



WORLD-RADIO

DOMINION & FOREIGN PROGRAMMES

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FRIDAY, JUNE 22, 1928.

Two Pence.

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Replies to Queries.

WORLD-RADIO

Station Identification Panel
(No. 93.)

LINZ (Austria)

- Wavelength : 254.2 m.
- Frequency : 1180 kc. Power : 0.5 kw.
- Approximate distance from London :
645 miles.
- Call : "Hallo! Hallo! Hier Radio Linz
auf welle zwei hundert vier und
fünfzig komma zwei meter."
- Interval Signal : Metronome.
- When station relays the Vienna pro-
gramme, that station's call is heard.
- Closes down in a similar manner to all
other Austrian stations.

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WORLD-RADIO

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FRIDAY, JUNE 22, 1928.

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Ravag: Austria's Broadcasting Organisation

(By our Vienna Correspondent.)

RAVAG is the short title, or nickname, of the Radio Verkehrs Aktien Gesellschaft—which is certainly rather a mouthful—meaning that it is the Radio Broadcasting Company Limited, as distinct from the

rates have been very low, based on income, and still the overwhelming majority of subscribers come under the minimum two schilling monthly rate (about 1s. 2d.). The next rate above it is six schilling, and it used sometimes to be evaded by registering the receiving set in the name of the youngest member of the family or a maidservant, in many households where the head would certainly not be on the minimum rate level. But threats and persuasion have to some extent diminished this subterfuge. The monthly dues are collected by the postman on his round, as Ravag is a semi-State institution. The largest class of radio subscribers in Vienna is composed of families with a keen interest in music and the theatre, who cannot afford often to buy seats, or to make the journey to and from theatre or concert hall.

Stubenring started in October, 1924; Rosenhügel in January, 1926; Graz in May, 1925, Klagenfurt in the spring of 1926, and Innsbruck in the spring of 1927. Linz will be ceremonially inaugurated on June 24. Salzburg has no station yet, owing to difficulty in choosing a suitable site. Nevertheless it is now possible for anyone in Austria, even on the mountain-tops, to enjoy the Vienna programme, as relayed by one or other of the provincial stations, with very moderate expenditure upon reception outfit. The great majority of subscribers use crystal sets of the simplest kind. The movement is therefore truly national.

There is a distribution of news from the Official News Bureau in Vienna before and after the evening programme. Sports news, such as snow conditions and temperatures at mountain resorts during the winter, is collected from various organisations and broadcast once a week. Experiments in picture broadcasting by means of the Fultograph, the invention of Captain Otho Fulton, are already being made, and next autumn it is anticipated that there will

be regular broadcasting of pictures daily, as part of the programme. Ravag was one of the pioneer broadcasting organisations in the matter of popular instruction in foreign languages. Professor Thomas McCallum's English lessons started in the first winter season, 1924-5, and his reputation is now Europe-wide. Professor Rivière, in French, and Professor Traversa, in Italian, are scarcely less popular. Instruction is also given in Esperanto.

The Chairman of Ravag is ex-Minister of Commerce Heindl, and the vice-chairmen are

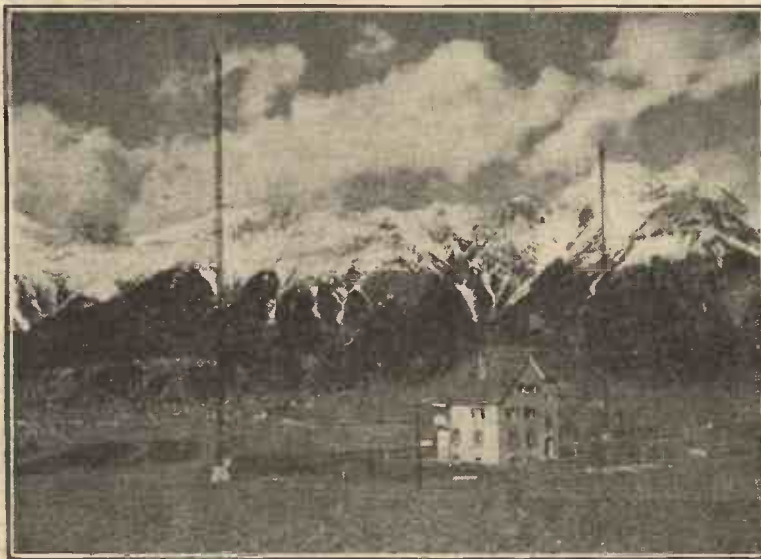


A Studio in the Johannesgasse

Radio-Austria Company, which is concerned only with transmission of messages to and from foreign countries.

At the end of the month of October, 1924, in which Ravag began broadcasting operations on the top floor of the immense Vienna War Office, now almost entirely allocated to peaceful purposes (for Austria's present War Office occupies so little space, and is dispersed in buildings much older than the great pile on the Stubenring, that very few Viennese would know where to look for its departments), Ravag had fewer than 6,000 subscribers, and a total staff of twenty. It has now nearly 300,000 subscribers, and a staff of ninety-eight in Vienna alone. For Ravag controls all the subordinate stations in Austria, namely, Graz, Klagenfurt, Innsbruck, and Linz, which is to be opened on June 24.

But by the end of 1924 there were nearly 100,000 subscribers in Austria, the majority, of course, in Vienna, for the range of the Stubenring station, then the only one, was severely limited. Now there are over 190,000 subscribers in Vienna alone, one in every ten of the total population of the city. From the first, subscription



Innsbruck Station



The New Linz Station

Hofrat Georg Stern and ex-Minister of Finance Grimm. Herr Czeija, the General Manager, Dr. G. Schwaiger, technical administrator, and Dr. Richtera, programme director, are well-known attendants at international radio conferences. Herr Arthur Richter, the chief announcer in Vienna, is a nephew of the President of the Republic, Dr. Hainisch.

The Ministry of Social Welfare provides Ravag with news on sporting and social topics. Racing events on land and water are now being described as they take place. Police announcements are sometimes made, and many missing persons and stolen motor cars have been traced by this method.

For the opening of the new Linz station, on June 24, the famous Vienna Philharmonic Orchestra will journey to Linz to give a special concert, mainly consisting of "Upper Austrian" music, which will be broadcast from Linz, the capital of Upper Austria. But almost the very first music to be broadcast from Linz will be that of the historic organ, in the Foundation of St. Florian, which was used by the Upper Austrian composer of religious music, Bruckner.

(Continued on page 911.)

Viâ Ether

MANY reports have reached me this week in respect to a new short-wave transmission heard at odd times by some of our readers. At first it was thought to be the Döberitz experimental station, but further information proves the broadcast to emanate from Bergedorf, a town on the Elbe situated some ten miles E.S.E. of Hamburg. The call would appear to be "Achtung! Hier AFL Bergedorf bei Hamburg," and so far as I have been able to ascertain, the transmissions are made on a wavelength in the immediate neighbourhood of 51 metres. From the reports received, news bulletins and short talks are transmitted, for periods of fifteen minutes, at the exact hour, from 6 to 11 p.m. almost nightly. At the time of writing, I am not certain whether this is an amateur or an official station, although the call sign would point to its being one owned and operated by the German Ministry of Posts and Telegraphs. In the same way as Berlin is experimenting on short waves, so it is quite possible that a similar installation may have been established in the neighbourhood of Hamburg. For the present, at least, no musical broadcasts have been traced to this transmitter.

The star item of to-night's (Friday, June 22) evening entertainment undoubtedly will be the relay, carried out at 8 p.m. by Cologne, of the performance of Puccini's *Bohème*, given at its Opera House by the singers of the Scala Theatre, Milan. The cast is an exceptionally good one, Rodolfo being taken by Roberto D'Alessio, and the part of Mimi by Carmen Melis. At the Czechoslovak stations we find, at 7.15 p.m., *I Pagliacci* and *Cavalleria Rusticana* as performed at the National Theatre at Brünn, and at 8.50 p.m. Naples gives us Acts I, II, III and V of Massenet's *Manon*, first produced at the Paris Opera Comique on January 19, 1884.

