Lunchtime Trio Musica.
2.40 p.m.—For Women and Children.
6.40 p.m.—The Rentmeester Trio.
6.55 p.m.—Talk and Police News.
7.40 p.m.—Concert: 1. "Armide"—Overture (Gluck). 2. Ballet Suite (Lully). 3. Menuet à la reine (Grétry). 4. Four Old French Songs. 5. Reading from "Electra" (Sophocles). 6. "The Ruins of Athens"—Overture (Beethoven). 7. Slavonic Dance (Folber). 8.

Pusztta-Legenden—Waltz (Lindsay-Thiemer). 9. Five Hungarian Songs. 10. Reading of Three Stories (Tchekov).
9.50 p.m.—News and Weather.
10.5 p.m.—A Request Programme: 1. "Zampa"—Overture (Hérold). 2. Wine, Women and Song—Waltz (Strauss). 3. Ay Ay Ay (Freire). 4. The Sleeping Beauty's Wedding Procession (Rhode). 5. Bella Vista—March (Morena).
10.40 p.m. (approx.)—Close Down.

HUIZEN (Holland)
WL 341 m. (870 kc); 4 kw. (Until 6.40 p.m.). Transmits from 6.40 p.m. on 1,870 m. (160 kc).
1.10 p.m.—Instrumental Concert.
5.40 p.m.—Programme for Children.
8.10 p.m.—Gramophone Selections.
8.40 p.m.—Soprano Solos and Talk.

JUAN-LES-PINS (France)
Radio LL. WL 230 m. (1,304 kc); 0.25 kw.
1.0 p.m.—Symphony Concert.
9.0 p.m.—Concert and News.
10.0 p.m.—Dance Music Programme.
10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. WL 303 m. (990 kc); 4 kw. Relayed by Danzig on 272.7 m. (1,100 kc).
Transmits at intervals from 6.15 a.m. to 6.20 p.m.—Talk for Parents.
7.0 p.m.—Talk, "The Importance of Theory and Practice in Business Training," from Danzig.
7.30 p.m.—Elementary English Lesson.
8.5 p.m.—Practical Wireless Hints.
8.20 p.m.—"A Waltz-Dream"—Operetta (Oscar Strauss), followed by Weather, News and Sports Notes.

KOVNO (Lithuania)
Radio Kaunas. WL 2,000 m. (150 kc); 15 kw.
Transmits at intervals from 12.0 noon to 7.30 p.m.—Talk, "Children and the Prevention of Contagious Diseases."
8.0 p.m.—News and Announcements.
9.0 p.m.—Quartet Concert: 1. "Alexander Stradella"—Overture (Flo-...). 2. Romance (Grünfeld). 3. Suite moderne (Armandola). 4. Humoresque (Dvorak). 5. Valse (Fuchs). 6. Chansonette (Caik-...). 7. In a Persian Market (Ketsky). 8. Lithuanian Song. 9. Quintezzenzen Potpourri (Morena).
10.30 p.m.—News and Close Down.

LAHTI (Finland)
WL 1,522 m. (197 kc); 25 kw.
Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw.
11.0 a.m.—Exchange and Music.
11.30 a.m.—Exchange and News.
11.59 a.m.—Time and Weather.
12.15 p.m.—Shipping Forecast.
5.57 p.m.—Time, Weather, and News.
6.15 p.m.—Concert. 1. Dance of the Dervishes (Bendix). 2. Melodies from "Pique Dame" (Tchikovsky). 3. La Source (Delibes). 4. Danse lente (Franck). 5. Songs. 6. "Egmont"—Overture (Beethoven). 7. Larghetto from the Second Symphony (Beethoven). 8. "Don Juan"—Overture (Mozart). 9. Minuet (Mozart). 10. Andante (Haydn). 11. Gavotte (Mehul).
8.45 p.m.—News in Finnish and Swedish.
9.15 p.m.—Relay from a Restaurant.

LANGENBERG (Germany)
Westdeutscher Rundfunk. WL 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc).
Transmits at intervals from 10.15 a.m. to 1.5 p.m.—6 p.m.—Programme from Cologne.
6.0 p.m.—Orchestral Concert from the Zoological Gardens, Elberfeld. 1. "The Mute of Portici"—Overture (Auber). 2. Hungarian Rondo (Haydn). 3. Scene from "Der Evangelist" (Kienzl). 4. Slavonic Rhapsody (Friedemann). 5. "Uhlenhorster Kinder"—Waltz (Fétras).
7.20 p.m.—Programme from Cologne.
7.45 p.m.—Talk, "The Signification of Surnames," from Dortmund.
8.5 p.m.—Programme from Cologne, followed by Concert relayed from the Handelshof, Essen.
12 midnight (approx.)—Close Down.

LEIPZIG (Germany)
Mitteldeutscher Rundfunk. WL 366 m. (818 kc); 4 kw. Relayed by Dresden on 275.2 m. (1,090 kc).

Transmits at intervals from 10.0 a.m. to 7.0 p.m.—Talk, "Swimming and Life Saving."
7.30 p.m.—Talk, "Philosophy and Natural Science."
8.0 p.m.—Recital and Time.
8.15 p.m.—Wealth of Lyrics from the Works of Otto Bierbaum.
9.15 p.m.—Concert of Light Music.
10.0 p.m.—News and Sports Notes.
10.15 p.m.—Dance Music Programme.

MADRID (Spain)
Madrid Radio (EAJ7). WL 347 m. (802 kc); 1.5 kw.
Transmits at intervals from 11.45 a.m. to 7.0 p.m.—Orchestral Concert: 1. Dolorettes (Vives). 2. Selection from "Sylvia" (Delibes). Recuerdo a Gaztambide (Chápi). Interlude by Luis Medina.
8.0 p.m.—Dance Music Programme.
9.45 p.m.—Talk on "Rural Hygiene" by E. Gallego Ramos.
10.0 p.m.—Time and Exchange.
10.5 p.m.—Concert: 1. "La Preciosa"—Overture (Weber). 2. Soprano Solos from "Der Freischütz" (Weber). 3. Humorous Talk, "The Chain of Good Luck." 4. Selection from "Don Franciscoquita" (Vives). 5. Soprano Solos (Stürmer). (a) De la Algría; (b) Thámire a las rosas. 6. Aria from "The Marriage of Figaro" (Mozart). 7. Adelaide (Beethoven). 8. Dances from "Prince Igor" (Borodine).
11.50 p.m. (approx.)—News.
12.0 midnight—Dance Music Concert.
12.30 a.m. (Thurs. approx.)—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. WL 549.3 m. (546 kc); 7 kw.
Transmits at intervals from 12.15 p.m. to 7.47 p.m.—French Language Lesson.
8.35 p.m.—Time, followed by "Astronomy Talk—The Sun."
8.45 p.m.—"Il Transito del Poverello"—Oratorio (Farina) and "Nazarath"—Oratorio (Vittadini). In the interval—Talk.
11.30 p.m.—Dance Music from the "Restaurant Cova." Milan.
12 midnight (approx.)—Close Down.

MUNICH (Germany)
Deutsche Stunde in Bayern WL 536 m. (559 kc); 4 kw. Relayed by Augsburg on 566 m. (530 kc); Kaiserslautern, 204.1 m. (1,470 kc); and Nürnberg, 241.9 m. (1,241 kc).
Transmits at intervals from 12.35 p.m. to 6.30 p.m.—Talk, "Light and Warmth."
7.0 p.m.—Talk on Psychology.
7.30 p.m.—Talk, "Young Swiss Poets."
8.0 p.m.—Programme from Zurich.
10.5 p.m.—Announcements and News.
10.30 p.m.—Gramophone Selections.

NAPLES (Italy)
Unione Radiofonica Italiana (1 NA). WL 333.3 m. (990 kc); 1.5 kw.
Transmits at intervals from 2.0 p.m. to 8.40 p.m.—Time, Harbour Notes.
8.50 p.m.—Concert. 1. Salvador Rosa (Gomez). 2. "Nabucco"—Selection for Chorus and Orchestra (Verdi). 3. "Il piccolo Marat"—Tenor Solo (Macagnani). 4. "Madame Butterfly"—Soprano Solo (Puccini). 5. "Marion Delorme"—Intermezzo (Ponchielli). 6. "A Masked Ball"—Selection (Verdi). 7. "La Favorita"—Selection (Donizetti). 8. "Carmen"—Choral (Bizet). 9. "Nerone"—Soprano Solo (Boito). 10. "Manon Lescaut"—Tenor Solo (Puccini). 11. "Iris"—Soprano Solo (Macagnani). 12. "Dardanus"—Rigaudon (Rameau). 13. "Il Trovatore"—Miserere (Verdi). 14. "The Battle of Legnano"—Symphony (Verdi).
10.55 p.m.—Programme Announcements.
11.0 p.m. (approx.)—Close Down.

OSLO (Norway)
Kringkastingselskapet. WL 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 566 m. (530 kc); Porsgrund, 500 m. (600 kc); Fredriksstad, 435 m. (689 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc).
5.40 p.m.—Programme for boys.
6.40 p.m.—Elementary French Lesson.
7.15 p.m.—News and Talk on "The United States" Time.
8.5 p.m.—Orchestral Concert.
9.0 p.m.—Talk, "Norway of the Middle Ages," by M. A. W. Brøgger.

Programmes for Wednesday.—(Cont.)

9.30 p.m.—Pianoforte Recital.
10.0 p.m.—Weather, News and Talk on Topical Events.
10.30 p.m.—Gramophone Dance Music.
12 midnight (approx.)—Close Down.

PARIS (France)

Eiffel Tower (FL). WL. 2650 m. (113 kc); 5 kw.
8.56 a.m.—Time Signal on 32.5 m. (9,231 kc).
10.26 a.m.—Time Signal on 2,650 m.
6.45 p.m.—"Le Journal Parlé."
8.10 p.m.—Weather Forecast.
8.30 p.m.—Concert. 1. Aquarelles—For Pianoforte, Flute and Cello. 2. Songs, (a) Salome's Aria from "Hérodiade" (Massenet), (b) Il est doux, il est bon (Massenet). 3. Pianoforte Solos, (a) Prelude and Fugette (Pierne), (b) Le Tombeau de Couperin (Ravel). 4. Songs, (a) Ma negli estrenu istanti (Mercadente), (b) Il mio ben (Paisello), (c) Intorno al l'Idol mio (Cesti). 5. Flute Solos, (a) Pastorale (de Francmesnil), (b) Prelude to "L'Après midi d'un faune" (Debussy). 6. Cello Solos. 7. Marguerite's Aria from "Mephistopheles" (Boito). 8. Sonata de Camera—For Pianoforte and Cello (Pierne). At 8.56 p.m. Time Signal on 32.5 m. (9,231 kc).
9.30 p.m.—Educational Programme. Talks on "Physical Culture," "Agriculture," etc.
11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)

Radio-Paris (CFR). WL. 1750 m. (171 kc); 3 kw.
Transmits at intervals from 7.30 a.m.
12.30 p.m.—Chamber Music. News.
1.50 p.m.—Market Prices, Bourse.
3.30 p.m.—Exchange Quotations.
3.45 p.m.—Concert. 1. "La Dame Blanche"—Overture (Boieldieu). 2. Violin Solos, (a) Aubade provençale (Kreisler), (b) La Precieuse (Kreisler), (c) Le Rouet (d'Ambrosio). 3. Berceuse (Brun). 4. Pianoforte Solos, (a) Jeux d'eau à la Villa d'este (Liszt), (b) Première arabesque (Debussy). 5. Serenade (Erlanger). 6. Cello Solos, (a) Grave (Eccles), (b) Tarantelle (Popper). 7. Petite Suite (Debussy).

4.45 p.m.—Exchange and News.
8.0 p.m.—Agricultural Report.
8.15 p.m.—Exchange and News.
8.30 p.m.—Concert. 1. "Monsieur et Madame Tel"—Dramatic Selection. 2. Selections by Mme. Marie Delna. 3. Classical Quartet Selections. News.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw. Relayed at intervals on 63 m. (4,762 kc); and 27 m. (11,111 kc). Transmits at intervals from 2.45 p.m.
11.15 p.m.—The Westinghouse Band from the "William Penn Hotel."
11.55 p.m.—Baseball Announcements.
12.0 midnight.—Telechron Time.
12.45—3.0 a.m. (Thurs. approx.)—Programme from WJZ, New York.
12.45 a.m.—Talk, "The Political Situation in Washington To-night."
1.0 a.m.—Selection.
1.30 a.m.—"Sylvania Foresters."
2.0 a.m.—"Philco Programme."
3.0 a.m.—"Happiness Programme" by the "Merry Maytag Ramblers."
3.30 a.m.—"Power Period."
4.0 a.m.—Telechron Time, Weather, Baseball Scores and Close Down.

POSEN (Poland)

Polskie-Radio. WL. 343 m. (874 kc); 1.5 kw.
Transmits at intervals from 10 p.m.
7.15 p.m.—French Language Lesson.
7.35 p.m.—Programme from Warsaw.
8.0 p.m.—Report on Finance.
8.30 p.m.—Cello Selection.
8.50 p.m.—Organ and Song Recital. 1. Organ—Fantasia and Fugue in G minor (Bach). 2. Soprano Solos: (a) Ave Maria (Cherubini), (b) Chant de pénitence (Beethoven). 3. Organ: (a) Fugue in A flat major (Guilmant), (b) Canzone (Guilmant), (c) Canon (Guilmant), (d) Grand choeur (Guilmant). 4. Soprano Solos: (a) Agnus Dei (Bizet), (b) Canticum (Adam). 5. Organ: (a) Fantasia (Walczyński), (b) Postludium (Szuszyński).
10.0 p.m.—Time, News, Weather and Variety Selections.
10.40 p.m.—Talk, "Wireless Technique."
11.0 p.m.—Dance Music Programme from the Café Esplanade, Posen.
12.0 midnight (approx.)—Close Down.

PRAGUE (Czechoslovakia)

Strasnice. WL. 348.9 m. (865 kc); 5 kw.
Transmits at intervals from 11.0 a.m.
5.20 p.m.—Programme for Children.
5.30 p.m.—Agricultural Report.
5.40 p.m.—Masaryk Institute Talk.
5.50 p.m.—German Transmission.
6.15 p.m.—Agricultural Report.
6.55 p.m.—Introductory Talk to the following transmission.
7.0 p.m.—"Fidelio"—Opera (Beethoven) from the National Theatre.
10.0 p.m.—Time, News and Announcements.
10.30 p.m.—Gramophone Selections.

ROME (Italy)

Unione Radiofonica Italiana. WL. 450 m. (666 kc); 3 kw.
Transmits at intervals from 1.30 p.m.
8.30 p.m.—German Language Lesson.
8.58 p.m.—Time, News, Exchange.
9.10 p.m.—Concert of Italian Music: 1. Allegro vivo (Scarlatti). 2. Toccata for String Quartet (Valentini, arr. Madami). 3. Mezzo Soprano Solos from the Opera "Arianna" (Marcello). 4. "Aria"—Violin Solo (Tenaglia). 5. Tarantella—Violin Solo (Sasso). 6. "La madre al figlio lontano"—Mezzo Soprano Solo (Pizzetti). 7. Theme and Variations for String Quartet (Zipoli). 8. Minuet per Isabella (Breschi). 9. Le streghe—Violin Solo (Paganini). 10. Talk, "Errors of Justice throughout the Ages." 11. Francesca da Rimini—Selections (Zandonai).
11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw. Relayed by 2XAD on 21.96 m. (13,661 kc); from 11.0 p.m.
Transmits at intervals from 11.45 a.m.
11.0 p.m.—Stock Reports, News.
11.25 p.m.—Baseball Announcements.
11.30 p.m.—Dinner Music Programme.
12.25 a.m. (Thurs.)—Baseball Scores.
12.30 a.m.—Remington Rand Band. Relayed from Iliou, New York.
1.0—3.30 a.m.—Programme relayed from New York.
1.0 a.m.—Magazine Review Items.
2.0 a.m.—"The Ipana Troubadours."
2.30 a.m.—Goodrich Silvertown Cord Quartet and Orchestra Programme.

3.30 a.m.—Time and Madrigal Mixed Quartet Programme.
4.0 a.m. (approx.)—Close Down.

STAMBOUL (Turkey)

Radio-Stamboul Societé Anonyme Turque de Telephonie sans fil. WL. 1,180 m. (254 kc); 5 kw.
Transmits at intervals from 4.30 p.m.
7.15 p.m.—Turkish Musical Programme.
8.0 p.m.—Weather and Time.
9.0 p.m.—Concert from works of Mozart: 1. "The Marriage of Figaro"—Overture. 2. Pianoforte Quartet. 3. Selection for pianoforte.

STOCKHOLM (Sweden)

Radiojånst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1,380 m. (217 kc); Göteborg, 416 m. (721 kc); Malinö, 260.9 m. (1,150 kc); and Sundsvall, 545.8 m. (550 kc).
Transmits at intervals from 12.35 p.m.
6.30 p.m.—Programme for Children.
7.0 p.m.—Concert of Light Music.
7.55 p.m.—Talk for Housewives.
8.15 p.m.—"The Demon"—Opera (Rubinstein) from the Studio.
9.15 p.m.—News and Weather.
9.40 p.m.—Dance Music Programme.
11.0 p.m. (approx.)—Close Down.

STUTTGAERT (Germany)

Süddeutscher Rundfunk. WL. 379.7 m. (790 kc); 4 kw.
Transmits at intervals from 12.30 p.m.
6.0 p.m.—Time, Weather and Agricultural Notes and News.
6.15 p.m.—Talk, "Social Life of Yesterday and To-day."
6.45 p.m.—Talk, "The Training and Career of a Mechanic and Electrician," by Prof. Veesenmeyer.
7.15 p.m.—English Language Lesson.
8.15 p.m.—Programme from Frankfurt. Followed by Dramatic Sketches: 1. "The Stronger" (Strindberg). 2. Die Droschke (Molnar). 3. Der letzte Nachmittag (Molnar). 4. Am Post-ohlne Teppich (Gast). 6. Beim Augenarzt (Reimann). 7. Gespenstergespräch (Reimann). 8. Telefongespräch (Reimann). 9. Egon and Emilie (Morgenstern). In the intervals, gramophone music and followed by News.

TOULOUSE (France)

Radiophonie du Midi. WL. 389.6 m. (770 kc); 3 kw.
Transmits at intervals from 10.15 a.m.
8.30 p.m.—Concert from the Works of Massenet. 1. Scènes alsaciennes. 2. Elegy—Cello Solo. 3. Le dernier soumeil de la Vierge. 4. Ariane. 5. Scènes pittoresques.
9.15 p.m.—Military Music Concert.
10.15 p.m.—"North African Journal." Report and Close Down.

VIENNA (Austria)

Radio Wien. WL. 577 and 517.2m (270 kc); 10 kw.
Relayed by Imbsbruck on 294.1 m. (1,020 kc); and Klagenfurt on 272.7 m. (1,100 kc).
Transmits at intervals from 11.0 a.m.
6.30 p.m.—Talk by Dr. Dollfuss.
7.0 p.m.—"The Magic Flute"—Opera (Mozart) from the Vienna Staatsoper, followed by Concert of Light Music.

WARSAW (Poland)

Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw.
Transmits at intervals from 12 noon.
6.15 p.m.—Concert of French Music.
7.5 p.m.—Agricultural Report.
7.35 p.m.—Talk, "Round Warsaw"
8.30 p.m.—Popular Concert from the Dolina Szwajcarska. 1. March from "The Prophet" (Meyerbeer). 2. "The Barber of Seville"—Overture (Rossini). 3. Berceuse (Jarnefeld). 4. L'Arlesienne—Second Suite (Bizet). 5. Choral Selections, (a) Chant des Marins (Schubert), (b) Le rêve (Gounod), (c) Chant chevaleresque (Moniuszko), (d) Les Montagnes (Kjerulf), (e) Douce soirée (Kotarbina), (f) A quoi bon rever d'amour (Duniacki), (g) chère Maisonette (Moniuszko), (h) Fanfare (Moczyński). In the Interval, News in French.
10.0 p.m.—Time, Weather and News.
10.30 p.m.—Dance Music Programme.
11.30 p.m. (approx.)—Close Down.

WILNO (Poland)

Polskie Radio. WL. 435 m. (689 kc); 0.5 kw.
Transmits at intervals from 12 noon.
5.35 p.m.—Talk: "Practical Astronomy."
7.35 p.m.—Programme from Warsaw.
10.0 p.m.—Programme from Warsaw.
10.30 p.m.—Dance Music Programme.
12 midnight (approx.)—Close Down.

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Exide
THE LONG LIFE BATTERY

PROGRAMMES FOR THURSDAY (June 14)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain)

Radio Barcelona (EAJI). WL. 344.8 m. (870 kc); 1.5 kw.
 Transmits at intervals from 11.0 a.m. to 10.0 p.m.—Exchange Closing Prices.
 6.10 p.m.—*Sextet Selections*. 1. La entrada de la murta—Two-step (Giner). 2. Selection from "La casita blanca" (Serrano-Pacheco). 3. Serenata (Molas). 4. Heuureux Moment (Ondshoorn).
 6.30 p.m.—Programme for Children.
 8.40 p.m.—*English Language Lesson*. 9.0 p.m.—Exchange and News.
 9.5 p.m.—Orchestral Selection—"Il Seraglio"—Overture (Mozart).
 9.10 p.m.—*Song Recital*. 1. Paris—Foxtrot (Monreal). 2. Servicio domestico—Monologue and Jota (Butet). 3. Dansa triomfant—Sardana (Vidal). 4. La ciguecanta—Tango (Kepler).
 9.45 p.m.—Programme of Recitations.
 10.0 p.m.—Chimes and Weather.
 10.5 p.m.—Orchestral and Gramophone Selections.
 11.15 p.m. (approx.)—Close Down

BERGEN (Norway)

Kringkastingselskap. WL. 369.9 m. (811 kc); 1.5 kw.
 Transmits at intervals from 11.15 a.m. to 10.0 p.m.—Orchestral Concert.
 9.0 p.m.—Talk: "Trolls and Spirits."
 9.30 p.m.—"The Exhibition Orchestra."
 10.0 p.m.—Weather, News and Time.
 10.15 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. WL. 1,250 m. (240 kc); 35 kw.
 Transmits at intervals from 12.0 noon to 10.15 p.m.—Educational, Talk.
 4.30 p.m.—Talk, "The Adaptability of Animals," by Dr. Zimmer.
 5.0 p.m.—Programme from Voxhaus.
 6.0 p.m.—Legal Subject Talk.
 6.30 p.m.—Advanced Spanish Lesson.
 6.55 p.m.—Talk on "Fruit Growing."
 7.20 p.m.—Talk, "Transport and Freight Regulations."
 8.0 p.m.—Talk on "The Air Ship as a Trade Medium."
 8.30 p.m.—Programme from Voxhaus.
 9.0 p.m.—Talk, "The Infancy of the Labour Movement in Europe."
 9.30 p.m.—Talk, "Criticism."
 10.15 p.m. (approx.)—Programme from Voxhaus.

BERLIN (Germany)

Voxhaus. WL. 484.6 m. (619 kc); 4 kw.
 Transmits at intervals from 10.10 a.m. to 10.15 p.m.—Sacred Concert from the Garrison Church, Potsdam. Organ Recital. 1. Prelude and Fugue in E minor (Bach). 2. Choral Selections, (a) Vom Himmel kam der Engel Schar, (b) Achet auf, ruft uns die Stimme, (c) Nun freut euch, lieben Christeng'mein. 3. (a) Auf, auf zu Gottes Lob (Franck); (b) Die Psyche ladet die Waldvöglein zum Lobe Gottes ein (Kopp); (c) Der Tag der Weltgerichts (Bach). 4. Variations in E major (Handel). 5. (a) Der Kreuzzug (Schubert); (b) Der Heilige Franziskus (Löwe). 6. (a) Canzone in E, flat Major; (b) Toccata in D minor; (c) Fugue in D major (Regér). 7. Hymne (Behm).
 7.0 p.m.—Talk, "Lithographic and Copper Plate Printing."
 7.30 p.m.—Talk, "The Grünauer Regatta as a Preliminary Test for the Amsterdam Olympiade."
 8.0 p.m.—Talk on Legal Matters.
 8.30 p.m.—Talk, "The New Giant Zeppelin L.Z. 127 and its English Rivals R.100 and R.101."
 9.0 p.m.—*Arias and Overtures*. 1. "The Water Carrier"—Overture (Cherubini). 2. Tenor Solos, (a) "The Stars were Shining," from "Tosca" (Puccini); (b) Aria from "Hérodiade" (Massenet). 3. "Die Rantzau"—Prelude (Masagnini). 4. Tenor Solo from "Rigoletto" (Verdi). 5. "The Black Domino"—Overture (Auber). 6. The Flower Song from "Carmen" (Bizet). 7. "Le Cid"—Overture (Massenet). Followed by News and Weather.
 10.30 p.m.—Dance Music Programme.
 12.30 a.m. (Fri., approx.)—Close Down.

BERNE (Switzerland)

Radio-Berne. WL. 411 m. (730 kc); 1.5 kw.
 Transmits at intervals from 1.0 p.m. to 8.0 p.m.—Time and Weather.

8.5 p.m.—Talk, "Travel Reminiscences of Scandinavia."
 8.30 p.m.—Concert of Cello Solos and Orchestral Selections. News and Weather in the interval.
 10.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)

Schlesische Funktunde. WL. 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (909 kc).
 Transmits at intervals from 11.15 a.m. to 10.0 p.m.—English Reading from "The Happy Prince and other Tales" (Wilde).
 7.50 p.m.—Talk, "Abyssinian Travels."
 8.30 p.m.—*Concert*. 1. "Im Reiche des Indra"—Overture (Lincke). 2. Maria Ney. 3. Bassoon Solo (Goepfert). 4. Mimosa Waltz (Jones). 5. Maria Ney in Selections from her Repertoire. 6. Tango d'Italiano (Kraehmer). 7. Maria Ney. 8. Per aspera ad astra—March (Urbach).
 10.0 p.m.—News and Letter Box, followed by Close Down.

BRÜNN (Czecho-Slovakia)

Komarov. WL. 441.2 m. (680 kc); 3 kw.
 Transmits at intervals from 11.0 a.m. to 10.0 p.m.—German Transmission.
 6.25 p.m.—Agricultural Report.
 7.0 p.m.—"The Aeronautic"—Comedy (John Cislér).
 8.0 p.m.—Symphony Concert.
 10.30 p.m.—Exhibition Programme.

BRUSSELS (Belgium)

Radio-Belgique. WL. 508.5 m. (590 kc); 1.5 kw.
 5.0 p.m.—Gramophone Selections.
 5.30 p.m.—Café Metropole Concert.
 6.0 p.m.—Flemish Language Lesson.
 6.30 p.m.—*Trio Concert*. 1. Le Général (Van Luck). 2. Le Domino lila (Cuvillier). 3. Shrove Tuesday, for Pianoforte (Daneau). 4. Where my caravan has rested (Lohr). 5. Hawaiian Nights (Klickman). 6. Blonde (Meyer). 7. Simple chanson for Cello (Khuner). 8. Song (Friml). 9. Cairo (Wallace). 10. Jeunesse dorée (Waldteufel). 11. Serenade à Lisette for Violin (Caludi). 12. Piccoline (Giraud).
 7.30 p.m.—*Le Radio Chronique*.
 8.15 p.m.—*Concert*. 1. Skate March (Robichon). 2. I call you sugar (Baxter). 3. Tenderly think of me (Pascoe). 4. Arabesque (Philips). 5. Love's Garden of Roses (H. Wood). 6. Kiss and make up (Miller). 7. Did you mean it? (Baker). 8. Beneath Venetian skies (Lewis Young). 9. Four Walls (Jolson). 10. Together (Berlin). 11. Waltz from "Faust" (Gounod). 12. Waltz Song. 13. Blue Danube Waltz (Ivanovic). 14. Waltz Song. 15. Valse des fleurs (Tchaikovsky). 16. La Source (Delibes). 17. Song. 18. Danse de l'Esterelle (Casadeu). In the interval: Talk by M. Nino Salvanesqui, Topicalities, and Literary Selection.
 10.15 p.m.—News, and Close Down.

BUDAPEST (Hungary)

Magyar Telephon Himnede es Radio R. T. WL. 557.1 m. (538 kc); 25 kw.
 Transmits at intervals from 9.0 a.m. to 10.0 p.m.—Talk, "Behind the Scenes."
 7.20 p.m.—*English Language Lesson*.
 8.0 p.m.—*Concert* from the Works of Alois Tarnay, with the Composer at the Piano.
 9.30 p.m.—Time and News, followed by Tzigane Music Programme.
 12.0 midnight (approx.)—Close Down

COLOGNE (Germany)

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc); 4 kw.
 Transmits at intervals from 10.15 a.m. to 10.0 p.m.—*Orchestral Concert*: 1. "Benvenuto Cellini"—Overture (Berlioz). 2. September Waltz (Godin). 3. Selection from "The Girl of the Golden West" (Puccini). 4. Ein Prosit der Gemütlich (Hannemann). 5. Oboe Solo—Concerto in F minor (Rietz). 6. Nur du—Waltz Song (Litzel). 7. Potpourri from "The Blue Mazurka" (Lehár). 8. Barataria March (Sullivan).
 4.15 p.m.—Talk, "Herder and His Inheritance," by Reinhard Lehmann.
 4.35 p.m.—Reading, "The Honest Thief" (Dostoievsky).
 5.20 p.m.—Talk on "The Choral Works of Bach," by Fred Hamel.
 6.0 p.m.—*Concert*. 1. Donauweibchen—Waltz (Strauss). 2. "Athalia"—Overture (Mendelssohn).

3. Selection from "Werther" (Massenet). 4. Serenade for Cello and Flute (Titl). 5. Pianoforte Solos—Bohemian Dances (Smetana); (a) Furiant; (b) Dupak. 6. Potpourri from "The Little Dutch Girl" (Kaiman).
 7.20 p.m.—See Langenberg Station.
 7.45 p.m.—Natural Science Talk.
 8.5 p.m.—Report on the Olympic Football Match at Amsterdam.
 8.15 p.m.—See Langenberg Station.
 10.45 p.m. (approx.)—Football Report, News, Sports Notes and Dance Music Programme.
 12.0 midnight (approx.)—Close Down.