From Danzig or Königsberg to-night, at 8.5 p.m., we may hear a Wagner concert relayed from the famous Kurgarten of Zoppot. It is the most popular seaside resort in Pomerania, on the shores of the Danziger Bucht; later, dance music from the same hall will be broadcast by Königswusterhausen as well as by the local stations. To Oslo it may be interesting to turn at 9 p.m. for a talk in English by Captain Talbot, who will describe his adventures in the war against China. Radio Paris should not be ignored on this evening for, at 8.30 p.m., it advertises an excellent concert in which the baritone Armand Crabbé and Mademoiselle Perelli (soprano), both of the Paris Opera House, are taking an active part.

Breslau, on more than one occasion, by means of a "mobile mike" has taken its listeners through different districts of the city and has provided us, by this means, with broadcasts of unusual interest, inasmuch as they have brought to our ears unfamiliar scenes in the daily life of its citizens. Tomorrow night, at 10.15 p.m., tune into this wavelength—or better still, to that of Gleiwitz of which the power is now increased to 10 kilowatts—for a "peep" into the *Johannisfest* annually celebrated with enthusiasm in many

German centres. Midsummer Eve, or the Eve of St. John, is commemorated in honour of the nativity of St. John the Baptist. In some countries the old pagan custom of lighting bonfires on the hills and of leaping over the flames, a practice also indulged in on the night of St. Walpurga, is still retained. There also exists a superstition that a close watch should be kept throughout the eventful night, as it was formerly believed that the soul would forsake the body to visit the spot where the final separation would take place. A Festival of a similar nature to that given at Breslau will be broadcast at 8 p.m. on Sunday (June 24) by Munich and the Bavarian stations; in this instance the *fête* takes place on the Tegernsee, on the borders of which, at a height of some 2,400 feet, is an ancient site of civilisation—a Benedictine Monastery, founded in A.D. 719.

If any of you have enjoyed, on previous occasions, the broadcasts of the "Cries of Old London," given by our home stations, you may find an equivalent attraction in the Radio Paris programme down for transmission to-morrow night (Saturday) at 8.30 p.m. It will consist of a short talk, with illustrations of the cries of modern Paris.

I know I shall be repeating myself by saying that no transmission can be made in the ether but that it is picked up by one or more readers of *World-Radio*, but I cannot refrain from making this statement again. During the late afternoon and earlier part of Friday evening, June 8, PCJJ, the powerful short-wave Hilversum transmitter—which, by the way, is still controlled from Eindhoven—spent several hours in an endeavour to get into touch with the Italian airship *Italia*. On a wavelength of 31 metres calls were sent out every three minutes in both the Italian and French languages, and friends on this side have been good enough to send me a translation of the messages picked up: "Hallo *Italia*, Hallo, Nobile! This is the short-wave transmitter PCJJ calling you. Endeavouring to ascertain where you are located. Rescue parties are now on their way. We are switching over and standing by to listen to you." Although no reply was received from the Italian expedition, the wireless station at North Cape, Spitzbergen, reported good reception of the PCJJ signals. I understand that a large number of Dutch radio fans stayed up throughout the night with headphones glued to their ears, in the hope of picking up some communication from General Nobile and his plucky comrades. There appears to be little doubt that if, as it is hoped, a rescue of the party is effected, the crew of the airship will owe their lives to radio.

Again this week-end we shall be treated to some excellent concerts by both Hilversum and the Rhineland stations. On Sunday (June 24), the Dutch studio will switch over to the Scheveningen Kurhaus at 2.40 and at 7.55 p.m.; Cologne, and its big brother Langenberg, connect up with the Municipal Hall at Mulheim (Ruhr) at 8 p.m. for a performance of Haydn's Oratorio *The Seasons*, in which a large choir, an augmented orchestra and

soloists from the Berlin and Duisburg Opera Houses take part.

On Monday (June 25) at 8.30 p.m. we shall be given the option of picking up a concert by the Warsaw Philharmonic Orchestra from all the Polish stations, as well as from Berlin, Prague and the Czechoslovak transmitters to which this programme will be fed by landline. Brussels, at 8.30 p.m., takes us over to the Casino at Spa, to which a further visit is contemplated on Thursday evening (June 28). At 7 p.m. we find at Leipzig a broadcast of Mozart's *Don Juan*, as performed at the Dresden State Opera House, and at 8.45 p.m. Radio Paris revives, at the request of its listeners, Planquette's tuneful comic opera *Rip Rip*, to which but only recently I referred in these notes.

More Mozart compositions will be available to us from Munich and its relays on Tuesday, June 26, on the occasion of the seventh Festival held at the Kaisersaal of Würzburg. Another Festival of equal interest in which we may take part is that carried out by Radio Paris on the same date, at 8.45 p.m. It is the Festival Messenger, at which this well-known composer will conduct personally a performance of his works. We shall no doubt hear excerpts from such popular successes as *Véronique*, *La Basoche*, *Les P'tites Michus* and *Monsieur Beaucaire*. Messenger is in his 76th year. Vienna, at 7.30 p.m., turns to the Academy Theatre in that city for its main entertainment, namely, Nicolai's comic fantasy opera *The Merry Wives of Windsor*. Hilversum, at 7.40 p.m., presents an original programme of military and other marches, to be played in the new studio by the band of the regiment of Royal Dutch Grenadiers.

Wednesday (June 27) brings us from Radio Paris at 8.30 p.m. a first night of *La Veillée Bretonne* (The Breton Wake), by Fernande Drouet, an original radio play which secured a prize in the drama competition organised by the studio. On Friday (June 29) at the same time, we shall hear *Jean le Veinard*, by Billod Morel, a sketch which also topped the list.

Rund um die Liebe (Circling around Love) is the title of the Oscar Straus three-act operetta offered to us by Königsberg at 8.5 p.m. on Wednesday evening. Stockholm, at 7.50 p.m., presents a studio performance of Adam's comic opera *Si j'étais Roi* (If I were King), not to be confused with the François Villon adventure in the English play of the same title. Adolphe Adam's opera narrates how in Goa (East India), Zephoris, a poor fisherman in his native village, sees his wish granted to be King for a day, with the happiest results for all concerned. Brussels, at 8.15 p.m., offers an alternative in excerpts from Bizet's *Les Pêcheurs de Perles* (The Pearl Fishers), a more passionate story of prehistoric times. When produced in London, in 1887, it bore the title of the chief character, *Leila*. Finally, let us return to this station on Thursday (June 28) for Kalman's delightful operetta *Die Bajadere*, one of the most successful of this versatile composer's musical stage plays. JAY COOTE.

Holidays Abroad: Ways and Means

Czecho-Slovakia

By Mrs. BEAUCHAMP TUFNELL*

A SUMMER holiday in Czecho-Slovakia. How thrilling it sounds—and it is possible for anyone. There are several routes from London to Prague—by Dover, Ostend, Nürnberg; by Calais, Paris, Karlsbad; by Harwich, Flushing, Leipzig, or by Harwich, Hook of Holland, Leipzig—all taking from 30 to 33 hours. So, you see, the time varies hardly at all, although the price does somewhat. The Paris route is the most expensive and on that line there are also trains *de luxe* on Tuesdays, Thursdays and Saturdays.

One can leave *Victoria* at 10.0 a.m., and be in Prague about 6 the next afternoon, or leave *Liverpool Street* at 10 a.m. and arrive in Prague by 3.50 p.m. By these last two routes one can secure second class sleepers, a great advantage to those who do not wish to travel first class, and yet want to have the comfort of a sleeper. The cost of a three week's holiday



if you do not attempt to order English dishes, but keep to the excellent Czech diet.

When there is no real water supply, the wines of the country or the famous light beers and mineral waters make a good substitute; I have never come across any place which seemed unhealthy.

The Giant Mountains offer charming excursions all spring and summer, whilst the winter sports are specially attractive. In the High Tatra, in the Carpathians, winter sports are most popular, and during July, August, and September the endless variety of climbs, walks, and excursions make the district ideal for a lengthy summer stay. Here are also famous sanatoria, reached by electric railway, where the most particular person can be sure of every comfort.