COPENHAGEN (Denmark)

Copenhagen Radio. WL. 337.4 m. (889 kc); 1 kw. Relayed by Kalundborg on 1,153.8 m. (260 kc).
 Transmits at intervals from 7.30 a.m. to 10.0 p.m.—Weather, News and Exchange.
 7.15 p.m.—Time, followed by Talk.
 8.0 p.m.—Town Hall Chimes.
 8.5 p.m. (approx.)—*Violin and Pianoforte Selections*. 1. Sonatina in D major, Op. 137, No. 1 (Schubert). 2. Violin Romance in F major, Op. 50 (Beethoven). 3. Selections from Sonata, No. 10 in B major (Mozart, arr. Köchel, No. 378), News.
 9.15 p.m.—"The Open Door"—Play (Sutro, translated by Lohse).
 10.45 p.m. (approx.)—Close Down.
 9.45 p.m.—Danish Ballet Music.

CORK (Ireland)

Cork Broadcasting Station (6CK). WL. 400 m. (750 kc); 1.5 kw.
 2.30 p.m.—Weather, Stock Market Report and Gramophone Concert.
 6.15 p.m.—Programme from Dublin.

CRACOW (Poland)

Polskie Radio. WL. 567 m. (529 kc); 1.5 kw.
 Transmits at intervals from 12.0 noon to 10.0 p.m.—Programme from Warsaw.
 7.5 p.m.—Agricultural Report.
 7.15 p.m.—Variety Items and News.
 7.30 p.m.—*English Language Lesson*.
 8.0 p.m.—Fanfare from the Church of Notre Dame, followed by Talk.
 8.30 p.m.—*Concert* of Polish Chamber Music. 1. Sonata for Violin and Pianoforte in A minor, Op. 13 (Paderewsky). 2. Pianoforte Selections (Statkovsky): (a) Six Oeuvres, Op. 16—Au bord de la source, (b) Alla Burla, Op. 16, No. 6; (c) Three Little Polish Pieces, Oberek, dumka, cracovienne; 3. Quartet for Pianoforte, First and Second Violin and Cello (Noskovsky).
 10.0 p.m.—Programme from Warsate.
 10.30 p.m.—"Pavillon" Restaurant Concert.
 11.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). WL. 319.1 m. (940 kc); 1.5 kw.
 Transmits at intervals from 1.30 p.m. to 10.0 p.m.—Programme for Children.
 7.0 p.m.—Gramophone Selections.
 7.15 p.m.—News and French Language Lesson by Mlle. Giudicelli.
 7.45 p.m.—Talk on "History."
 8.0 p.m.—The Station Orchestra.
 8.15 p.m.—A. W. Deale (Baritone).
 8.30 p.m.—Carmel Turner (Pianist).
 8.40 p.m.—Orchestral Music: from the Works of Saint-Saëns.
 9.0 p.m.—Poems, by Christine Daly.
 9.15 p.m.—Harrison's Dance Band.
 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany)

Süddeutscher Rundfunk. WL. 429 m. (699 kc); 4 kw. Relayed by Cassel, on 252.1 m. (1,190 kc).
 Transmits at intervals from 1.30 p.m. to 10.0 p.m.—Wireless Notes and other announcements.
 6.30 p.m.—Talk for Women, and Talk on "The chemical analysis of water," from Cassel.
 7.15 p.m.—Talk: "The Language of Hunters," by Prof. Schultz.
 7.45 p.m.—Programme arranged by the Frankfurter Zeitung.
 8.15 p.m.—Tenor Song Recital.
 9.15 p.m.—"The Showman,"—Variety Programme relayed from Cassel.
 HAMBURG (Germany)
 Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297 m. (1,010 kc); and Kiel, 255 m. (1,176 kc).
 Transmits at intervals from 5.45 a.m. to 11.30 a.m.—Relay from Hanover of the 15th Jubilee Celebration of

the Veterinary High School, Hanover—"Parsifal"—Prelude (Wagner)—Address, Songs.
 6.0 p.m.—Orchestral Selections.
 6.45 p.m.—Talk for Housewives.
 7.0 p.m.—Talk, "Feminine Types in the Creative Art of the Century," by Fril. A. v. Oertzen.
 7.25 p.m.—Talk, "The Summer Holiday from the Medical Standpoint," by Prof. Gäthgens.
 7.55 p.m.—Weather and Economics.
 8.15 p.m. (Hamburg, Hanover and Kiel)—*Flemish Programme*. 1. "Charlotte Corday"—Overture (Benoit). 2. Flemish Dialect Recitations. 3. Flemish Sketches (Brusselsmans). 4. Flemish Poets and their Poems. 5. Flemish Landscape (De Teye). 6. Songs: (a) De Rebenboog (de Clercq); (b) Ave Marie (de Clercq); (c) Spinnlied; (d) De Zee rochtet in de Verte; (e) Klein Duichterke. 7. Orchestral Selections: Kermeesse de Milenka (van Block).
 10.15 p.m. (approx.)—News.
 10.30 p.m. (approx.)—Hamburg and Kiel)—Cabaret Concert.

HILVERSUM (Holland)

Algemeene Vereeniging Radio-Omroep. WL. 1,069 m. (280 kc); 5 kw.
 11.40 a.m.—Police Information.
 2.40 p.m.—Programme for Hospitals.
 5.10 p.m.—*Concert*: 1. "Elverhoi"—Overture (Kuhlau). 2. Swedish Sketches (Fétras). 3. Romantic Valse (Heinecke). 4. Soloist Selections. 5. Potpourri of the works of Mendelssohn (Fétras). 6. Balade expressive (Caludi). 7. Soloist Selections. 8. Nesya—Valse lente (Brandl). 9. Selection from "Paganini" (Lehár). 10. Finale.
 6.55 p.m.—*English Language Lesson*.
 7.25 p.m.—Police Information.
 7.40 p.m.—"A Marriage under Ludovic XV"—Play in Four Acts, followed by Dance Music Programme. News and Weather in the Interval.
 11.40 p.m. (approx.)—Close Down.

HUIZEN (Holland)

WL. 341 m. (879 kc); 4 kw. (Until 6.40 p.m.). Transmits from 6.40 a.m. on 1,870 m. (160 kc).
 1.10 p.m.—Vocal and Instrumental Concert.
 6.10 p.m.—Instrumental Concert.
 8.10 p.m.—Talk on Literature.
 8.40 p.m.—Soprano Solos and Gramophone Selections.

JUAN-LES-PINS (France)

Radio LL. WL. 230 m. (1,304 kc); 0.25 kw.
 1.0 p.m.—Symphony Concert.
 9.0 p.m.—French Literary Programme.
 10.0 p.m.—Concert of Dance Music.
 10.30 p.m. (approx.)—Close Down.

LAHTI (Finland)

WL. 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw.
 11.0 a.m.—Exchange and Music.
 11.30 a.m.—Exchange and News.
 11.59 a.m.—Time and Weather.
 12.15 p.m.—Shipping Forecast.
 5.57 p.m.—Time, Weather, and News.
 6.15 p.m.—Programme for Children.
 7.0 p.m.—Orchestral Concert.
 8.45 p.m.—News in Finnish and Swedish.
 9.15 p.m.—Relay from a Restaurant.

LANGENBERG (Germany)

Westdeutscher Rundfunk. WL. 479.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc).
 Transmits at intervals from 10.15 a.m. to 10.0 p.m.—Programme from Cologne.
 7.20 p.m.—Spanish Language Lesson relayed from Münster.
 7.45 p.m.—Programme from Cologne.
 8.15 p.m.—Variety Programme from Dortmund. 1. Mandoline Orchestra—Country Dance (Ritter). 2. Songs to the Lute. 3. Grave and Humorous Selections (Löns).
 9.0 p.m.—Orchestral Selections from

Düsseldorf—Symphony in E minor, Op. 38 (Prof. A. Busch).
 10.0 p.m.—Variety Concert from Dortmund (cont.). 4. Songs to the Lute. 5. Humorous Selections (Löns). (a) A delightful Dog Story; (b) A cheaper Sunday. 6. Mandoline Orchestra—German Folk and Dance Melodies. 7. The Language of Crows (Löns). Followed by Programme from Cologne.
 12 midnight (approx.)—Close Down

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. WL. 366 m. (818 kc); 4 kw. Relayed by Dresden, on 275.2 m. (1,090 kc).
 Transmits at intervals from 10.0 a.m. to 10.0 p.m.—Talk on "Physics."
 7.30 p.m.—Talk: "The Flight to the North Pole," by E. Littmann.
 8.0 p.m.—Weather and Time.
 8.15 p.m.—"Ingeborg"—Comedy in Three Acts (Kurt Götz).
 10.5 p.m.—News and Sports Notes.
 10.30 p.m.—Silent Night.

MADRID (Spain)

Union Radio. (EAJ7). WL. 374 m. (802 kc); 1.5 kw.
 Transmits at intervals from 11.45 a.m. to 7.0 p.m.—Municipal Band Concert from the Parque del Retiro. Programme relayed by San Sebastian (EAJ8).
 10.0 p.m.—Exchange Quotations.
 10.5 p.m.—"Surprise" Programme.
 11.50 p.m. (approx.)—News.
 12 midnight.—Orchestral Concert, relayed from the "Alcazar."
 12.30 a.m. (Fri., approx.)—Close Down

MILAN (Italy)

Unione Radiofonica Italiana. WL. 549.3 m. (546 kc); 7 kw.
 Transmits at intervals from 12.15 p.m. to 7.47 p.m.—*English Language Lesson*.
 8.35 p.m.—Time, followed by Adrienne Lecouvreur—Opera (Cilea). Sports Notes and News in the Interval.
 11.45 p.m. (approx.)—Close Down.

MUNICH (Germany)

Deutsche Stunde in Bayern. WL. 536 m. (559 kc); 4 kw. Relayed by Augsburg on 566 m. (530 kc); Kaiserlautern, 204.1 m. (1,470 kc); and Nürnberg, 241.9 m. (1,240 kc).
 Transmits at intervals from 12.55 p.m. to 6.30 p.m.—Agricultural Talk.
 7.0 p.m.—Dance Music Programme.
 8.0 p.m.—*Concert*: 1. Das Mühlenglied. 2. Edward (an old Scottish Ballad). 3. The Nun—Choral Ballade. 4. Böser Markt. 5. Wohlundslud. 6. Odins Helritt. 7. Das Wiegenlied.
 10.5 p.m.—Announcements. News.
 10.25 p.m.—Orchestral Concert: 1. "Zampa"—Overture (Hérold). 2. Dreams of the Ocean (Gungl). 3. Slavonic Dances Nos. 7 and 8. 4. The Second Hungarian Rhapsody (Liszt).

NAPLES (Italy)

Unione Radiofonica Italiana (INA). WL. 333.3 m. (920 kc); 1.5 kw.
 Transmits at intervals from 2.0 p.m. to 8.40 p.m.—Time, News, Harbour Notes.
 8.50 p.m.—*Concert* of Light Music.
 10.55 p.m.—Programme announcements.
 11.0 p.m. (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. WL. 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 566 m. (530 kc); Porsgrund, 500 m. (600 kc); Fredrikstad, 435 m. (680 kc); Nittedden, 412 m. (728 kc); and Ryjukan, 448 m. (670 kc).
 5.30 p.m.—*Concert* by members of the Hamburg "Norag."
 6.55 p.m.—Shorthand Dictation.
 7.15 p.m.—News and German Lesson.
 8.0 p.m.—Talk: "Saxon Switzerland."
 8.30 p.m.—Tchaikovsky Concert.
 9.30 p.m.—Recitation by Mme. Voss.
 10.0 p.m.—Weather, News and Talk on Topical Events.
 10.30 p.m. (approx.)—Close Down.

PARIS (France)

Eiffel Tower (FL). WL. 2,650 m. (113 kc); 5 kw.
 8.56 a.m.—Time Signal on 32.5 m. 9.231 kc).
 10.26 a.m.—Time Signal on 2,650 m.
 6.45 p.m.—"Le Journal Parlé."
 Talks on "The Law." "Books to read." "New Things in Wireless" and "Cinema Notes," etc.

Programmes for Thursday.—(Cont.)

8.10 p.m.—Weather Forecast.
 8.30 p.m.—Concert: 1. "Aphrodite" Prelude to the Fourth Act (Erlanger). 2. Sonata for Violin (Mozart). 3. Songs (de Fay): (a) L'Attente; (b) Berceuse; (c) Dans la Forêt; (d) Aubade. 4. Trio for Violin, Cello and Piano-forte (Mendelssohn). 5. Kermaria (Erlanger). At 8.56 p.m. Time Signal on 32.5 m. (9,231 kc).
 9.30 p.m.—Educational Programme. Talks on "The Centenary of Schubert" and "Singing" etc.
 11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)
 Petit Parisien. WL 340.9 m. (880 kc); 0.5 kw.
 8.45 p.m.—Gramophone Selections, Talk, Announcements and News.
 9.0 p.m.—Concert. 1. Prelude and March from "Hérodiade" (Massenet). 2. Rhapsody on Airs of the Pays d'Oc. (Lacombe). 3. Symphony Orchestra: (a) First Part of the Scottish Symphony (Mendelssohn), (b) Trout Quintet (Schubert). 4. Spanish Serenade (Chaminade). 5. Selection from "Aida" (Verdi). 6. Finale from "La Reine Fiammette" (Leroux). News in the intervals.

PARIS (France)
 Radio-Paris (CFR). WL 1,750 m. (171 kc); 3 kw.
 Transmits at intervals from 7.30 a.m. 12.0 noon.—Protestant Address.
 12.30 p.m.—Orchestral Concert. Part 1. Selections from the Works of Verdi. 1. "La Traviata." 2. "Rigoletto." 3. "Othello." Part 2: Selections from the Works of Rachmaninoff. 1. Prelude. 2. Melodie. 3. Chanson georgienne. 4. Les Lilas. 5. Elégie. 6. Serenade.
 1.0 p.m.—Children's Programme, News.
 1.50 p.m.—Market Prices, Bourse.
 3.30 p.m.—Exchange Quotations.
 4.45 p.m.—Exchange and News.
 8.0 p.m.—Agricultural Report.
 8.25 p.m.—Talk in Esperanto.
 8.30 p.m.—Concert. 1. "Rembrandt"—Dramatic Selection (Joly and Dumure). 2. Melodies. 3. Chamber Music. News.

PITTSBURGH (U.S.A.)
 Westinghouse Electric (KDKA). WL 315.6 m. (950 kc); 50 kw. Relayed at intervals on 63 m. (4,762 kc); and 27 m. (11,111 kc).
 Transmits at intervals from 2.45 p.m. 11.15 p.m.—Symphony Orchestra, from the William Penn Hotel.
 11.55 p.m.—Baseball Announcements.
 12.0 midnight.—Telechron Time.
 1.0 a.m. (Fri.)—4.0 a.m. (approx.)—Programme from WJZ, New York.
 1.0 a.m.—"Retold Tales."
 1.30 a.m.—"Ampico" Programme.
 2.0 a.m.—"Maxwell" Programme.
 3.0 a.m.—"Michelin Tyre" Programme.
 3.30 a.m.—"Flit Soldiers' Show."
 4.0 a.m.—Baseball Scores, Weather, Telechron Time, and Close Down.

POSKIE (Poland)
 Polskie-Radio. WL 343 m. (874 kc); 1.5 kw.
 Transmits at intervals from 7.0 a.m. 7.10 p.m.—English Language Lesson.
 7.35 p.m.—Agricultural Talk.
 8.0 p.m.—Report on Finance.
 8.30 p.m.—Concert of Opera Selections. 1. Act 3 from "L'Evangeliste" (Kienzl). 2. Duet from "La Bohème" (Puccini). 3. Two Trios for Mezzo Soprano, Tenor and Baritone: (a) (Dargomyzsky). (b) Selection from the Works of Dmitrieff. 4. Two Duets: (a) Selection from the Works of Rubinstein, (b) Selection from the Works of Badia. 5. Selections from "Djamileh" (Bizet).
 10.0 p.m.—Time, News, Weather and Variety Selections.
 10.50 p.m. (approx.)—Close Down.

PRAGUE (Czechoslovakia)
 Stranice. WL 348.9 m. (860 kc); 5 kw.
 Transmits at intervals from 11.0 a.m. 5.50 p.m.—German Transmission.
 6.15 p.m.—Agricultural Report.
 6.25 p.m.—Talk for Workers.
 6.35 p.m.—French Language Lesson.
 7.15 p.m.—Dance Music Programme.
 8.0 p.m.—Symphony Concert.
 10.0 p.m.—Time, News, Orchestra.

ROME (Italy)
 Unione Radiofonica Italiana. WL 450 m. (666 kc); 3 kw.
 Transmits at intervals from 1.30 p.m. 8.30 p.m.—French Language Lesson.
 8.58 p.m.—Time, News, Exchange.
 9.15 p.m.—"Addio Giovinezza"—Operetta Selection (Pietri). In the Interval—Humorous Selection. Followed by Selection from "Acqua Cheta"—Operetta (Pietri).
 11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)
 General Electric Company (WGY). WL 379.5 m. (790 kc); 50 kw. Relayed by 2XAF on 31.4 m. (9,554 kc) from 11.0 p.m.
 Transmits at intervals from 11.45 a.m. 11.0 p.m.—Stock Reports. News.
 11.25 p.m.—Baseball Announcements.
 11.30 p.m.—Dinner Music Programme from the Hotel de Witt Clinton.
 12.25 a.m. (Fri.)—Baseball Scores.
 12.30 a.m.—Talk on "Trout Fishing."
 12.45 a.m.—Music from Studio.
 1.0 a.m.—"Dodge" Programme, followed by "Hoover Sentinels"—both Programmes from New York.
 2.0 a.m.—Musical Programme.
 2.30 a.m.—"Beechnut Historic Mohawk Valley Travelogue."
 3.0 a.m.—Halsey Stuart Presentation Programme from New York.
 3.30 a.m.—Time and Shea's Buffalo Studio Programme.
 4.0 a.m.—Dance Music Programme relayed from New York.
 4.30 a.m.—Organ Recital relayed from the Strand Theatre, Albany.
 5.0 a.m. (approx.)—Close Down.

STAMBOUL (Turkey)
 Radio-Stamboul. Société Anonyme Turque de Téléphonie sans fil. WL 1,180 m. (254 kc); 5 kw.
 Transmits at intervals from 4.30 p.m. 7.15 p.m.—Turkish Musical Programme. In the interval: Weather and Time.
 9.0 p.m.—Concert. 1. Katia (Gilbert). 2. Frasquita (Lehar). 3. Nuit de bal (O. Strauss).
 10.30 p.m.—News and Close Down.

STOCKHOLM (Sweden)
 Radiotjänst (SASA). WL 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1,380 m. (217 kc) Göteborg, 416 m. (721 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.8 m. (550 kc).

Transmits at intervals from 12.35 p.m. 6.30 p.m.—Service from the Studio.
 7.0 p.m.—Talk, followed by Play.
 7.45 p.m.—Concert: 1. Violin Solos: (a) Berceuse (Wilhelmi); (b) Solitude on the Mountains (Ole Bull); (c) Minuet (Mozart). 3. Bass Solos—Swedish Romances. 3. Soprano Solos—Swedish Folk Songs. 4. Violin Solos: (a) Meditation (Massenet); (b) Chanson and Pavane (Couperin-Kreisler); (c) Caprice viennois (Kreisler); (5) Soprano Solos—Swedish Folk Songs.
 8.45 p.m.—Talk on Literature.
 9.15 p.m.—News and Weather.
 9.40 p.m.—Cabaret Concert.
 10.15 p.m. (approx.)—Close Down.

STUTTGART (Germany)
 Süddeutscher Rundfunk. WL 379.7 m. (790 kc); 4 kw.
 Transmits at intervals from 12.30 p.m. 6.0 p.m.—Time and Weather Report.
 6.15 p.m.—Talk, "The Problem of Second Sight," by Max Moecke.
 6.45 p.m.—Talk for Doctors.
 7.15 p.m.—Talk on Chess Problems.
 7.45 p.m.—Ideas and Hints on Week-ends and Holidays, by K. Lange.
 8.0 p.m. (approx.)—Time and Weather.
 8.15 p.m.—Concert, "Picture Post Cards." 1. Before the Journey: (a) Overture, The Departure (d'Albert), (b) Postcard Greetings (Hoefert). 2. Picture Postcards: (a) From Petersburg (Rilke), (b) Trioka (Tchaikovsky). 3. (a) From Norway (Björnson), (b) The Holberg Suite (Grieg). 4. (a) The North Sea (Heine), (b) Prelude to "The Flying Dutchman" (Wagner). 5. (a) A Railway Station at night (Morgenstern), (b) From London (Behl). 6. (a) From Paris (Angermayer) (b) Paris Life (Offenbach). 7. (a) From Madrid (Musset), (b) Andalusian Dance (de Falla). 8. (a) From Marseille (Mehring), (b) An Evening in a South European Port (Schramm). 9. (a) In the Train (Ehrenbaum-Degele), (b) From Rome (Le Fort). 10. From Venice (Nietzsche), (b) Venetian Gondola Song (Mendelssohn). 11. (a) In the Slow Train (Schüler), (b) From Switzerland (Leuthold), (c) From "William Tell" (Rossini). 12. (a) From Prague (Meller), (b) Légende

(Dvorák). 13. (a) Froza Vienna (Daniger), (b) Wienerblut (Strauss) News and Silent Night.

TOULOUSE (France)
 Radiophonie du Midi. WL 389.6 m. (770 kc); 3 kw.
 Transmits at intervals from 10.15 a.m. 8.0 p.m.—Time, News and Bourse.
 8.30 p.m.—Concert of Spanish Ballet Music.
 9.0 p.m.—Gala Concert. 1. "Poet and Peasant"—Overture (Suppé). 2. Don Cèzar de Bazan—Berceuse (Massenet). 3. Estudiantina—Waltz (Waldeufel). 4. Scènes alsaciennes (Saint-Saëns). 5. Selection from "Miss Helyett" (Audran). 6. "Canzone" from "The Marriage of Figaro" (Mozart). 7. Babillage (Gillet). 8. Hindu Pictures (St. Hauren). 9. Selection from "Lakmé" (Delibes). 10. Dia di Fierla—March (Leduc). 11.0 p.m.—"North African Journal" Report and Close Down.

VIENNA (Austria)
 Radio Wien. WL 577 m. and 517.2 m. (520 and 580 kc); 1.5 and 5 kw. Relayed by Imusbrück on 294.1 m. (1,020 kc) and Klagenfurt on 272.7 m. (1,100 kc).
 Transmits at intervals from 11.0 a.m. 6.45 p.m.—Esperanto Talk.
 7.0 p.m.—Talk, "The Evolution of Wireless and Wireless Telephony."
 7.30 p.m.—Advanced English Lesson.
 8.0 p.m.—Programme announcements
 8.5 p.m.—Programme from the Works of Rosegger.
 9.0 p.m.—Relay from the Josefsplatz

WARSAW (Poland)
 Polskie Radio. WL 1,111.1 m. (270 kc); 10 kw.
 Transmits at intervals from 12.0 noon. 8.15 p.m.—Concert. 1. Second Quartet for Strings, Op. 6 (Maliszewski). 2. Songs. 3. Violin Solo. 4. Songs: (a) Amelia's Aria from Act IV. of "The Masked Ball" (Verdi), (b) Air from "Le Cid" (Massenet). 5. Violin Solo. 6. Songs: (a) Air from "Madame Butterfly" (Puccini), (b) Bergerette of the 18th Century. In the interval: News in French.
 10.30 p.m.—Dance Music Programme.
 11.30 p.m. (approx.)—Close Down.

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PROGRAMMES FOR FRIDAY (June 15)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH-SUMMER TIME

BARCELONA (Spain)
Radio Barcelona. (EAJJ). WL. 344.8 m. (870 kc); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange-Closing Prices. 6.10 p.m.—Programme for Women, "Fashions" and "Useful Hints." 6.30 p.m.—Sextet Selections. 1. Selection from "La Marsellesa" (Caballero). 2. The Gipsy's Caravan—Charleston (Daniel-Galvez). 3. La chula de cabestros—Schottische (Gordo). 4. Mysterieuse-Waltz (Lamaire). 8.30 p.m.—Weekly Music Lesson. 9.0 p.m.—Exchange and News. 9.5 p.m.—Orchestral Selection—La fleur de pomme—March (Siede). 9.10 p.m.—Tenor Song Recital. 9.45 p.m.—Orchestral Selection—Danse des Libellules (Lehar). 10.0 p.m.—Chimes and Weather. 10.5 p.m.—Concert by the Mandoline Orchestra. 1. Largo (Handel). 2. Minuet from Sonata 11 (Beethoven). 3. Moment musical (Schubert). 4. Nocturne in E flat (Ferrari). 5. Fiesta en la montaña (Blanes). 6. Gavotte (Bachmann). 7. Fire Dance from "El amor brujo" (Fallá). 11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)
Kringkastingskap. WL. 369.0 m. (811 kc); 1.5 kw. Transmits at intervals from 11.15 a.m. 8.0 p.m.—Grieg Concert. 8.30 p.m.—Talk on "Rowing." 9.0 p.m.—Soprano Solos (Grieg). 9.30 p.m.—Grieg-Pianoforte Recital. 10.0 p.m.—Weather, News and Time. 10.15 p.m. (approx.)—Close Down.

BERLIN (Germany)
Königsruherhaus. WL. 1,250 m. (240 kc); 35 kw. Transmits at intervals from 12 noon. 4.0 p.m.—Talk, "The Life of a Concrete Worker." 4.30 p.m.—Talk "Young Germany." 5.0 p.m.—Programme from Leipzig. 6.0 p.m.—Talk by Dr. Weisbart. 6.30 p.m.—Advanced English Lesson. 6.55 p.m.—Talk on Electro-Technology. 7.0 p.m.—Programme from Voxhaus.

BERLIN (Germany)
Voxhaus. WL. 484.6 m. (619 kc); 4 kw. Transmits at intervals from 10.10 a.m. 7.0 p.m.—Talk on the following transmission. 7.30 p.m.—"Fidelio," Opera in Two Acts (Beethoven). Followed by News and Weather.

BERNE (Switzerland)
Radio-Berne. WL. 411 m. (730 kc); 1.5 kw. Transmits at intervals from 1.0 p.m. 8.5 p.m.—Time and Weather. 8.5 p.m.—Talk on "Swimming." 8.30 p.m.—The Kursaal Orchestra. 9.0 p.m.—Recital of Songs. 9.15 p.m.—The Kursaal Orchestra. News and Weather in the Interval. 10.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)
Schlesische Funkstunde. WL. 322.0 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (909 kc). Transmits at intervals from 11.15 a.m. 6.15 p.m.—Reading of a Story. 6.30 p.m.—Talk by Mr. C. Gründel. 7.25 p.m.—Theatre Programme. 8.30 p.m.—Symphony Concert. 1. Symphony in A major, No. 201 (Mozart). 2. Symphony No. 3, Op. 32 (Mozart). 3. Preceded by Introductory Notes.

BRÜNN (Czecho-Slovakia)
Komarov. WL. 441.2 m. (680 kc); 3 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Time and German Transmission, followed by Talk. 7.0 p.m.—Orchestral Concert. 8.0 p.m.—Russian Programme. 1. Selections from "Ludmila" (Glika). 2. Suite (Moussorgsky). 3. Legend (Tchaikovsky). 4. (a) The Brook (Arhangelsky), (b) March (Arhangelsky). 5. International Suite (Tchaikovsky). (a) Polish Dance, (b) French Romance, (c) Czech Dance, (d) Italian Song, (e) Russian Song, (f) Tyrolian Dance, (g) Hungarian March, (h) Neapolitan Song. 6. In Turkish Slavery. (Miscinsky). 7. The Nightingale (Miscinsky). 8. Mil-

tary Song (Miscinsky). 9. Trot de Cavalerie (Rubinstein). 9.0 p.m.—Exhibition Programme. 10.20 p.m.—Orchestral Selections.

BRUSSELS (Belgium)
Radio Belgique. WL. 508.5 m. (590 kc); 1.5 kw. 5.0 p.m.—Dance Music from the St. Sauveur Palais de danse. 6.0 p.m.—Talk, "History of Music." 6.15 p.m.—Flemish Literature. 7.30 p.m.—Chamber Music. 1. Trio (Schumann). 2. Sonata for Cello (Buononcini). 3. Trio (Saint-Saens). 7.30 p.m.—La Radio Chronique. 8.15 p.m.—Concert. 1. Romantic Overture (Keler-Bela). 2. Selection from "Hérodiade" (Massenet). 3. Narcissus (Mevin). 4. In a Persian Garden (Ketalbey). 8.45 p.m.—Gramophone Selections, followed by Topical Talk. 9.5 p.m.—Concert. 1. Morning, Noon and Night (Suppé). 2. M. Goossens (Flemish Entertainer). 3. Valse des brunes (Ganne). 4. Talk on "Flemish Music." 5. Intermezzo (Lohr). 6. Humorous Selection by M. Goossens. 7. Cortège tartare (Scassola). 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)
Magyar Telefon Hírdome es Radio R.T. WL. 557.1 m. (538 kc); 25 kw. Transmits at intervals from 9.0 a.m. 6.20 p.m.—Talk in the German Language. 7.30 p.m.—Reading by H. A. Bosin from his own Works. 8.0 p.m.—Concert by the Schmidt-Hodossy-Bergmann Trio. 9.30 p.m.—Time, News and Tzigané Music Programme. 12.0 midnight (approx.)—Close Down.

COLOGNE (Germany)
Westdeutscher Rundfunk. WL. 283 m. (1,060 kc); 4 kw. Transmits at intervals from 10.15 a.m. 1.5 p.m.—Concert. 1. Heil Europa—March (Blon). 2. "Antigone"—Overture (Buisson). 3. Oboe Selection—Lament (Ropartz). 4. Bass Solos (Strauss): (a) In der Fremde; (b) Frühlingnacht; (c) Frühlingfahrt; 5. Goldregen—Waltz (Waldteufel). 6. Potpourri from "Der Obersteiger" (Zeller). 7. Bass Solos (Brahms): (a) Feldeinsamkeit; (b) Ständchen; (c) Minnelied. 8. Regenogon—Intermezzo (Wenrieh). 4.10 p.m.—Relay from Elberfeld (see Langenberg). 4.30 p.m.—Young People's Programme. 5.15—7.15 p.m.—See Langenberg Station. 7.15 p.m.—English Conversation. 7.45 p.m.—See Langenberg Station. 8.5 p.m.—Report on the Olympic Football Match at Amsterdam. 8.15 p.m.—Concert. 1. Mazeppa—Symphonic Poem (Liszt). 2. Cello Solo—Concerto (Lalo). 3. Don Juan—Symphonic Poem (Strauss). 4. Variations and Gigue on the Theme of Handel's "The Harmonious Blacksmith" (Schumann). Followed by Football Report, News, Sports Notes, and Concert from Düsseldorf. 12.0 midnight (approx.)—Close Down

COPENHAGEN (Denmark)
Copenhagen Radio. WL. 337.4 m. (889 kc); 1 kw. Relayed by Kalundborg on 1,153.8 m. (260 kc). Transmits at intervals from 7.30 a.m. 6.50 p.m.—Weather, News and Exchange. 7.15 p.m.—Time and Talk on "The Descent of Man," by H. Brønsted. 7.35 p.m.—Waldemar's Day Celebration. 9.30 p.m.—Orchestra Selections from the "Tivoli." 10.30 p.m. (approx.)—Close Down.