The Sumava Forest, in south west Bohemia, is another lovely spot, quite unknown to the British tourist. Slovakia, in the late spring and summer, is an endless source of interest, but it is not advisable to go there between October and April. In all the less frequented villages the picturesque native costumes can be seen on Sundays and holidays; and equally interesting are the native pottery, lace, embroideries, wood-carving, and the fascinating, decorated cottages and wooden churches. If you are lucky, you may hear choral singing, and even come across dancing at some rural festival—a wedding or religious fête. Slovakia is a paradise for the fisherman, and it is not hard to get leave to fish in the mountain streams.

Moravia is a most charming province, where native costumes abound; one can appreciate this part better by car, wandering through quaint villages, always finding a meal at some "hostinec." Don't miss seeing the vast stalactite caves of the Macocha. Chars-a-banc await you at Blansko, on the main line from Prague to Brünn, during the season.

Ruthenia, the eastern province, is the most picturesque part of the Republic, but is not yet quite ready for tourists; the accommodation being rather rough. However, anyone used to rather primitive conditions would love the wild mountain streams rushing down from the Carpathians, the primeval forests, with trees over 150 feet high, the peasants with their

is approximately £35, travelling second class, but using the best available accommodation. This is taking a low, but quite reasonable estimate. Of course, elaborate meals with expensive wines would raise the cost considerably. Tips are not usual, 10 per cent. being added on to the bill instead.

Do not try to bargain; in Prague you may find a few tourist shops for the foreigner, but not elsewhere. It is perfectly safe for ladies to travel alone anywhere, even in the most rural districts. I advise luggage which, at a pinch, can be handled personally; cross-country journeys are greatly complicated by registered or booked luggage. At some small junctions the porter combines many offices and he is not always available. At one station you may be surprised to find a bevy of women porters who will shoulder the heaviest cases with ease.

Prague is delightful at most times of the year, though in August it might be too warm. In the spring, with the acacias in bloom; in September, with the autumn colouring of the trees against the grey buildings; and in winter, under its mantle of snow, the city is a joy. You will need several days if you wish to see it thoroughly. Besides the Hradcany Castle, the Cathedral, and other churches and buildings, there are the museums, the interesting collection of the Czech Legionaries, and the Strahov Monastery with its famous library.

You must see the view from the Petrin Tower and dine on the island in the Vltava. A trip up the river is amusing, especially on Sundays, when literally thousands of people are bathing and boating.

One can wander through the mediæval, fortified towns of Bohemia with sketch book or camera, and find something fresh at every turn. Look on the inns as such, don't think of them as hotels, and you will be amply satisfied; the food is always good, especially

gorgeously embroidered sheepskin coats, and the old wooden churches with their separate belfries. The autumn tints are exquisite. At vintage time, the wonderful white grapes keep



[Photos by courtesy of the Czechoslovak Travel Bureau.]

The Town Square, Trenčín, Slovakia.

the population of the plains busy. The State is proud of its wine-cellars, which are worth a visit. The salt mine at Akan Slatina is also worth seeing—a vast concern which employs

(Continued on next page.)

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One of the Stalactite Caves of the Macocha: The Sternberg Pillar

* In a talk broadcast from London, through Daventry, on June 19.

everyone in the district and provides the whole Republic with salt.

The castles, whether ruined or well-preserved, are one of the great features of Czechoslovakia. Nearly every point of vantage used to have its fortified castle or burg, and it is astonishing that so many of them remain in excellent condition. Some of the Austrian nobles had a score or more of estates, and owned whole districts—splendid forests with a castle. The President has been presented by a grateful people with the castle of Lany, near Prague, and when not in residence at the Hradcany Palace in Prague, lives there, or in another delightful country home, Topolciany, in Slovakia.

As to language, German will carry you almost everywhere, but many Slovaks speak English, as they used to emigrate to the United States, and when they returned home with their "pile," they kept up the new language. Thus, in some remote spot, your request, in broken Czech, for stamps, may be replied to by the postmaster in perfectly good "American."

Prices vary according to the standing of the places; the well-known spas, such as Karlsbad (now called Karlovy Vary) are expensive, but there are innumerable watering places, less known and comparatively cheap, which the Czechs themselves patronise. Prague and Bratislava hotels are reasonable, though not cheap, but if one knows where to go one can get exceedingly cheap meals. Railway fares vary according to the train chosen, an express costing more than an ordinary or "person's" train. An excellent method of observing the ways of the peasants is to travel by the slowest train on a Sunday and see the groups of picturesque folk on the platforms. One even sees the Elizabethan ruff. If you want to visit imposing works and factories, there are any number of opportunities. At Brünn there is an International Exhibition this summer and autumn, which will no doubt attract many strangers.

Motorists can be sure of finding petrol almost everywhere, and the roads are not bad; Czech drivers are the boldest I have ever met, and they gaily twirl their strongly-made cars round the most appalling bends, or over bog-like roads, which we should consider quite impassable.

One word about Czech drama. This plays an important part in the life of the people. Not only in Prague, where the National Theatre is too well-known to need further remark, but in Bratislava and Brünn, and many other places, drama and opera are given great prominence, and a high standard is reached. The Prague Opera is closed in July and August. The best concerts take place in the winter and early spring. The Jewish players of Ruthenia have a small but very powerful company. I saw one performance which was intensely gripping, though I did not understand a word of the dialogue.

The restaurants all have good music, and, if anything, there are too many musicians.

All Czechs and Slovaks seem to have a natural bent for music and a little education in that line produces an artist. In Slovakia, small boys run about with a violin slung on their shoulders and the peasants sing exquisite melodies, which are in many cases traditional. I have a great weakness for the Slovaks, who are not only intensely artistic but have a strong personal charm, like the Irish. There is quite an artists' colony in Slovakia, where a modern school has arisen, full of local colour and expression. At Bratislava a vigorous movement is on foot to encourage native arts and crafts and to preserve the national designs and colourings. The whole country gives one the impression of being alive to the importance of progress and modern ideas, whilst seeing the value of keeping all that was good in times past. Tennis is played everywhere, and swimming is a favourite pastime, whilst large bands of young folk wander round the countryside, in holiday time, with knapsacks, on prolonged and strenuous walking tours.

Dominion and Foreign Broadcasting Intelligence

EAST AFRICA

Kenya Station Opened

The first broadcasting station in East Africa was opened on June 14 we are informed by the Commissioner of His Majesty's Eastern African Dependencies' Trade and Information Office. This new station is situated in Kenya, a few miles out of Nairobi, the capital of the Colony. Kenya is the first British Colony to possess a short-wave broadcasting station.

SOUTH AFRICA

New Wireless Legislation

May 18, 1928.

(From our Cape Town Correspondent.)

An important Bill, introduced by the Minister of Posts and Telegraphs, to amend the South African Radio Act of 1926 has already been read a first time in the Union House of Assembly, and the second reading will probably be taken today. A section of the old Act is to be repealed and substituted by another which provides that any person who erects, maintains, uses or has in his possession any radio apparatus without an appropriate licence or permit as required by the Act shall be liable to conviction with the penalty of a fine and/or confiscation of apparatus and cancellation of licence. Sub-section 2 of the Bill prohibits the sale, or gift or supply of any radio apparatus from one person to another unless he holds a licence to deal in, or a permit to transfer such radio apparatus, issued by the Postmaster-General. (Such licences, each of which shall expire on the thirty-first day of December next succeeding the date of its issue, and such permits, may be granted free of charge by the Postmaster-General), and under sub-section 3 it is an offence for a person licensed under sub-section 2 to deal in radio apparatus, if he sell, give, or in any manner whatever supply any radio apparatus—(a) to any person who is not the holder of an experimenter licence, a broadcasting licence, or a listener's licence; and (b) unless he keeps a true record of such transaction by means of an invoice written by him or under his direction and signed by him at the time of the transaction, setting out the date of the transaction, his name and address and the name and address of the person supplied. The last clause of the amending Bill attempts a new definition of the words "radio apparatus." It says: "Radio apparatus" means any radio aerial, radio crystal set, radio loud speaker, or radio telephone receiver, and includes any other article used for radio which the Minister has from time to time declared to be radio apparatus, provided that the Minister may at any time cancel any such declaration."