CORK (Ireland)
Cork Broadcasting Station (6CK). WL. 400 m. (750 kc); 1.5 kw. 2.30 p.m.—Weather, Stock Market Report and Gramophone Records. 6.15 p.m.—Programme from Dublin.

CRACOW (Poland)
Polskie-Radio. WL. 567 m. (529 kc); 1.5 kw. Transmits at intervals from 12 noon] 5.45 p.m.—Programme from Warsaw. 7.5 p.m.—Agricultural Report. 7.15 p.m.—Variety Selections. 7.35 p.m.—Review of Wireless. 8.0 p.m.—Fanfare and Sports Notes. 8.15 p.m.—Programme from Warsaw.

DUBLIN (Ireland)
Dublin Broadcasting Station (2RN); WL. 319.1 m. (940 kc); 1.5 kw. Transmits at intervals from 1.30 p.m. 6.15 p.m.—Children's Programme. 7.0 p.m.—Gramophone Selections. 7.20 p.m.—News, followed by Gardening Talk by G. O. Sheppard. 7.45 p.m.—Italian Language Lesson. 8.0 p.m.—Chamber Music Programme. 8.25 p.m.—Violet M. Wolfe (Soprano). 8.35 p.m.—The Station Orchestra in a Selection "From Many Lands." 9.15 p.m.—William Lindsay (Bass). 9.30 p.m.—"A Slip Carriage," Sketch by Gertrude Quinn and Company. 10.0 p.m.—Kitty Payne (Pianist). 10.15 p.m.—The Station Orchestra. 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany)
Süddeutscher Rundfunk. WL. 429 m. (699 kc); 4 kw. Relayed by Cassel on 252.1 m. (1,190 kc). Transmits at intervals from 1.0 p.m. 6.15 p.m.—Wireless Notes and other announcements. 6.30 p.m.—Talk for gardeners. 6.45 p.m.—Talk, "Salesmanship." 7.15 p.m.—Talk by Dr. F. Neumark. 7.45 p.m.—Twenty minutes of Science and Technology. 8.5 p.m.—The week's Films. 8.15 p.m.—Variety Concert Programme, followed by Late Concert from Cassel.

HAMBURG (Germany)
Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297 m. (1,010 kc); and Kiel, 255 m. (1,176 kc). Transmits at intervals from 5.45 a.m. 6.0 p.m.—Orchestral Selections. 6.30 p.m.—Königswusterhausen Relay. 7.0 p.m.—Orchestral Selections. 7.25 p.m. (Hamburg only)—Talk for Tourists. Weather. 8.0 p.m.—"Gudrun"—Play in Five Acts (Bruno Peyn). 10.0 p.m. (approx.)—Topical Talk and News Bulletin. 10.30 p.m. (approx.) (Hamburg and Kiel).—Restaurant Ostermann Concert Programme.

HILVERSUM (Holland)
Algemeene Vereniging Radio-Omroep. WL. 1,069 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Lunchtime. Trio Music. 5.40 p.m.—The Rentmeester Trio. 6.55 p.m.—Weekly Book Review. 7.25 p.m.—Police Information. 7.40 p.m.—Chamber Music. 1. Pièces en concert. 2. Harp Solos, (a) Rigaudon, (b) Minuet (Rameau), (c) Air varié (Haydn). 3. Sonata in E flat major (Bach) for Flute and Harp. 4. Trio Selections, (a) Sarabande (Gaubert), (b) Impromptu, (c) Sonata (Debussy). 8.55 p.m.—Orchestral Concert. 1. Radio Holland India—March (Opohorst). 2. "Indra"—Overture (Lincke). 3. Fürstentmünd (Lehar). 4. Selection from "Martha" (Flotow). 5. Dance of the Derivish (Bendix). 6. (a) Simple aveu (Thomé), (b) Si vous l'aviez compris (Denza). 7. Selection from "The Circus Princess" (Kalmán). 8. Beatrice—Tango (Freudenthal). 9. Radezky March (Joh. Strauss). Weather and News in the interval. 10.40 p.m. (approx.)—Close Down.

HUIZEN (Holland)
WL. 341 m. (879 kc); 4 kw. (until 6.40 p.m.). Transmits from 6.40 p.m. on 1,870 m. (160 kc). 1.10 p.m.—Concert of Trio Music. 4.40 p.m.—Gramophone Selections. 5.40 p.m.—Soprano Song Recital and Programme of Recitations. 7.40 p.m.—Gregorian Lesson. 8.10 p.m. (approx.)—Close Down.

JUAN-LES-PINS (France)
Radio LL. WL. 230 m. (1,304 kc); 9.25 kw. 1.0 p.m.—Symphony Concert. 9.0 p.m.—News and Orchestral Music. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. WL. 303 m. (990 kc); 4 kw. Relayed by Danzig on 272.7 m. (1,100 kc). Transmits at intervals from 6.15 a.m. 6.15 p.m.—Talk on "The Grading and Pricing of Milk."

6.40 p.m.—Talk, "The Care of our Children's Teeth." 7.10 p.m.—Esperanto Instruction. 7.30 p.m.—Elementary Spanish Lesson. 8.10 p.m.—Melodrama Selections. 9.15 p.m.—Soloist Concert. 1. Sonata for Violin (Porpora). 2. Violid Concerto (Nardini). 3. Soprano Solo—Aria with Violin Obligato from "Zaide" (Mozart). 4. Sonata for Viola. 5. Two Swedish Folk-Songs. 6. Violin Solos—Swedish Folk Dances. 10.15 p.m.—Weather, News and Sports. 10.30 p.m.—Orchestral Music, followed by Dance Music Programme.

KOVNO (Lithuania)
Radio Kaunas. WL. 2,000 m. (150 kc); 15 kw. Transmits at intervals from 12.0 noon. 8.30 p.m.—Time, Weather and News. 9.0 p.m.—Concert of Clarinet and Flute Music. 1. Concerto (Weber). 2. Spanish Concerto (Popper). 3. Aria (Bergsen). 4. Russian Ballad (Popper). 5. Turkish March, from "The Ruins of Athens" (Beethoven). 10.15 p.m.—Concert of Variety Items.

LAHTI (Finland)
WL. 1522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw. 11.0 a.m.—Exchange and News. 8.30 p.m.—Exchange and News. 11.59 a.m.—Time and Weather. 12.15 p.m.—Shipping Forecast. 5.57 p.m.—Time, Weather and News. 6.15 p.m.—Children's Programme. 7.0 p.m.—Concert. 1. Wedding March (Mendelssohn). 2. Nocturne (Mendelssohn). 3. Berceuse-Réverie (Sgambati). 4. Russian Dance (Dvorák). 5. Songs. 6. Peer Gynt Suite (Grieg). 7. Hungarian Weisen (Laszlo). 8. Hungarian Dance (Brahms). Hungarian Melodies (Keler-Bela). 8.45 p.m.—News in Finnish and Swedish. 9.15 p.m.—Relay from a Restaurant.

LANGENBERG (Germany)
Westdeutscher Rundfunk. WL. 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. 1.5 p.m.—Programme from Cologne. 4.10 p.m.—Anzenbrube Reading. Relayed from Elberfeld. 4.30 p.m.—Programme from Cologne. 5.15 p.m.—Programme from Cologne. Dortmund. Fables and Parables of da Vinci, Luther, Gellert, Strindberg, Fulda, etc. 5.40 p.m.—Talk from Düsseldorf. "Present-day Political Problems in the Rhenish-Westphalian District." 6.0 p.m.—Concert from Münster. Selections from the last Works of Franz Schubert. 1. Liebesbotschaft. 2. Kriegers Ahnung. 3. Frühlingsschneehuhn. 4. Ständchen. 5. Aufenthalt. 6. In der Ferne. 7. Abschied. 8. Der Atlas. 9. Ihr Bild. 10. Das Fischer Mädchen. 11. Die Stadt. 12. Am Meer. 13. Der Doppelgänger. 14. Die Taubenpost. 7.15 p.m.—Programme from Cologne. 7.45 p.m.—Legal Talk from Münster. 8.5 p.m.—Programme from Cologne, followed by Concert from the Hofgarten-Rheinterrasse, Düsseldorf 12 midnight (approx.)—Close Down.

LEIPZIG (Germany)
Mitteldeutscher Rundfunk. WL. 366 m. (818 kc); 4 kw. Relayed by Dresden on 275.2 m. (1,090 kc). Transmits at intervals from 10.10 a.m. 4.30 p.m.—Concert. 1. Passacaglia for Violin and Viola (Halvorsen). 2. Larghetto from the Double Concerto for Violin (Bach). 3. La Folia (Corelli-Kreisler). 4. Soirée de Vienne (Schubert). 5. Selections for Cello and Pianoforte, (a) Adagio in A major (Respighi), (b) Allegro appassionato (Saint-Saens). 6. Hexentanz (Paganini). 6.5 p.m.—Review of New Books. 6.30 p.m.—Programme relayed from Königsruherhaus. 7.30 p.m.—Talk, "Poison Gases." 8.0 p.m.—Weather and Time. 8.15 p.m.—"Ernani"—Opera (Verdi). 10.30 p.m.—News and Sports Notes. 10.45 p.m.—Dance Music Programme and Concert of Light Music. 12 midnight (approx.)—Close Down.

MADRID (Spain)
Union Radio (EAJ7). WL. 374 m. (802 kc); 1.5 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Chamber Music Concert. Quartet in E flat major, Op. 127 (Beethoven). 2. Soprano Solos, (a) The Swan, (b) Solveig's Song (Grieg). 3. Trio in B flat major, No. 6 (Mozart). 4. Hungarian Songs for Soprano. 10.0 p.m.—Chimes and Exchange. 10.5 p.m.—Orchestral Concert relayed from the Hotel Nacional. 11.50 p.m. (approx.)—News. 12 midnight—Dance Music Programme from the Alcazar. 12.30 a.m. (Sat. approx.)—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. WL. 549.3 m. (546 kc); 7 kw. Transmits at intervals from 12.15 p.m. 7.45 p.m.—German Language Lesson. 8.35 p.m.—Time and Medical Talk. 8.45 p.m.—Symphony Concert. 1. "Iphigenia in Aulis" (Glück). 2. "Children's Corner" (Debussy). 3. Selections (Martucci). 4. Umbrian Rhapsody (Parelli). 5. "Tancred" (Rossini). In the Interval: Literary Talk. 10.55 p.m.—News and Close Down.

MUNICH (Germany)
Deutsche Stunde in Bayern. WL. 536 m. (559 kc); 4 kw. Relayed by Augsburg on 566 m. (530 kc); Kaiserlautern, 204.1 m. (1,470 kc); and Nürnberg, 241.9 m. (1,240 kc). Transmits at intervals from 12.55 p.m. 6.15 p.m.—Richard Würz Recital. 7.0 p.m.—Talk, "Rambling and How to Read a Route Map." 7.30 p.m.—Talk, "Film Sociology." 8.5 p.m.—Talk on "Richard Strauss." 8.35 p.m.—Richard Strauss Concert. 1. "Guntram"—Prelude. 2. Selections from "Bürger als Edelmann." 3. Recitative and Aria of Zerinetta from "Ariadne auf Naxos." 4. Selection from "Bürger als Edelmann." 5. Schlusszene— for Soprano and Orchestra, from "Salome." 6. Don Juan—Symphonic Poem. 10.5 p.m.—Sports. Review of the Week, and Wireless Notes.

NAPLES (Italy)
Unione Radiofonica Italiana (INA). WL. 333.3 m. (990 kc); 1.5 kw. Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time, News, Harbour Notes. 8.50 p.m.—"Hoffman"—Opera (Lacetti). 10.55 p.m.—Programme announcements. 11.0 p.m. (approx.)—Close Down.

OSLO (Norway)
Kringkastingselskapet. WL. 461.5 m. (750 kc); 1.5 kw. Relayed by Hamar, 566 m. (530 kc); Porsgrund, 500 m. (600 kc); Fredrikstad, 435 m. (680 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc). 5.40 p.m.—Orchestral Concert. 6.40 p.m.—French Language Lesson. 7.15 p.m.—News and English Lesson. 8.0 p.m.—Sacred Concert Programme. 9.0 p.m.—Talk by M. Peter Hofstad. 9.30 p.m.—"A Night in Raskilde"—Farce (H. C. Andersen). 10.0 p.m.—Weather, News and Talk on "Topical Events." 10.30 p.m. (approx.)—Close Down.

PARIS (France)
Eiffel Tower (FL). WL. 2,650 m. (113 kc); 5 kw. 8.56 a.m.—Time Signal on 32.5 m. (9,231 kc). 10.26 a.m.—Time Signal on 2,650 m. 6.45 p.m.—"Le Journal Paris" Talks, "The Law" and "Science." 8.10 p.m.—Weather Forecast. 8.30 p.m.—Concert. 1. Prelude from the Toccata for Pianoforte (Debussy). 2. Songs: (a) Les rossignols chantaient sur le Tombeau d'Orphée (d'Arquières), (b) Le soldat basque (d'Arquières), (c) Son nom, (d) Après (d'Arquières), (e) Les Caravans (Berneheim), (f) Three Vases (Nerini), (g) Valse céleste, (h) Valse-tendre, (i) Valse folle. 5. Harp, Sextet Selections, (a) Les Trois rubans, (b) Bretagne (Duhamel), (c) M'y allant promener (Comté). 6. Popular Songs of the Landes, (a) Lou bouqueton, (b) Au Brat de Larroque, (c) Dégat Jannefon. 7. Hexentanz (MacDowell). 8. Two Songs of the Swiss Romand (Dalcroze), (a) O,

Programmes for Friday.—(Cont.)

Lune, jolie lune, (b) L'oiselet. At 8.56 p.m., Time Signal on 32.5 m. (9,231 kc).
 9.30 p.m.—Educational Programme. Talks, "Great Modern Writers," "Greek without Tears," etc.
 11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)

Petit Parisien. WL. 340.9 m. (880 kc); 0.5 kw.
 8.0 p.m.—Dance Music Programme.