AUSTRIA

(From our Vienna Correspondent.)

The Postponed Drama

Rosegger's drama, *On the Day of Judgment* is to be given in the Ravag studio on Sunday, July 1, having been postponed from July 16 last, when, owing to the disturbances in Vienna, there was no radio broadcasting. After that, the title was thought likely to be unpopular, particularly as the theme of the play is judicial proceedings and the punishment of crime in the Austrian Alps, and several hundred persons in Vienna were awaiting trial for offences committed on July 15 and 16. The play itself is not of a gloomy cast. Peter Rosegger, one of the most popular of Austria's poets and prose writers, died in 1918 at the age of 74.

"The Merry Wives" in German

On Tuesday, June 26, there will be a play from the Academy Theatre in Vienna of the opera *The Merry Wives of Windsor*, in its German form, *Die Lustigen Weiber von Windsor*, at 7.30 p.m.

GERMANY

Slight Decrease in "Pirate" Convictions

(From our Berlin Correspondent.)

Radio-pirates (*Schwarzhörner*) to the number of 551 were sentenced in Germany from January to March last, as compared with 558 in the same period last year and 618 in the last quarter of 1927.

Return of Atlantic Flyers Broadcast

June 16, 1928.

Captain Köhl and Baron von Hünefeld, together with Major Fitzmaurice, are due to arrive back in Germany on Monday next. The Funk-Stunde, Berlin, who relayed the reception of the aviators in New York after their successful flight at the end of April, are arranging also to broadcast incidents in connection with their return. The first of these transmissions will be given as *S.S. Columbus* nears port. This will be followed by a welcome of the airmen on board by the people of Bremen-haven, and, later, by an official welcome through the North German Lloyd. Celebrations on the Tempelhof flying ground, Berlin, are being organised for Wednesday, June 20, and these will be broadcast from 1.45 p.m. In the evening of the same day an official reception will be given to the three aviators in the Fest-sälen von Kroll in the Platz der Republik. Speeches will be given by the Minister of Communications, the President of the German Reich, and the British and United States Ambassadors.

More Radio Plays

(From our Stuttgart Correspondent.)

The German stations are increasing the time allotted in their programmes to performances of "Hörspiele," that is, radio drama, or plays especially written for broadcasting. Stuttgart produces "Im Aether" (In the Ether), by R. Masur, on Monday, June 25, in the evening.

Leipzig's Special Programme Features

(From a Correspondent.)

On Sunday, June 24, at 7.30 p.m., Leipzig is honouring, by a reading from his "Aphorisms," the memory of Walter Rathenau, the German industrialist and philosopher who was murdered in Berlin by political opponents on June 24, 1922. Other interesting items in the Leipzig programme include a relay of Mozart's *Don Juan* from the Dresden State Opera, on Monday, June 25, at 7 p.m. and a studio rendering, on June 29, at 8.15 of Johann Strauss's *Waldmeister*. On June 30, at 8.15, a "Wunschabend" will be given, the items of which will reflect the wishes of listeners in the Leipzig and Dresden area.

Wagner and Mozart Festival Broadcasts

(From our Munich Correspondent.)

On enquiry, the Deutsche Stunde inform me that it is not yet quite settled whether festival performances of Wagnerian operas will be relayed from Bayreuth. The Bavarian stations have, however, already arranged for several relays from the Wagner and Mozart annual festivals in the Regent and Residenz Theatres in Munich.

NORWAY

Saturday Evening's Programme

(From our Oslo Correspondent.)

For English listeners who are fond of Norwegian music, the programme on Saturday, the 23rd, should be of much interest. This will begin at 8 o'clock with an orchestral performance of the old Norse Hunter's March; Ole Bull's "Sæter Girl's Sunday," Grieg's "Dovregubben's Hall," and Kjerulf's "And the Fox lay under a Birch-tree Root," will follow.

A Portable Adventure

By HOLT MARVELL

IF you do decide this summer to buy one of those portable wireless sets, be sure that it isn't by any chance a four valve "True Blue"—unless, that is, you intend to present it to someone who has done you a mortal injury. Now I come to think of it, though, this warning is quite unnecessary because the True Blue people went smash about Christmas time.

Where was I? Ah, yes! the Four Valve "True Blue" Portable. I first came to hear of it in this way. Millicent Dovecote—she's the girl who used to be engaged to Ernest Fothergill—telephoned me last summer to invite me to a picnic. "It's Ernest's birthday on Saturday!" she explained. "Mother and I are giving him a 'True Blue.' We thought it would be a good idea to take it to the woods in the car and have our tea under the trees. You'll come? Good!" Thereupon she rang off.

I spent the rest of the week wondering what on earth a "True Blue" could be.

On the Saturday I presented myself at the Dovecotes' house. Ernest Fothergill opened the door, his face wreathed in smiles. "What do you think Millicent has given me for my birthday?" he asked.

I confessed that I had been in the secret. "I'm not so sure, though," I said, "that you're the sort of man I'd entrust a valuable 'True Blue' to. These highly-bred dogs need a lot of looking after!"

"Dogs my foot!" he retorted impolitely. "Come and look at it!" He led me into the drawing room where, upon a table, stood a large box "of mahogany finish" (as they say in *The Undertakers' Year-Book*).

"What on earth is it?" I asked.

"Wireless, you half-wit! No earth or aerial trailing about the place—loud speaker in the lid—four valves—gets forty stations and—er—all that!"

I was impressed—particularly when with careless self-assurance he opened the lid and started swinging the knobs about. Nothing happened, though. The "True Blue" remained dumb. "The programme can't have started!" he said airily—but a contemptible suspicion crossed my mind that perhaps he didn't know how to work the thing!

Millicent and her mother came downstairs and we climbed into their car. The Dovecotes' car isn't—well, a frightfully good one. It's silly about starting. It took Fothergill ten minutes to get the engine running—but we moved off down the road in unimpeachable style.

When we had gone a hundred yards, Fothergill said brightly, "We've left the 'True Blue' on the table in the drawing room!"

"If you'll stop the car," I told Millicent, "I'll run back and fetch it!"

"I shouldn't do that—stop the car I mean. It's so difficult to get it started again. We'll slow down so that you can jump off—and crawl along until you catch us up again!"

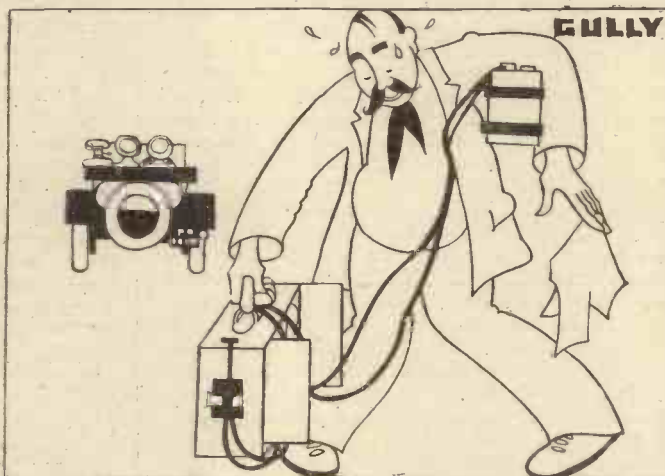
I ran back to the house and entered the drawing room. "Come along, my hearty!" I said to the "True Blue," taking it by its leather handle and lifting it from the table. Pause for thought!

It may have been a portable set—though designed for the special use of that chap called 'The Perfect Man whose muscles ripple all over the advertisements in the morning paper. Somehow or other I got back on to the road. Up at the top of the hill I could see the car. It looked a long way off. I groaned as, at a jog-trot, the "True Blue" and I started in pursuit.

My arms seemed to be wrenched from their sockets, my shirt grew clammy at every step. And to add to my annoyance, as I arrived within a yard or so of my objective, a sweet womanly voice from the bowels of the "True Blue" exclaimed, "Now a nice cooling drink for the summer can be made by first icing a bottle of hock and then adding a pound of ripe strawberries..." As Fothergill proudly explained I must have switched the thing on by mistake and got on to the Household Talk.

They laughed a good deal at my overheated condition.

I had the laugh of Fothergill, though, when, later, on our arriving at the woods, he had to lug the "True Blue" about between the trees, while Mrs. Dovecote chose a place for tea. When he tripped over a log and dropped the set on his foot, I nearly died of laughter! During tea we listened to the "True Blue." We had to listen pretty closely for it never spoke above a whisper.



"Something disconnected!" Fothergill said.

Fothergill opened the back door of the thing and fiddled about with its anatomy. That gave him an electric shock. He swore—and Mrs. Dovecote nearly choked herself with a piece of jam turnover. We decided to leave the "True Blue" alone until after tea.

Unfortunately, Fothergill had left the back-door open and, when we returned to the attack, we discovered that two bumble-bees had got in among the valves and things. "Take them out!" wailed Millicent. "They'll damage the delicate mechanism!"

"Delicate mechanism be blown!" retorted her fiancé. "I believe the thing's made of cast iron. It feels like it!" However, they made such a fuss about the bees that he had to try to remove them.

The bees were enjoying themselves. They had never seen a "True Blue" before—and they were taking a good look round. They both stung Fothergill—twice. When I was a lad, they told me that as soon as a bee stings you it dies. Don't believe it! Ask Fothergill! His face got very red and his language very blue. When at last the bees were dismissed, Mrs. Dovecote thought that perhaps we'd better not tinker with the set any more, but take it back to the shop in the morning. Instead of revelling in the world's broadcasting, we lay and listened to "Mrs. Dovecote Calling!"

At the end of the afternoon Fothergill carried the "True Blue" back to the car. I was lost in admiration of his physique—until, when we shoved the thing in the car, we discovered that he had omitted to lock it up and consequently both the batteries and a number of other things had dropped out on the way!

Fothergill is no longer engaged to Millicent Dovecote—and, as I believe I mentioned before, the "True Blue" people went smash just about Christmas time!

(Continued from page 907.)

This will be given at midday. At 11 a.m. there will be a concert by the band of the 7th Alpine Jäger Regiment in the Redoutensaal at Linz.

Linz station will be the first erected in Austria of British manufacture. The station is of 0.5 kw. capacity, and experiments in distribution have been made since May 21, on a wavelength of 258.6 m., which has now been altered to 254.2 m. The results have been entirely satisfactory. Relays from Vienna have also been excellent. Of course, a station of such relatively low power is only meant to serve Upper Austrians who cannot receive Vienna, which is 125 miles distant, with simple sets. Its two masts are 45 metres high and 120 metres apart. Linz city has a population of 110,000.

After the first portion of the military band concert on June 24, there will be speeches by the Governor of Upper Austria, Dr. Josef Schlegel, the Burgomaster of Linz, Herr Robert Mayr, and the Managing Director of the Ravag, Herr Oscar Czeija. Then the military band will play two more items, and the whole of this programme in the Redoutensaal will be broadcast not only by Linz but by Rosenhügel, Graz, Klagenfurt and Innsbruck. The concert of the Vienna Philharmonic Orchestra conducted by Herr Frank Schalk, the famous conductor of the Vienna State Opera, will begin in the Linz Gymnastic and Festival Hall at 3.0 p.m. After that the Vienna programme will be relayed, concluding with the concert of the Vienna Symphony Jazz Orchestra.

Ravag is continually outgrowing its premises in Vienna, and a portion of the great music-hall building known for many years as Ronachers is now being adapted for offices and studios. The main room of a former cabaret called the "Parisien," which formed part of the Ronacher building, will be the principal studio there.

One of Ravag's advantages is that the language of Austria is German, and, unlike many of its eastward neighbours, it does not have to cater for minorities speaking another tongue than that of the State. It has a Council comprising members from all parts of the country, and at the meetings, held in Vienna, there is always free discussion of topics of every sort. The Government, though of course retaining supreme control, interferes as little as possible, the offices of Ravag seeing to the elimination of political propaganda from lectures, of which the text must be submitted several days before delivery.

One point of interest attaching to the Johannesgasse studio is that in 1919 it was used as a makeshift barracks for the British troops who were sent to Vienna to guard the international relief food supplies. Of course, structural changes have been made on a large scale, the building having been formerly a school. The Rosenhügel station is built over a reservoir, and this somewhat daring experiment—as it was considered at the time—has been fully justified by results.

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Broadcasting and Languages

FRENCH

POSITION DE L'ACCENT DE FORCE EN FRANÇAIS

The French transmission through Daventry from the London station next Monday evening at 7.25 p.m. will take the form of a practical demonstration of pronunciation given by M. E. M. Stéphan, with an English student. We are therefore substituting for the text of the broadcast talk a special article on pronunciation by M. E. M. Stéphan.

Lorsque nous désirons mettre une syllabe en relief, nous renforçons le courant expiratoire ; en d'autres termes nous faisons un plus grand effort, et en même temps, nous accompagnons cet accent de force d'une intonation spéciale. N'oublions donc pas que le mot *accent* signifie, entre autres choses, l'intonation spéciale, non emphatique ou emphatique, qui accompagne la syllabe forte.

Pour accentuer correctement une langue il faut savoir deux choses :

(1) Il faut savoir quels sont les mots de la phrase ou du groupe de sens, qui doivent recevoir l'accent.

(2) Il faut savoir laquelle des syllabes de ces mots doit être accentuée.

Examinons d'abord le second problème. Dans un mot français, quelle syllabe faut-il accentuer ? D'une façon générale, on peut dire, que tout mot français isolé qu'on ne désire pas prononcer avec une emphase spéciale, a l'accent sur la dernière syllabe prononcée. Toutes les syllabes du mot ont un accent moyen à peu près égal, excepté la dernière syllabe qui se prononce un tout petit peu plus fortement que les autres.

Nous dirons : ta/bleau, ma/tin, ache/ter, restau/rant, gymnas/tique, etc.

Le système est donc très différent du système anglais. Nous remarquons immédiatement deux différences considérables :

(a) Tandis qu'en français l'accent normal est toujours sur la dernière syllabe prononcée du mot à accentuer, en anglais la position de l'accent varie d'un mot à l'autre. Le pauvre étranger qui apprend l'anglais ne sait où donner de la tête, il faut qu'il apprenne la position de l'accent dans chaque mot nouveau qui se présente.

(b) L'autre différence tient à ce que l'accent d'intensité est beaucoup plus fort en anglais qu'en français ; par suite le contraste entre la syllabe forte et les syllabes faibles est bien plus marquée dans un mot anglais que dans un mot français. Il suffit pour s'en convaincre de comparer des mots tels que : *photo*/graphy et *photo*graphy, *sub*/stantial et *sub*stantial, etc.

A côté de cet accent normal qui tombe régulièrement sur la dernière syllabe, il en existe un autre en français : l'*accent emphatique* auquel on a recours quand on veut tout particulièrement attirer l'attention sur un mot. Le rythme normal du langage se trouve alors dérangé, soit par besoin d'antithèse, soit pour raison émotionnelle.

La place de l'accent emphatique est généralement sur la première syllabe quand le mot commence par une consonne, et sur la seconde syllabe quand le mot commence par une voyelle :

Ex. /ravissant, /magnifique, /parfaitement, ex/cellent, ab/solument, é/pouvantable.

Prononcer emphatiquement un mot français consiste donc à déplacer l'accent. Il n'en est pas de même en anglais où la syllabe accentuée est la même, que le mot soit prononcé avec ou sans emphase. Pour mettre un mot anglais en relief on se contente de renforcer la syllabe accentuée.

Remarquons en passant, que le déplacement de l'accent, par besoin d'emphase, ne fait pas disparaître l'accent normal. Quand on le prononce emphatiquement, tout mot français isolé, de deux syllabes au moins, a donc deux accents : l'un, l'accent oratoire, sur la première syllabe, et l'autre un peu plus faible, l'accent normal, sur la dernière syllabe.