PARIS (France)

Radio-Paris (CFR). WL. 1,750 m. (171 kc); 3 kw.
 Transmits at intervals from 7.30 a.m.
 12.30 p.m.—Orchestral Concert. 1. "The Italian in Algiers"—Overture (Rossini). 2. Valse des fleurs (Tchaikovsky). 3. Castilla (Boccherini). 4. Minuet (Hahn). (b) Torna a sorriento (De Curtis). 6. Berceuse—Violin Solo (Fauré). 7. Rigaudon de Dardanus (Rameau). 8. Sicilienne (Pergolesi). 9. First and Third Movements from the First Symphony (Beethoven). 10. Chanson triste—Cello Solo (Pillois). 11. Chanson du soir (Schumann). 12. Moment musical (Schubert). 13. La Truite (Schubert). News. 1.50 p.m.—Market Prices. Bourse. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Concert. 1. "The Mute of Portici"—Overture (Auber). 2. Sonata for Violin (Schubert). 3. Kosisskova (Akimenko). 4. Pianoforte Solos: (a) Romance (Moreau), (b) Après l'ondée (Pesse). 5. Après la tempête (Bruneau). 6. Cello Solos, (a) Chant slave (Sachs), (b) Bagatelle (Kulmann). 7. Monsieur de Pourceaugnac (Bastide). 4.45 p.m.—Exchange and News. 8.0 p.m.—Agricultural Report. 8.15 p.m.—Exchange and News. 8.30 p.m.—Concert. 1. "Tannhäuser"—Opera Selection (Wagner). 2. (a) Overture espagnole, (b) Fantasia for Pianoforte and Orchestra, (c) Conte d'Avril (Widor). News.

POSEN (Poland)
 Polskie-Radio. WL. 343 m. (874 kc); 1.5 kw.
 Transmits at intervals from 1.0 p.m.
 7.30 p.m.—Talk, "The Mineral Wealth of Posen," Dr. Swinareka. 7.55 p.m.—Report on Finance. 8.15 p.m.—Symphony Concert by the "Philharmonie de Varsovie."
 10.0 p.m.—Time, News, Weather and Variety Selections.
 10.50 p.m.—Dance Music Programme from the Wielkopolanka Café.
 12 midnight (approx.)—Close Down.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw.

Relays at intervals on 63 m. (4,762 kc), and 27 m. (11,111 kc).
 Transmits at intervals from 2.45 p.m.
 11.15 p.m.—Symphony Orchestra, from the William Penn Hotel.
 11.30 p.m.—Children's Programme relayed from WJZ, New York.
 12.0 midnight.—Telechron Time and Baseball Announcements.
 12.15 a.m. (Sat.)—Week-end Tours (A.A.A.), with probable weather conditions to be encountered.
 12.30—3.0 a.m. (approx.)—Programme from WJZ, New York.
 12.30 a.m.—Dixie Circus. News.
 1.0 a.m.—Godfrey Ludlow (Violin).
 1.30 a.m.—White Rock Concert Party.
 2.0 a.m.—"Wrigley Review." Time.
 3.0 a.m.—"Automatic Agitators."
 4.0 a.m.—Telechron Time, Weather, Baseball Scores and Close Sown.

PRAGUE (Czechoslovakia)
 Strasnice. WL. 348.9 m. (860 kc); 5 kw.
 Transmits at intervals from 11.0 a.m.
 5.50 p.m.—German Transmission.
 6.15 p.m.—Agricultural Report.
 6.25 p.m.—Talk for Workers.
 6.35 p.m.—Czech-German Conversation.
 7.15 p.m.—Orchestral Selections.
 8.0 p.m.—Weather and News, followed by Popular Evening.
 9.30 p.m.—Concert. 1. Appassionata (Mascagni). 2. Selections from "Andrea Chenier" (Giordano). 3. Selections from "Samson and Delilah" (Saint-Saëns). 4. Selection from "Aida" (Verdi).
 10.0 p.m.—Time and News, followed by programme from Brünn.

ROME (Italy)

Unione Radiofonica Italiana. WL. 450 m. (666 kc); 3 kw.
 Transmits at intervals from 1.30 p.m.
 8.30 p.m.—English Language Lesson.
 8.58 p.m.—Time, News, Exchange.
 9.15 p.m.—Instrumental and Choral Concert. 1. "Les petits riens"—Ballet Music (Mozart). 2. Il ritratto—Madrigale for Choir and Soloists (Palestrina). 3. The Nymph and the Shepherd (Vecchi). 4. Il bell'umore (Gastoldi). 5. Batti, martello (Thermignon). 6. Adagio and Minuet from the Second Symphony for Viola (Ariosti). 7. "Oberon"—Overture (Weber). 8. Hymn to the Night (Beethoven). 9. The Song of the Hen (Fabrianese). 10. Echi (d'Abruzzo). 11. Rane e grille—Scherzo (Casimiri). 12. Review of Books. 13. Cantabile e allegro assai (Tartini). 14. The Bohemians (Schumann). 15. "I Promessi Sposi" (Ponchielli). 16. Piccoli eroi (Manente). 17. (a) Canzone del villaggio, (b) Quando la mamma dorme (Allegri). 18. Senza l'amore (Anzelmo). 19. Er cucuzaro (Zuccoli). 20. La giava degli automi-Soprano Solo (Montanesano). 21. Corrida (Ferri). 22. Li Femmene (Cinque). 23. Il figlio Dello Sceicco (Travisi). 24. "Wiener Blut"—Waltz (Strauss).
 11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw.
 Relayed by 2XAD on 21.96 m. (13,661 kc) from 11.0 p.m.
 Transmits at intervals from 11.45 a.m.
 11.0 p.m.—"Mutual Savings Hour." Programme from New York.
 12.0 midnight—Exchange and News.
 12.20 a.m. (Sat.)—Baseball Scores.
 12.25 a.m.—Talk on Health.
 12.30 a.m.—"The WGY Players."
 1.0 a.m.—"Fro-Joy" Programme. Rose Mountain (Contralto).
 2.0 a.m.—"The Anglo-Persians." Programme from New York.
 2.30 a.m.—"Cathedral Echoes," from Memorial Chapel, Union College.
 3.0 a.m.—"Palmolive Hour." Programme relayed from New York.
 4.0 a.m. (approx.)—Time and Close Down.

STAMBOUL (Turkey)

Radio-Stamboul. Société Anonyme Turque de Téléphonie sans fil. WL. 1180 m. (254 kc); 5 kw.
 Transmits at intervals from 4.30 p.m.
 7.30 p.m.—Turkish Musical Programme. In the Interval, Weather and Time.
 9.0 p.m.—Concert. 1. "Genoveva"—Overture (Schumann). 2. Selection from "Faust" (Gounod). 3. Hungarian Rhapsody (Popper). 4. La Fleur (Dunkles). 5. Farantelle (Popper). 6. March from "The Prophet" (Meyerbeer).

STOCKHOLM (Sweden)

Radiotjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1,380 m. (217 kc); Göteborg, 416 m. (721 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.8 m. (550 kc).
 Transmits at intervals from 12.35 p.m.
 6.30 p.m.—Programme for Children.
 7.0 p.m.—Gramophone Selections.
 7.15 p.m.—Talk on Furniture.
 7.45 p.m.—Concert. 1. "Turandot"—Overture (Weber). 2. Scènes Alsaciennes—Suite (Massenet). 3. Tenor Solos—Prize Song from "The Mastersingers" (Wagner) and Spring Night from "The Valkyrie" (Wagner). 4. (a) Albumblatt (Wagner), (b) Entr'acte from "Carmen" (Bizet), (c) Hungarian Dance (Brahms). 5. Tenor Solos, (a) Liebesfeier (Weingartner), (b) Morgen (Strauss), (c) Heimliche Aufforderung (R. Strauss). 6. Selection from "Mademoiselle Nitouche" (Hervé).
 9.0 p.m.—Agricultural Talk.
 9.15 p.m.—News and Weather.
 9.40 p.m.—Talk for Housewives.
 10.0 p.m. (approx.)—Close Down.

STUTTGART (Germany)

Süddeutscher Rundfunk. WL. 379.7 m. (790 kc); 4 kw.
 Transmits at intervals from 12.30 p.m.
 6.0 p.m.—Time, Weather and Agricultural Report.
 6.15 p.m.—Legal Talk by J. Langfritz.
 6.45 p.m.—Talk, "Man and Animals."
 7.15 p.m.—Esperanto Language Lesson.
 7.45 p.m.—Announcements in Esperanto. Time and Weather.

8.15 p.m.—Programme of German Poetry and Prose of the Past Hundred Years. News, followed by Choral Concert from Mannheim.

TOULOUSE (France)

Radiophonie du Midi. WL. 389.6 m. (770 kc); 3 kw.
 Transmits at intervals from 10.15 a.m.
 8.0 p.m.—Time, News and Bourse.
 8.30 p.m.—Concert of Arias from the Works of Gounod. 1. Ave Maria. 2. Serenade. 3. Aimons-nous. 4. "Inspirez-Moi" from "The Queen of Sheba." 5. "Salut, demeure chaste et pure" from "Faust." 6. Cavatina from "Romeo and Juliet." 7. "Ah! si je redevenais belle," from "Phlémon and Baucis."
 9.0 p.m.—Programme of Waltzes.
 10.15 p.m.—"North African Journal" Report and Close Down.

VIENNA (Austria)

Radio Wien. WL. 577 and 517.2 m. (520 and 580 kc); 1.5 and 5 kw.
 Relayed by Innsbruck on 294.1 m. (1,020 kc), and Klagenfurt on 272.7 m. (1,100 kc).
 Transmits at intervals from 11.0 a.m.
 6.30 p.m.—Talk, "Artificial Silk."
 7.0 p.m.—Elementary Italian Lesson.
 7.30 p.m.—Public Health Talk.
 8.5 p.m.—English Literature Lesson.
 8.30 p.m.—"Auf der Brücke"—Play (Felix Salten), followed by Programme of Music from French Operetta, and Dance Selections.

WARSAW (Poland)

Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw.
 Transmits at intervals from 12 noon.
 7.55 p.m.—Talk on "Music."
 8.15 p.m.—Wagner Concert by the "Dolina Szwajcarska." 1. "The Flying Dutchman"—Overture. 2. Choral Selection from "The Flying Dutchman." 3. "Good Friday Spell" from "Parsifal." 4. Entry of the Gods into Valhalla. 5. Songs. 6. Träume. 6. Forest Murmurs. 8. The Ride of the Valkyrie. 9. The Death of Iseult. 10. "Tannhäuser"—Overture. In the interval, News in French.
 10.0 p.m.—Time, Weather and News.
 10.30 p.m. (approx.)—Close Down.

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PROGRAMMES FOR SATURDAY

(June 16)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain)

Radio Barcelona (EAJ). WL 344.8 m. (870 kc); 1.5 kw. Transmits at intervals from 11.0 a.m. to 10.15 p.m.—*Sextet Selections*. 1. Arrogancia española—Two-Step Selection (Luna-Brú). 2. Return—Sardana (Sancho Marraco). 4. Heimlich Tanz—Gavotte (Lincke). 5. Selection from "Manon" (Massenet). 8.30 p.m.—French Language Lesson. 9.0 p.m.—Exchange and News. 9.5 p.m.—Orchestral Concert. 1. "Pique Dame"—Overture (Suppe). 2. Cornflowers and Poppies—Waltz (Waldteufel). 3. Rokoko—Minuet (Haydn). 4. Adagio and Carillon from the First Suite of "L'Arlesienne" (Bizet). 5. First Spring Flowers (Kockert-Zimmer). 10.0 p.m.—Chimes and Weather. 10.5 p.m.—Programme from Madrid, E.A.J. 7.

BERGEN (Norway)

Kringkastingselskap. WL 369.9 m. (811 kc); 1.5 kw. Transmits at intervals from 11.15 a.m. to 10.15 p.m.—*Orchestral Music*. 1. Wienerblut—Waltz (Strauss). 2. Dance (Hannikainen). 3. Slavonic Rhapsody (Friedmann). 4. Ali Baba (Lope). 8.30 p.m.—Soprano Song Recital. 1. Liebesfeier (Weingartner). 2. Der Lenz (Hildach). 3. Selection (Peterson-Berger). 4. Thy Wedding Day (Gründahl). 9.0 p.m.—Talk, "St. Peter's and the Vatican in Rome." 9.30 p.m.—The Exhibition Orchestra. 10.0 p.m.—Weather, News and Time. 10.15 p.m.—Dance Music Programme from Hotel Norge. 12.0 midnight (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. WL 1,250 m. (240 kc); 35 kw. Transmits at intervals from 12.0 noon to 10.15 p.m.—Talk, "New German Physical Culture." 4.30 p.m.—Talk by Dr. Richardt. 5.0 p.m.—Programme from Hamburg. 6.0 p.m.—Talk, "Trade Unions and Accidents Insurance." 6.30 p.m.—Elementary Spanish Lesson. 6.55 p.m.—Talk on "Choral Music." 7.20 p.m.—Talk, "Goethe's Prose." 7.25 p.m.—Programme from Hamburg. 10.15 p.m. (approx.)—Programme relayed from Voxhaus.

BERLIN (Germany)

Voxhaus. WL 484.6 m. (619 kc); 4 kw. Transmits at intervals from 10.10 a.m. to 10.15 p.m.—Talk: "The East Prussian Sea Service," by Dr. Ehardt. 7.10 p.m.—Talk: "The Life and Work of the German Philosophers of the Nineteenth Century"—"Joseph Schelling." 7.35 p.m.—Talk: "German for Germans." 8.30 p.m.—Selections from Old Sketches, followed by News, Time, Weather and Sports Notes. 10.30 p.m.—Dance Music Programme. 12.30 a.m. (Sun., approx.)—Close Down.

BERNE (Switzerland)

Radio-Berne. WL 411 m. (730 kc); 1.5 kw. Transmits at intervals from 1.0 p.m. to 10.15 p.m.—Time and Weather. 8.5 p.m.—Programme from Vienna. 9.45 p.m.—News and Weather. 10.0 p.m.—The Kursaal Orchestra. 10.35 p.m.—Dance Music Programme. 12.0 midnight (approx.)—Close Down.

BRESLAU (Germany)

Schlesische Funkstunde. WL 322.0 m. (929 kc); 4 kw. Relay by Gleiwitz, on 329.7 m. (909 kc). Transmits at intervals from 11.15 a.m. to 10.15 p.m.—Talk in Esperanto. 6.30 p.m.—Königswusterhausen Relay. 7.25 p.m.—Talk: "The Culture of Germany and France," by W. Koch. 7.50 p.m.—Advanced English Lesson. 8.30 p.m.—"XYZ"—Play (Klabund). 10.0 p.m.—News, followed by Programme relayed from Voxhaus. 12 midnight (approx.)—Close Down.

BRÜNN (Czecho-Slovakia)

Komarov. WL 441.2 m. (680 kc); 3 kw. Transmits at intervals from 11.0 a.m. to 10.15 p.m.—Time. German Transmission. 6.25 p.m.—Programme of Talks. 7.0 p.m.—Concert. 1. "Eve"—Overture (Foerster). 2. Bagatelles (Bendel). 3. The Old Bear—Polka (Fucik). 4. Les Nouvelles (Rozkosny). 5. Nocturne (Wilde). 6. Fantasy (Suda). 7.40 p.m.—French Language Lesson. 8.0 p.m.—Concert by the Choral Society of Moravian Teachers. 10.0 p.m.—Programme from Prague.