Maintenant, après avoir considéré l'accent dans les mots isolés, passons aux groupes de mots qui constituent le langage suivi. En ce qui concerne l'accent de force, les mots formant un petit groupe de sens (syntax-group), sont traités comme s'il s'agissait d'un seul mot long. Quand on parle sans emphase, c'est donc la dernière syllabe du groupe qui reçoit l'accent le plus fort. Nous dirons : l'*empire britan/nique*, avec un seul accent fort sur la syllabe *nique*, tandis que si les mots étaient isolés il y aurait deux accents de force : l'un sur la syllabe *pire* du mot *empire*, et l'autre sur la syllabe *nique* du mot *britannique*.

Dans la chaîne parlée, l'accent normal, non emphatique, des mots français, dépend donc de leur place dans les groupes ; c'est un accent de position. En anglais, l'accent d'intensité, dans un groupe de mots, n'a rien à voir avec la position des mots, et dépend entièrement de leur importance. Certains mots : substantifs, adjectifs, verbes principaux, adverbies, pronoms démonstratifs et interrogatifs, sont toujours accentués, quelle que soit leur position dans le groupe. Voici une phrase anglaise où tous les

mots doivent se prononcer avec un accent de force : /Last/week/father/bought/two/new/houses.

Prenons la phrase française correspondante : *La semaine der/nière, papa a ache/té deux maisons /neuves*. Cette phrase se divise, comme vous le voyez, en trois groupes de sens (groupes grammaticaux), et la dernière syllabe de chaque groupe reçoit un accent de force, de sorte que nous n'avons que trois accents d'intensité dans la phrase française, tandis que dans la phrase anglaise nous en avons sept.

Cette différence fondamentale, sur laquelle nous attirons l'attention de nos lecteurs, se remarque très facilement dans les groupes composés d'un adjectif qualifiant un nom. En anglais les deux mots reçoivent un accent de force, en français c'est le second mot, quel qu'il soit, qui seul reçoit l'accent de force :

Ex. a/good/book, a/new/house, un bon /livre, une maison/neuve.

Finalement, si dans un groupe de sens, ou dans une phrase assez courte pour ne former qu'un seul groupe, on désire mettre en relief un mot d'au moins deux syllabes, il faudra donner un accent de force à la syllabe emphatique de ce mot, et un autre accent un peu moins fort, à la dernière syllabe du groupe :

Ex. Il n'est/jamais à l'heure.

C'est ab/solument impos/sible.

Avec, /tous mes remercie/ments.

En/chanté de vous rendre ser/vice.

GERMAN

DICTIONARY

Wenn Sie an jemand schreiben, der ein Professor und ein Doktor ist, so müssen Sie den Brief adressieren : Herrn Professor Doktor. Der höhere Titel kommt zuerst. Wenn Sie den Herrn anreden, so sagen Sie : Herr Professor, und zu seiner Frau müssen Sie sagen : Frau Professor oder Gnädige Frau.

GRAMMAR AIDS

Regular Verbs

I should like to-night to say a few words about verbs.

Verbs can be regular or irregular ; the regular verbs are called weak, and the irregular strong. In this talk I shall only deal with the regular verbs.

Regular, or weak, verbs form their past tense by adding *-te* to the root — *kaufen* : to buy. The root is *kauf* ; therefore the past tense is *kaufte*. In the past participle they add *-t* to the root and prefix *ge* — *gekauft* ; *spielen*, *spielte*, *gespielt* ; *loben*, *lobte*, *gelobt* ; *fragen*, *fragte*, *gefragt*. Once you have impressed the scheme on your mind there is no further difficulty.

If the root ends in a *d* or a *t*, a slight modification has to take place in the past tense and in the past participle — *reden* : to speak. The root is *red*, and if we add *-te* to that root the *d*-ending of the root would no longer be apparent. English does not mind such formations, as you can see from *hit*, *hit*, *hit* and *put*, *put*. German, however, places an *e* between the dental ending of the root and the dental showing the past tense. The past tense of *reden* is, therefore, *redete* ; *arbeiten* (to work) would, therefore, have *arbeitete*, and *löten* (to solder) would have *lötete*. The same principle is, of course, applied to the past participle. The participle of *reden* is *geredet*, of *arbeiten*, *gearbeitet*, and of *löten*, *gelötet*.

The weak verbs have only one special subjunctive form in the third person singular present. As you know, a verb in English ends in *-s* in the third person singular present. If we leave out this "s" we obtain a subjunctive form — he comes, if he come. In German, the third person singular present ending corresponding to the English "s" is a *t* — *reden*, *er redet*. The subjunctive would be *er rede* ; similarly, *er arbeite* and *er arbeite*, and *er löte*, and *er löte*. If, therefore, you wish to express a subjunctive in any other person of the present

(Continued on Page 913.)

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1928

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Continental Programme Events

Sunday, June 24.

- 11 a.m.—Linz.—Opening of station.
- 8 p.m.—Munich.—A St. John's Eve concert, relayed from the shores of the Tegernsee.
- 8 " Langenberg.—"The Seasons."
- 8 " Linz.—Concert relayed from the Redoutensaal.
- 8.15 " Stockholm.—Open-air concert.

Thursday, June 28.

- 8 p.m.—Breslau.—"The Postillion of Lonjumeau."
- 8 " Stockholm.—"Three Little Girls."
- 8 " Stuttgart.—"Die Bajadere."
- 8.45 " Milan.—"L'Amore dei tre re."
- 8.50 " Naples.—"Silhouette" (Bellini).
- 9.15 " Rome.—"Il Bircichino di Parigi."

Monday, June 25.

- 7 p.m. Leipzig.—"Don Juan."
- 8 " Frankfurt.—Concert given by the Cambridge University Madrigal Choir.
- 8.30 " Warsaw.—International transmission to Berlin, Prague and Vienna; concert by the Warsaw Philharmonic Orchestra.
- 8.45 " Radio-Paris.—"Rip."
- 8.50 " Naples.—"Manon Lescaut."
- 10.15 " Königsberg.—Old and new madrigals.

Tuesday, June 26.

- 7.25 p.m. Hamburg.—"The Barber of Seville"
- 7.30 " Frankfurt.—"The Bat."
- 7.30 " Munich.—Mozart festival in Würzburg: Chamber music relayed from the Kaiser-saal.
- 7.30 " Vienna.—"The Merry Wives of Windsor" (Nicolai).
- 7.40 " Hilversum.—Marches played by the band of the Royal Grenadiers.
- 8 " Stuttgart.—Symphony concert.
- 8.30 " Berlin.—"Speaking film" transmission, with introductory remarks by the inventor, Dr. Guido Bagier.
- 8.30 " Breslau.—Orchestral concert.
- 8.45 " Radio-Paris.—(1) Messenger festival, conducted by the composer; (2) "L'Oiseau de feu" (Stravinsky).

Wednesday, June 27.

- 7.30 p.m. Oslo.—Schubert programme.
- 7.50 " Stockholm.—"Si j'étais roi" (Adam).
- 8.5 " Königsberg.—"Rund um die Liebe" (Straus).
- 8.15 " Brussels.—Selections from "The Pearl Fishers."
- 8.15 " Langenberg.—Symphony concert.
- 8.15 " Leipzig.—"An hour with Franz Schubert."
- 8.15 " Munich.—Richard Wagner programme.
- 9.10 " Rome.—"La Traviata."
- 9.15 " Leipzig.—Choral concert.

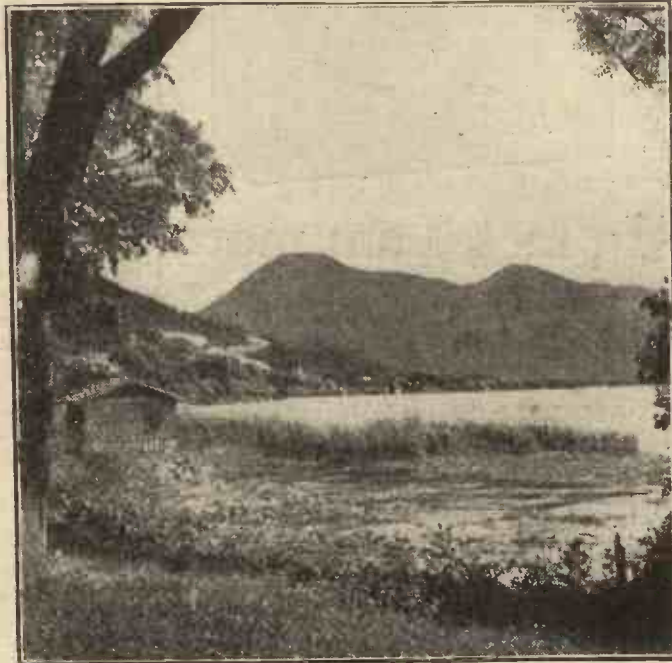
Friday, June 29.

- 6.30 p.m.—Vienna.—"Tannhäuser."
- 7.30 " Berlin.—"Othello" (Verdi).
- 7.30 " Budapest.—"The Barber of Seville."
- 8.15 " Leipzig.—"Waldmeister" (Strauss).
- 8.15 " Stuttgart.—"Storm in the Pacific" (Möhning).
- 8.30 " Radio-Paris.—(1) "La Vivandière" (Godard); (2) "Rapsodie Basque" (Bordes).
- 8.50 " Naples.—"Dejanice" (Catalani).

Saturday, June 30.

- 7 p.m.—Prague.—"Marriage of Figaro."
- 7.30 " Frankfurt.—"The Protagonist" and "The Czar allows himself to be photographed" (Weill).
- 8.15 " Vienna.—"Das Fürstenkind" (Lehár).
- 9 " Toulouse.—Choral concert.
- 9.15 " Rome.—"The Dancer."

Note.—Vienna has changed its programme for the evening of Saturday, June 23. The operetta, "Frasquita" will be substituted for the concert originally announced.



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CONTROL

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(Continued from page 912.)

and in the past tense you have to walk round it as in English: he may come, he would like to come, etc.

I should like to add a few general remarks which apply to all verbs. All verbs have an -n in the infinitive — *sehen, laufen, springen, turnen, spielen*; in fact, the ending is usually -en. But verbs whose root ends in l or r often

drop the e — *radeln*: to ride a bicycle; *schaufeln*: to shovel; *erwidern*: to answer, *bessern*: to improve.

All infinitives can be used as nouns, and they are always neuter; also they do not usually have a plural — *das Sehen*: seeing; *das Laufen*: running; *das Radeln*: riding a bicycle. You see that these verbs correspond to the English verbs in -ing.



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Modern Portable Receivers

TWO or three years ago self-contained wireless receivers which could be carried from place to place without having to be dismantled were generally regarded as scientific novelties, rather than as a means of reproducing aesthetically a broadcast programme. At that time, the components and accessories available made it an extremely difficult matter to build a really efficient receiver, working on a frame aerial, and yet so compact that the complete set could be housed in a container of reasonable dimensions from a portability point of view, and whose weight would not be excessive.

Since then, however, rapid strides have been made in the design of components and accessories, and although the general design of portable receivers has not changed a great deal, so great have been the improvements in details that to-day receivers are made which are completely self-contained and readily portable, and at the same time have a performance which compares very favourably with that of other types of receivers working on outdoor aerials. The range is naturally not quite so great, but the quality of reproduction is not appreciably inferior in a great many cases. Provision is usually made for using an outside aerial and an earth, if desired, so that the range can be increased, and under these conditions the performance of the better types of portable receivers is equal to that of the majority of non-portable receivers.

The frame aerial is usually arranged to be efficient for both long and short waves of the broadcast band by being wound in three sections, which are connected in series for long waves, and in parallel for short waves. This arrangement overcomes the inefficiency caused by loading a frame aerial, designed for short waves, to receive longer waves, or that caused by tapping or short-circuiting part of a frame aerial, designed for long waves, to receive shorter waves. It usually means, however, that there is a gap from about 500 to 1,000 metres in the tuning range, as with the three sections wound to give a range of about 250 to 500 metres when connected in parallel, the range when these are connected in series is about 1,000 to 2,000 metres. This does not matter, however, as it is very seldom that one desires to receive stations working within the band 500 to 1,000 metres.

The majority of present-day portable receivers employ two H.F. stages in order to give a reasonable factor of signal strength, so that the listener can be fairly sure of receiving several stations in almost any part of this country. As portable receivers, when used as such for outdoor entertainment, are mostly used in daylight, two H.F. stages are almost essential if reliable loud-speaker reception is required at distances greater than about thirty miles from a main B.B.C. station. In many cases, of course, satisfactory reception can be obtained, especially at night, with only one H.F. stage, at greater range than thirty miles from a B.B.C. station, and high-power stations like 5XX, and 5GB, and some of the Continental stations can be received at very much greater distances even with one H.F. stage. It should be borne in mind, however, that reception of stations on the broadcast band (200/600 metres) at night, at distances greater than 80 to 100 miles, is always liable to interruption by fading, irrespective of the power of the transmitter and the type of receiver used.

In order to make the controls as simple as possible, and to economise space, the couplings for the H.F. stages usually consist of aperiodic chokes or transformers. This means that the maximum possible amplification is not obtained from those stages, but operation is considerably simplified, and the set is rendered much more stable than would be the case if those stages were tuned.

Stability is much more difficult to obtain in a portable receiver where all the components

are in close proximity to each other, and to the aerial, and loud speaker, than in receivers where compactness is not of primary importance, and which are not self-contained. In addition, a fairly large degree of reaction has to be employed to obtain reception of distant stations, and it is important that the control of this should be smooth, otherwise the set suddenly bursts into oscillation which is usually accompanied by L.F. oscillation as well as H.F. oscillation.

Leaky grid detection is usually employed on account of its sensitivity being greater than that of anode bend detection, although one or two receivers on the market employ the latter. In the early days of portable receivers, when dull emitter valves of the .06 type were used on account of their low consumption, considerable trouble was experienced with microphonic noises, especially from the detector valve. This could be very largely overcome by packing the detector valve in cotton wool or similar material. Since the introduction of valves of the .1 type, trouble due to microphonic valves has considerably decreased, although it is still sometimes desirable to pack the detector valve in cotton wool; in fact, it is often a good plan to pack all the valves in this manner if the set is likely to be subject to severe jolting when being transported from place to place. Very often the valves are mounted close together in anti-phonic holders, and if the set is badly jolted they may hit one another, or adjacent parts of the receiver, unless so protected.

Two L.F. stages are practically always employed in portable receivers, and are usually both transformer coupled to give good amplification with low values of H.T. Provided good transformers are used, and care is taken to prevent interaction, the results obtained are quite satisfactory.

Modern loud speakers, usually of the cone type, give much better results than the type of loudspeakers used in portable sets a few years ago, when it was too often the practice to fit the smallest possible horn and base that could be found to reproduce audible sounds, whatever the quality of reproduction.

Limitations of space and weight necessitate the use of H.T. and L.T. batteries as small as practicable without sacrificing purity of reproduction to any considerable extent, and causing too frequent renewals or re-charging. H.T. dry batteries of about 100 volts are usually employed, and 2 volt unspillable accumulators are generally used for supplying the valve filaments. Dry batteries are rarely satisfactory for this latter purpose, and should only be used in cases of emergency. Modern unspillable accumulators of the best types really are unspillable and can be left upside down for very considerable periods without the smallest drop of acid finding its way outside. It is essential, however, to ensure that the acid level does not exceed that indicated by the makers, otherwise acid will most certainly find its way outside the accumulator and cause damage to the receiver.

A number of unspillable accumulators contain glass wool to absorb the acid and so prevent leakage, any surplus acid being shaken out of the accumulator after charging. These accumulators are not generally as satisfactory as other types which rely on special vents and acid compartments for preventing leakage of acid, as they are very liable to sulphate if left uncharged for very long. Whichever kind is used, precautions must be taken to see that the accumulator is not left uncharged for any length of time, as it very often happens that a portable set is put on one side for a while and then, when next required, the accumulator is found to be completely ruined.