BRUSSELS (Belgium)

Radio-Belgique. WL 508.5 m. (590 kc); 1.5 kw. 5.0 p.m.—Dance Music from the St. Sauveur Palais de danse. 6.0 p.m.—English Language Lessons. 6.45 p.m.—Trio Concert. 1. Les soldats de la Reine (Parry). 2. Paul and Virginia (Massé). 3. Arabian Dance, for Piano-forte (Grieg). 4. Julius (Meyer). 5. La Reine Fiametta (Leroux). 6. Dans tes yeux (Waldteufel). 7. Barcarolle and Sentimental Minuet, for Violin (J. Strauss). 8. Romance sans paroles (Van Goens). 9. Cantabile (Widor). 7.30 p.m.—Le Radio Chronique. 8.15 p.m.—Concert. 1. "Raymonde"—Overture (Thomas). 2. Entr'acte from "Rigaudon de Lévière" (Dubois). 3. Valse caprice (Rubinstein). 4. Song. 5. (a) Day Dreams, (b) Love in Arcady, (c) Longing (Haydn Wood). 6. Selection from "The Count of Luxembourg" (Lebár). 7. Song. 8. Guiffoild Suite. 9. Violin and 'Cello Selection (Dunhill). 10. Le Triomphe d'Aphrodite (Rousseau). 11. Selection for Oboe and 'Cello (Sourillas). 12. Scaramouche (Messager). In the interval: Topicalities. 10.15 p.m.—News and Close Down

BUDAPEST (Hungary)

Magyar Telefon Hírmondó és Radio R. T. WL 577.1 m. (538 kc); 25 kw. Transmits at intervals from 9.0 a.m. to 10.15 p.m.—Travel Talk, by M. A. Gaspar. 7.40 p.m.—Hungarian Programme. 9.10 p.m.—Time, News and Sports Notes. 9.30 p.m.—Scenes from *Operetta*. 10.45 p.m.—Programme of H.M.V. Gramophone Records. 12.0 midnight (approx.)—Close Down.

COLOGNE (Germany)

Westdeutscher Rundfunk. WL 283 m. (1,060 kc); 4 kw. Transmits at intervals from 10.15 a.m. to 10.15 p.m.—Orchestral Concert. 3.40 p.m.—Talk on Wireless. 4.0 p.m.—Illustrated Talk on the Cologne Dialect. 4.30 p.m.—Königswusterhausen Relay. 5.0 p.m.—Talk for Women. 5.30 p.m.—See Langenberg Station. 6.0 p.m.—Orchestral Concert. 1. In the South—Concert Overture (Elgar). 2. 'Cello Solos with Orchestral Accompaniment, (a) Elegy (Fauré), (b) Pezzo capriccioso (Tchaikovsky). 3. Algerian Suite (Saint-Saëns). 4. Selection from "L'Enfant prodigue" (Debussy). 5. Selection from "Gesella" (Adam). 6. Tanzmomente (Herbeck). 7.10 p.m.—Talk for Workers. 7.30 p.m.—Programme from Hanover, followed by Football Report, News, Sports Notes, Musical Selections and Dance Music Programme. 1 a.m. (Sun., approx.)—Close Down.

COPENHAGEN (Denmark)

Copenhagen Radio. WL 337.4 m. (889 kc); 1 kw. Relay by Kålnborg, on 1,153.8 m. (280 kc). Transmits at intervals from 7.30 a.m. to 10.15 p.m.—News, Exchange and Time. 7.20 p.m.—Programme Announcements for the Coming Week. 7.30 p.m.—Talk on "The Mammals of Denmark," by Magnus Degerbøl. 8.0 p.m.—Town Hall Chimes. 8.5 p.m. (approx.)—Wireless Ball: 1. Old Dance Music: (a) Marche parisienne (Ganne), (b) Amoretten tånze—Waltz (Gungl), (c) Polka Mazurka (arr. Möller), (d) Diplomaten—Polka (J. Strauss). 2. Old Danish Folk Dances from North Jutland: (a) Two Selections for Violin and Viola, (b) Three Selections for Clarinet and Bass. 3. Les Artistes du Nord—Quadrille (Möller). 4.

Frühlingszauber—Waltz (Translatteur). 5. Sophie Mazurka (Poulisen). 6. Alte Kameraden—March (Teike). News. 9.15 p.m.—Modern Dance Music. 10.45 p.m.—Dance Music Programme. 12 midnight.—Town Hall Chimes. 12.5 a.m. (Sun., approx.)—Dance Music. 1.0 a.m. (approx.)—Close Down.

CORK (Ireland)

Cork Broadcasting Station (6CK). WL 400 m. (750 kc); 1.5 kw. 2.30 p.m.—Weather, Stock Market Report and Gramophone Records. 7.20 p.m.—Programme from Dublin.

CRACOW (Poland)

Polskie Radio. WL 567 m. (529 kc); 1.5 kw. Transmits at intervals from 12 noon to 10.15 p.m.—Programme from Warsaw. 6.55 p.m.—Agricultural Report. 7.15 p.m.—Variety Selections. 7.35 p.m.—Review of the Foreign Politics of the Past Week. 8.0 p.m.—Fanfare from the Church of Notre Dame, followed by News. 8.30 p.m.—Programme from Warsaw. 10.30 p.m.—Restaurant Concert. 11.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). WL 310.1 m. (940 kc); 1.5 kw. Transmits at intervals from 1.30 p.m. to 10.15 p.m.—News and Talk. 7.45 p.m.—Irish Talk by Seamus O'Duinn, followed by Relay of Students' Musical Union from R.I.A.M. 9.0 p.m.—Sketch by Mme. Kirkwood Hackett. 9.30 p.m.—Elliot Dobie (Bass). 9.40 p.m.—The Augmented Orchestra. 9.50 p.m.—Elliot Dobie (Bass). 10.0 p.m.—The Augmented Orchestra. 10.10 p.m.—Julia Twohig (Contralto). 10.20 p.m.—The Station Orchestra. 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany)

Süddeutscher Rundfunk. WL 429 m. (699 kc); 4 kw. Relay by Cassel, on 252.1 m. (1,190 kc). Transmits at intervals from 1.0 p.m. to 10.15 p.m.—Notes and Other Announcements. 6.30 p.m.—Answers to Correspondence. 7.15 p.m.—Talk by Kurt Weill. 7.45 p.m.—Programme arranged by the Frankfurter Zeitung. 8.15 p.m.—"Der Soldat der Marie"—Operetta (Leo Ascher). Followed by Programme from Voxhaus.

HAMBURG (Germany)

Norag (ha, in Morse). WL 396 m. (757 kc); 4 kw. Relay by Bremen on 272.7 m. (1,100 kc); Hanover, 297 m. (1,010 kc); and Kiel, 255 m. (1,176 kc). Transmits at intervals from 5.45 a.m. to 10.15 p.m.—Concert of music composed for broadcasting: 1. Prelude to "Alpenkönig und Menschenfeind" (Erdlen). 2. Music from "Sturm" (Scheffler). 3. March and Kyrie from "Götz von Berlichingen" (Platen). 4. Chorus from "Empedokles" (Gartz). 5. Prelude to "Fährkrögg" (Platen). 6.0 p.m.—(Hamburg and Kiel)—Variety Programme. 6.55 p.m.—Legal Talk by Dr. Zorn. 7.25 p.m.—Programme from Hanover. 9.15 p.m.—Richard Wagner Evening. 10.15 p.m. (approx.)—News and Concert from Hanover.

HANOVER (Germany)

Norag. WL 297 m. (1,010 kc); 0.7 kw. 6.0 p.m.—Variety Item Programme. 7.25 p.m.—Relay from the Exhibition Hall of the First German Workers' Singing Festival, 1928. Concert of the Berlin Philharmonic Society: "The Damnation of Faust"—Opera (Berlioz). 10.30 p.m. (approx.)—Concert from Café Continental.

HILVERSUM (Holland)

Algemeene Vereeniging Radio Omroep. WL 1,069 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Lunch-time Trio Music. 1.40 p.m.—Concert relayed from the Tuschinski Theatre. 5.40 p.m.—Concert: 1. "La Belle Galathée"—Overture (Suppe). 2. Viennese Folk Music (Komzak). 3. Humorous Variations on "Was kommt dort von der Höh" (Suppe). 4. Serenata (Toselli). 5. Selection from "Carmen" (Bizet). 6.

Traum-Ideale (Fucik). 7. Parana (Castro). 8. Rococo (Schmeling). 9. Horen Sic (Borchert). 10. Sempre Idem—Jarch (Blankenburg). 7.25 p.m.—Police Information. 7.50 p.m.—Talk and Concert, arranged by the Workers' Radio Society. 10.10 p.m.—Concert relayed from the Royal Cinema, Amsterdam. 11.15 p.m. (approx.)—Close Down.

HUIZEN (Holland)

WL 341 m. (879 kc); 4 kw. (Until 6.40 p.m.). Transmits from 6.40 p.m. on 1,870 m. (160 kc). 1.10 p.m.—Concert of Trio Music. 6.10 p.m.—Gramophone Selections. 7.40 p.m.—Dutch Language Lesson. 8.10 p.m.—Talk by Prof. Huybers. 8.40 p.m.—Instrumental Concert.

JUAN-LES-PINS (France)

Radio LL. WL 230 m. (1,304 kc); 0.25 kw. 1.0 p.m.—Symphony Concert. 9.0 p.m.—News, followed by Talk: "The Secret Societies of the Congo," by Mme. Delais-Arnoux. Orchestral Music. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down

KÖNIGSBERG (Germany)

Ostmarken Rundfunk. WL 393 m. (750 kc); 4 kw. Relay by Danzig, on 272.7 m. (1,100 kc). Transmits at intervals from 6.15 a.m. to 10.15 p.m.—Market Price Quotations. 6.30 p.m.—Talk, "Do You Always Understand What You Speak?" 6.55 p.m.—Esperanto Announcements. 7.0 p.m.—Topical Events Talk. 7.30 p.m.—Elementary English Lesson. 8.10 p.m.—Concert. 1. Orchestral Selection—"Nakiris Hochzeit". 2. Overture (Lincke). 3. Two Recitations: (a) Die steinerne Agnes von Berchtesgaden (Ginz-kay), (b) Hoch vom Kahlenberg (Pözl). 3. Orchestral Selection—Fantasia from Lortzings Liebeskinder (Urbach). 4. Tenor Solos: (a) Zwei Augenlein brann (Gumbert), (b) Noch sind die Tage der Rosen (Baumgartner), (c) Oh, Le, Me Dream (Sullivan), (d) Gute Nacht, du mein herziges Kind (Abb). 5. Orchestra—Seid umschlungen, Millionen—Waltz (O. Strauss). 6. Three Recitations: (a) Nur nicht schmolten (Saphir), (b) Die Torte (Reimann), (c) Aus heiligem Land! (Grenz). 7. Orchestra—Ich hatte einst ein schönes Vaterland (Lassen). 8. Tenor Solos: (a) O Maienzeit, O Liebestraum, (b) Unter dem Lindenbaum (Eberle), (c) Dort unten Baum, (d) Der letzte Gruss. 9. Orchestra—Paraphrase on the Song, Nach der Heimat (Nahl). 10. Three Recitations: (a) Diese Mädels (Roeßger), (b) Die Schwamm-masuppen (Traumgrübel), (c) Anecdotes. 11. Orchestra—An der Weser (Pressel). 12. Tenor Solos: (a) Todesehnen (Tosti), (b) Ich sende diese Blume dir (Wagner), (c) Rokokoständchen (Meyer-Helmund), (d) Aus der Jugendzeit (Kuttner). 13. Potpourri of Viennese Folk Music (Komzak). 10.10 p.m. (approx.)—Weather, News and Sports Notes, followed by Musical Selections and Dance Music. 12.0 midnight (approx.)—Close Down.

KOVNO (Lithuania)

Radio Kaunas. WL 2,000 m. (150 kc); 5 kw. Transmits at intervals from 12.0 noon to 10.15 p.m.—Talk by Mr. Biciunas. 8.0 p.m.—News, Time and Weather. 9.0 p.m.—Request Programme. 1. "The Barber of Seville"—Overture (Rossini). 2. "Lysistrata"—Gavotte (Lincke). 3. Minuet (Paderewski). 4. Poem (Fibich). 5. "Carmen"—Selection (Bizet). 6. Elegy (Glinka). 7. Les doules (Glinka). 8. Selection (Middleton). 10.15 p.m.—Wireless Notes, followed by Gramophone Records.

LAHTI (Finland)

WL 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw. 11.0 a.m.—Exchange and Music. 11.30 a.m.—Exchange and News. 11.50 a.m.—Time and Weather. 12.15 p.m.—Shipping Forecast. 5.57 p.m.—Time, Weather and News. 6.15 p.m.—Concert. 1. Melodies from "Der Bittelstudent" (Millocker). 2. Serenade (Widor). 3. Melody from "The Merry Widow" (Lehár). 4. Song. 5. Valse Dornrostein (Tchaikovsky).

6. Indian. Suite (Lüling). 7. Humoresque (Dvorák). 8. Romance (Svendens). 9. L'Arlesienne—Suite (Bizet). 8.45 p.m.—News in Finnish and Swedish. 9.15 p.m.—Relay from a Restaurant.

LANGENBERG (Germany)

Westdeutscher Rundfunk. WL 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. to 10.15 p.m.—Programme from Cologne. 4.30 p.m.—Königswusterhausen Relay. 5.0 p.m.—Programme from Cologne. 5.30 p.m.—English Lesson from Münster. 6.0 p.m.—Programme from Cologne. 7.30 p.m.—Programme from Hanover, followed by programme from Cologne. 10.15 p.m. (Sun., approx.)—Close Down.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. WL 366 m. (818 kc); 4 kw. Relay by Dresden on 275.2 m. (1,090 kc). Transmits at intervals from 10.0 a.m. to 10.15 p.m.—Legal Talk. 6.55 p.m.—Weather and Time. 7.0 p.m.—Talk, "Our Neighbours in Space," by Dr. Weber. 7.30 p.m.—Programme from Hanover. 10.0 p.m.—New and Sports Notes. 10.15 p.m.—Cabaret Concert.

MADRID (Spain)

Union Radio (EAJ7). WL 374 m. (802 kc); 1.5 kw. Transmits at intervals from 11.45 a.m. to 10.15 p.m.—Orchestral Concert. 1. La verónica (Vives). 2. Selection from "Le Chemineau" (Leroux). 3. La viejecita (Caballero). Interlude by Luis Medina. 8.0 p.m.—Dance Music Programme. 9.45 p.m.—Market Report and Prices. Programme relayed by Barcelona EAJ1, and San Sebastian EAJ3, 335 m. (895 kc). 10.0 p.m.—Chimes and Orchestral Concert. 1. "The Italian in Algiers"—Overture (Rossini). 2. Selection from "Don Juan" (Mozart). 3. Scherzo from "Roma" (Bizet). 4. Septimino (Beethoven). 5. Fantaisie-Ballet (Bériof). 6. El Sardinero (Bretón). 7. Two Arabesques (Debussy). 8. Espana—Rhapsody (Chabrier). 11.50 p.m. (approx.)—News. 12.0 midnight—Dance Music Programme from the Alcazar. 12.30 a.m. (Sun., approx.)—Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. WL 549.3 m. (546 kc); 7 kw. Transmits at intervals from 12.15 p.m. to 10.15 p.m.—French Language Lesson. 8.35 p.m.—Time and History Talk. 8.45 p.m.—Variety Concert. 1. Ent'Acte (Malvezzi). 2. Talk, "The History and Ethics of Music." 3. "The Pearl Fishers"—Selection (Bizet). 4. Trio (Smetana). 5. Chaconne for Violin (Bach). 6. Variations (Boellmann)—for 'Cello. 7. Tenor Solos. 8. "The Queen of Sheba"—Selection (Goldmark). 9. "The Barber of Seville"—Symphony (Rossini). 10.55 p.m.—News, followed by Dance Music, relayed from the Restaurant Cova, Milan. 11.45 p.m. (approx.)—Close Down.

MÜNICH (Germany)

Deutsche Stunde in Bayern. WL 536 m. (559 kc); 4 kw. Relay by Augsburg, on 566 m. (530 kc); Kaiserlautern, 204.1 m. (1,470 kc); and Nürnberg, 241.9 m. (1,241 kc). Transmits at intervals from 2.30 p.m. to 10.15 p.m.—Wireless Talk: "The Construction of Modern Receiving Sets," by Ing. Wittwer. 7.0 p.m.—"The Letter Box." 7.30 p.m.—Zither and Guitar Recital: 1. Mélodie (Rubinstein). 2. Idylle passionelle. 3. Valse Vanité. 4. Im tiefen heiligen Wald. 5. Verden-felser Marsch. 6. Heimweih. 7. Corfu. 8. Alter Bayer. 8.0 p.m.—"Drei Paar Schuhe"—Musical Sketch (Millocker). 10.5 p.m.—Announcements. News. 10.30 p.m.—Dance Music Programme from the Galerie Arkadia.

NAPLES (Italy)

Unione Radiofonica Italiana (INA). WL 333.3 m. (900 kc); 1.5 kw. Transmits at intervals from 2.0 p.m.

Programmes for Saturday.—(Cont.)

8.40 p.m.—Time, News, Harbour Notes.
8.50 p.m.—Orchestral Concert. 1. "Italica"—Overture (Sassano). 2. Intermezzo dramatico (Roselli). 3. Danse des Sultanes (Florida). 4. Ballo amor (Marenco).
9.30 p.m.—Programme from a Theatre.
10.55 p.m.—Programme Announcements.
11.0 p.m. (approx.)—Close Down.

OSLO (Norway)
Kringkastingsselskapet. WL 461.5 m. (650 kc.); 1.5 kw. Relayed by Hamar on 566 m. (530 kc.).
Porgrund, 500 m. (600 kc.). Fredrikstad, 435 m. (680 kc.). Notodden 412 m. (728 kc.); and Rjukan on 448 m. (670 kc.).
Transmits at intervals from 11.10 a.m.
6.45 p.m.—Children's Programme.
7.15 p.m.—News and Talk.
8.0 p.m.—Time followed by Orchestral Concert: 1. "Mephistopheles"—Selection (Boito). 2. "Albumblatt" (Wagner). 3. Serenade galante (Behr). 4. Dance Music. 5. "Guitar" (Bizet). 6. "Die Puppenfee"—Selection (Bayer). In the Interval—Recitation.
9.30 p.m.—Song Recital.
10.0 p.m.—Weather, News and Topical Talk.
10.30 p.m.—Humorous Talk followed by Dance Music Programme.
12.0 midnight (approx.)—Close Down.

PARIS (France)
Eiffel Tower (FL). WL 2,650 m. (113 kc); 5 kw.
8.56 a.m.—Time Signal on 32.5 m. (9,231 kc).
10.26 a.m.—Time Signal on 2,650 m.
6.45 p.m.—"Le Journal Parle." Talk, "Careers for Women."
8.10 p.m.—Weather Forecast.
8.30 p.m.—Concert. 1. Songs, (a) Paysage majeur (Bordes), (b) O Triste était mon âme (Verlaine-Bordes), (c) La lune blanche (Verlaine-Gaubert). 2. Cinq Haï Kai—Violin and Cello Selection (Pillois). 3. Songs, (a) Le colibri (Chausson), (b) Chanson perpetuelle (Chausson), (c) Tant que mes yeux pourrout larmes expandre (Sels). At 8.56 p.m., Time Signal on 32.5 m.

PARIS (France)
Radio-Paris (CFR). WL 1,750 m. (171 kc); 3 kw.
Transmits at intervals from 7.30 a.m.
12.30 p.m.—"Columbia Record" Hour: 1. Scènes alsaciennes (Massenet). 2. "Rosamunde"—Overture (Schubert) by the Hallé Orchestra. 3. Selections from "Pelleas and Melisande" (Debussy). 4. Adagio amoroso for Violin and Piano (Sammartini). 5. You went away too far—by Layton and Johnstone. 6. Just like a Butterfly—by Layton and Johnstone. 7. Who was the lady?—Fox-trot. 8. Transportation Blues. News.
1.50 p.m.—News and Religious Notes.
3.45 p.m.—Dance Music. News.
7.30 p.m.—Piano Recital.
8.0 p.m.—Agricultural Report.
8.15 p.m.—Talk and News.
8.30 p.m.—Concert arranged by "Le Matin": 1. Symphony Programme. 2. Waltzes of to-day and yesterday. News.

9.30 p.m.—Educational Programme. Talks on "The Origin of Religion," "The History of Economics" and "Child Studies."
11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)
Petit Parisien. WL 340.9 m. (880 kc); 0.5 kw.
8.45 p.m.—Gramophone Selections, Talk, Announcements and News.
9.0 p.m.—Concert. 1. Le Pré au Clercs"—Overture (Hérold). 2. "Carmen"—First Suite (Bizet). 3. Symphony Orchestra: (a) Hungarian Rhapsody No. 14 (Liszt), (b) Dolly (Fauré). 4. Serenade (Saint-Saëns). 5. Humoresque (Tchaikovsky). 6. Procession and Dance from "Le Miracle" (Humperdinck). News in the intervals.

PARIS (France)
Radio-Paris (CFR). WL 1,750 m. (171 kc); 3 kw.
Transmits at intervals from 7.30 a.m.
12.30 p.m.—"Columbia Record" Hour: 1. Scènes alsaciennes (Massenet). 2. "Rosamunde"—Overture (Schubert) by the Hallé Orchestra. 3. Selections from "Pelleas and Melisande" (Debussy). 4. Adagio amoroso for Violin and Piano (Sammartini). 5. You went away too far—by Layton and Johnstone. 6. Just like a Butterfly—by Layton and Johnstone. 7. Who was the lady?—Fox-trot. 8. Transportation Blues. News.
1.50 p.m.—News and Religious Notes.
3.45 p.m.—Dance Music. News.
7.30 p.m.—Piano Recital.
8.0 p.m.—Agricultural Report.
8.15 p.m.—Talk and News.
8.30 p.m.—Concert arranged by "Le Matin": 1. Symphony Programme. 2. Waltzes of to-day and yesterday. News.

PITTSBURGH (U.S.A.)
Westinghouse Electric (KDKA). WL 315.6 m. (950 kc); 50 kw. Relayed at intervals on 63 m. (4,762 kc); and 27 m. (11,111 kc).
Transmits at intervals from 2.45 p.m.
11.15 p.m.—KDKA Symphony Orchestra from the William Penn Hotel.
11.55 p.m.—Baseball Announcements.

12.0 midnight.—Telechron Time.
12.30 a.m. (Sunday).—Weekly Meeting of the Home Radio Club.
12.45 a.m.—American Literary Gems.
1.0 a.m.—United States Navy Band from WJZ, New York.
2.0 a.m.—Mediterranean Dance Band, relayed from WJZ, New York.
3.0 a.m.—Weather, Telechron Time, Baseball Scores and Close Down.

POSEN (Poland)
Polskie-Radio. WL 343 m. (874 kc); 1.5 kw.
Transmits at intervals from 7.50 a.m.
7.15 p.m.—Elementary French Lesson.
7.35 p.m.—Talk, "Communism and the Worker" by E. Swidzinsky.
8.0 p.m.—Report on Finance.
8.30 p.m.—Vocal and Instrumental Concert. 1. Mandolin Orchestra. 2. Vocal Quartet—Songs from the Works of: (a) Abt, (b) Gounod, (c) Hermes. 3. Soprano Solos: (a) Aria from "Boccaccio" (Suppé), (b) Aria from "Paganini" (Lohár).
10.0 p.m.—Time, News, Weather and Variety Selections.
10.50 p.m.—Dance Music Programme from the Carlton Restaurant.
12.0 midnight.—Concert.
2.0 a.m. (Sun., approx.)—Close Down.

PRAGUE (Czecho-Slovakia)
Strasnice. WL 348.9 m. (860 kc); 5 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—German Transmission.
6.25 p.m.—Agricultural Report.
6.35 p.m.—Talk for Workers.
8.0 p.m.—Concert by the Choral Society of Moravian Teachers.
10.0 p.m.—Time and News, followed by Popular Orchestral Music.

ROME (Italy)
Unione Radiofonica Italiana. WL 450 m. (666 kc); 3 kw.
Transmits at intervals from 1.30 p.m.
8.30 p.m.—German Language Lesson.
8.58 p.m.—Time, News, Exchange.
9.15 p.m.—"Faust"—Opera (Gounod). In the Interval Review of Art and Literature by Lucio d'Ambrà.
11.20 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)
General Electric Company (WGY). WL 379.5 m. (790 kc); 50 kw.

Relayed by 2XAF on 31.4 m. (9,554 kc); from 11.25 p.m.
Transmits at intervals from 11.45 a.m.
11.25 p.m.—Baseball Announcements.
11.30 p.m.—Dinner Music Programme.
12.25 a.m. (Sun.)—Baseball Scores.
12.30 a.m.—"Statler's Pennsylvanians," relayed from New York.
1.0—3.0 a.m.—Programme relayed from New York.
1.0 a.m.—"Bonnie Laddies," and "Cabin Door" Programme.
2.0 a.m.—Time and National Symphony Orchestra Programme.
3.0 a.m.—Musical Programme relayed from Syracuse, New York.
3.30 a.m.—Organ Recital relayed from Rochester, New York.
4.0 a.m.—Dance Music from Hotel de Witt Clinton, Albany, N. Y.
5.0 a.m. (approx.)—Close Down.

STAMBOUL (Turkey)
Radio-Stamboul. Société Anonyme Turque de Téléphonie sans fil. WL 1,180 m. (254 kc); 5 kw.
Transmits at intervals from 4.30 p.m.
7.15 p.m.—Turkish Musical Programme. In the Interval: Weather and Time.
9.0 p.m.—Concert. 1. "Don Juan" Overture (Mozart). 2. Act 3 of "La Tosca" (Puccini).
10.30 p.m.—News and Close Down.

STOCKHOLM (Sweden)
Radiotjänst (SASA). WL 453.8 m. (661 kc); 1.5 kw. Relayed by Motala, on 1,380 m. (217 kc); Göteborg, 416 m. (721 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.8 m. (550 kc).
Transmits at intervals from 12.35 p.m.
4.0 p.m.—Celebration in Commemoration of the 50th Anniversary of the Swedish Congregational Church: Talk by the Prime Minister, Talks in French and English by Foreign Guests, and Concert.
6.0 p.m.—Programme for Children.
6.45 p.m.—Cabaret, followed by Play.
8.15 p.m.—Concert of Light Music.
9.15 p.m.—News and Weather.
9.45 p.m.—Talk on Topical Events.
10.0 p.m.—Dance Music Programme.
12 midnight (approx.)—Close Down.

STUTTGART (Germany)
Süddeutscher Rundfunk. WL 379.7 m. (790 kc); 4 kw.

Transmits at intervals from 12.30 p.m.
6.0 p.m.—Time and Weather.
6.15 p.m.—Talk, "The Road to International Trade," from Freiburg, 574.7 m. (522 kc).
6.45 p.m.—Talk, "Oriental and Occidental Music."
7.15 p.m.—Legal Subject Talk.
7.45 p.m.—Labour Market Report, followed by Time, Weather and Sports Notes.
8.15 p.m.—Programme from Frankfurt, followed by News and Dance Music from Café-Restaurant Wilhelmsbau.

TOULOUSE (France)
Toulophonie du Midi. WL 380.6 m. (770 kc); 3 kw.
Transmits at intervals from 10.15 a.m.
8.0 p.m.—Time, News and Bourse.
8.30 p.m.—Concert of Opera and Opera Comique Melodies.
9.30 p.m.—Accordion Recital.
10.15 p.m.—"North African Journal" Report and Close Down.

VIENNA (Austria)
Radio Wien. WL 577 and 517.2 m. (520 and 580 kc); 1.5 and 5 kw. Relayed by Innsbruck on 204.1 m. (1,020 kc) and Klagenfurt on 272.7 m. (1,100 kc).
Transmits at intervals from 11.0 a.m.
6.45 p.m.—Children's Music.
7.15 p.m.—"Trio in E flat major (Mozart).
8.15 p.m.—"The Jew of Toledo" Play (Franz Grillparzer), followed by Dance Music. 1. "Maritana"—Variation (Plateau). 2. "L'Amour" Symphonic Poem (Pauscher). 3. Fox-trot (Marhush). 4. Love Me—Blues (Oscar Strauss). 5. I Love My Boatman (Wilke). 6. Tango (Mann). 7. That night in Araby (Rose). 8. Money macht froh (Leopold). 9. Amalasintha (Katscher). 10. Slow Fox-trot (Stolz).

WARSAW (Poland)
Polskie Radio. WL 1,111.1 m. (270 kc); 10 kw.
Transmits at intervals from 12 noon.
7.5 p.m.—Agricultural Report.
7.15 p.m.—Variety Selections.
7.35 p.m.—Talk on Topical Events.
8.15 p.m.—Evening Concert. In the Interval: News in French.
10.0 p.m.—Time, News and Weather.
10.30 p.m.—Dance Music Programme.
11.30 p.m. (approx.)—Close Down.

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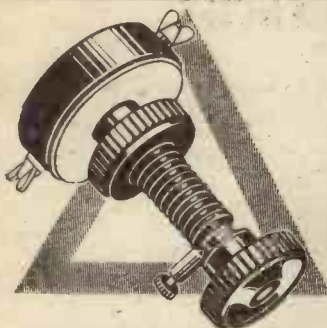
STATIONS IN ORDER OF WAVELENGTHS AND FREQUENCIES.

A LIST OF SHORT WAVE STATIONS WILL BE FOUND ON ANOTHER PAGE.

Table listing radio stations in Europe with columns for M. (Meters), Kc. (Kilohertz), and station details including name and location.

Table listing radio stations in the U.S.A. with columns for M. (Meters), Kc. (Kilohertz), and station details including name and location.

Table listing radio stations in Canada, North Africa, Australia, New Zealand, India, South America, Japan, and Ceylon with columns for M. (Meters), Kc. (Kilohertz), and station details.




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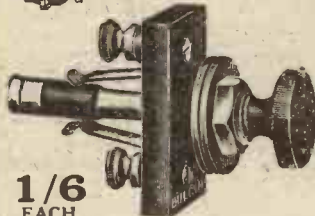
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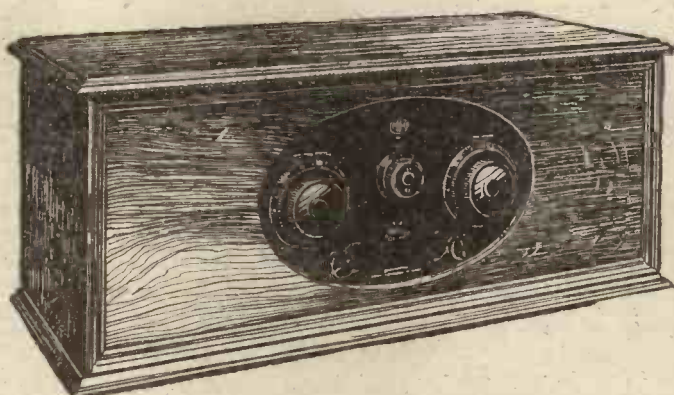
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