For general outdoor use, a portable receiver contained in a leather attaché case is usually preferred, but many self-contained receivers are enclosed in handsome wooden cabinets and

(Continued at end of col. 1, page 915.)

Last Week's Log

By "NORTHERNER"

THE most notable feature in my records covering the period under review would appear to be the great uncertainty experienced as to what transmissions might be heard on switching on one's receiver. I apply this observation almost solely to the section between, say, 600 and 300 metres. There have been times when the supposedly "certain" stations appeared to be very retiring and their signals were practically inaudible, yet within twenty-four hours they have returned to full normal strength. Amongst such I can name Vienna (517.2 metres), Langenberg and Stuttgart. The case of Vienna is really of a negative nature, since I have lately received this station very well at times, whereas until recently I have had no satisfactory reception from there since early May. I noticed this particularly on June 11, when the Voxhaus programme was sent out S.B. in Poland, Austria and Czechoslovakia, and on which occasion I found the Vienna relay was much the best external reproduction, and not very noticeably weaker than that from Königswusterhausen.

Summertime conditions, with increased daylight, are responsible no doubt for these unexpected results, and so far as I am concerned the uncertainty adds a very distinct interest and attraction to searching.

Since about June 12, to the time of writing, a very marked improvement in signal strength on all wavelengths has been noticed, and it would almost seem that the atmospheric conditions and the relative positions of anticyclones and depressions have a definite bearing on signal strength from various points of the compass. Speaking very generally the best signals I receive are from the east, but occasionally these weaken, whilst those from a more southern quarter are somewhat increased.

Dublin is now a very good transmission to hear, and appears to have lost that tendency to distortion, at regular intervals, which, previously, to a large extent spoiled the programme, at least as received in my locality. Budapest remains inaudible until dusk and then rapidly improves.

On the long waveband, fortunately, there has been less variation in signal strength, although static has been rather troublesome. It is good news to see that Hilversum is now commencing the summer season relays from Scheveningen. I scarcely know whether 900 metres is a long or a medium wavelength, but there has been considerable improvement in signal strength recently.

On the short wave section, static has been noticeable, but nevertheless this waveband is always reasonably quiet below 30 or 35 metres. June 3 gave an opportunity to hear both 3LO, Melbourne, and the Sydney short-wave transmitter, both these being in operation during the normal Sunday period, viz. 7.30 to 9.30 p.m. B.S.T. At 9.0 p.m. Melbourne clock was in very close agreement with "Big Ben" from 5XX. I found Melbourne somewhat stronger than Sydney, but thought the quality from the latter decidedly better.

Presidential Election matters are much in evidence in those of the U.S.A. transmissions from which speech is sufficiently strong to be followed.

are suitable for drawing-room as well as outdoor use. The latter are usually too heavy and bulky to be really portable, but when suitable transport facilities are available this is perhaps not of much importance. They are often provided with a turntable in the base of the cabinet so that the set can be easily rotated until the wanted station is received at maximum strength. In this connection, it should be borne in mind that maximum signals are not necessarily received when the frame aerial is pointing towards the transmitting station, as, owing to local surroundings, the distribution of the electromagnetic field in the vicinity of the receiver may be considerably different from what it would be in plain open country.

W. G.

SHORT WAVE STATIONS

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

M.	Kc.	Station
85	3529	Zürich (Radio Club) EH9XD
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.
66.04	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).
64	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.
59.98	5003	Bound Brook (N.J.) 3XL, 30 kw.
58.5	5128	New York City (2XE). Relays WABC. Weekdays 11 p.m. to 5 a.m. SUN. 3.50 p.m. to 5.30 p.m.
56.7	5291	Nauen (AG) occasionally after 7 p.m.
54.02	5583	Columbus (Ohio) XJ.
54.02	5553	Coney Island (N.Y.) 2XBH, 0.15 kw.
54	5558	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) 1AX. Broadcasts occasionally.
44.4	6696	Vienna, 0.24 kw.
43	6976	Pittsburgh East (Westinghouse Electric) KDKA.
42.8	7009	Constantine (Tunis)—8 KR. SAT., 10 p.m. to midnight.
40.2	7463	Lyon (Rhône) YR. Daily except SUN from 4.30 to 5.30 p.m.
38	7894	Agén.
37.65	7988	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. 10.30 p.m.-midnight.
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 6.56 a.m. and 8.56 p.m.
32	9375	Zürich (Radio Club) EH9XD.
32	9375	Melbourne (3LO). SUNDAYS, 7.30 p.m. to 9.30 p.m.
32	9375	Johannesburg (JB).
32	9375	Berne (Switzerland) EH90C.
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	9600	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.
30.7	9772	Madrid (EAM).
30	10,000	Bergen (Norway) LGN.
28.5	10,528	Sydney (2FC).
27	11,111	Pittsburgh (8XK). MON. and THURS. 7 p.m. to 9 p.m., 40 kw.
26.92	11,144	New York (2XAG).
24	12,500	New York (2XAB).
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	13,513	Vienna, 0.24 kw.
22.1	13,574	Richmond Hill (N.Y.) 2XE (S.W. of WABC), after 11 p.m.
21.98	13,661	Schenectady (General Electric Co.), 2XAD. SUN. to 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	17,647	Bandoeng, Java (Radio-Malabar) ANH, 30 kw. SAT., 1.40 to 3.40 p.m.
16.02	18,728	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	18,354	Nancy (France).

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Technical Difficulties

By "SPARKS"

High Frequency Amplification

"I live three or four miles from the Dublin station and want to cut that station out by the use of a high-frequency valve so that I can receive other stations. I cannot obtain stability. Will you tell me which is the best simple circuit, using ordinary plug-in coils, of which I have a variety?"

IN view of the fact that the enquirer lives some little distance from Dublin station, which has the power of only 1 kilowatt, there should be no difficulty in cutting that station out with a quite simple circuit using one high-frequency valve. This may be either of the tuned-anode or tuned-grid type. If the former, a seventy-five-turn coil should be connected in the anode circuit of the first valve, and a variable condenser having a capacity between .00025 and .0005 connected across the coil. A simple method of neutralising this circuit to prevent self-oscillation is to use a coil which has a centre tap. If one of these is not available, it is not a difficult matter to find a centre point of the coil. Strictly speaking, it should be the electrical centre, but a tap taken at about the thirty-fifth turn will serve the purpose. This should be connected through a small neutralising condenser to the grid-return lead, that is to say, the earth side of the aerial-tuning coil. If the tuned-grid method is used, a 600-turn coil should be inserted in the anode of the first valve, and the low-potential side of that coil connected through a neutralising condenser to earth, a fifty-turn coil being connected across the grid-filament circuit of the next valve, the variable condenser of .00025 to .0005 in parallel with it. The grid side of this coil should be connected through the condenser having capacity of about .0002 to the anode of the high-frequency valve. If cumulative grid rectification is used, the grid leak may be connected across this condenser;

if anode-bend rectification, then the other end of the tuning coil should be connected to the appropriate negative tapping on the grid-bias battery. Of course, a more efficient stable circuit can be devised by the use of six-pin coils, screen valves, etc., but the correspondent particularly requests that the circuit should use plug-in coils and ordinary valves only. One important point is that no reaction should be used with either of these circuits, as the use of a reaction coil will negative the stabilising effect of the neutralising condenser.

Aerial Systems

"My three-valve receiver does not give good results in Leicester. Both Daventrys are received at once. I have only a twenty-foot aerial and am not allowed by the landlord to attach it to the roof, but only to an upper window. There is a disused well in the yard and I have been advised to put an aerial down it. Would this be of any use?"

It is extremely doubtful whether an aerial down a well would improve matters at all in this case. "Sparks" has actually no experience of subterranean aerials other than a frame aerial operated experimentally in a railway tunnel, for which a special receiver was constructed. If, however, the set does not give satisfactory results with an already restricted outside aerial, it would not be likely to give better results with a subterranean one. In fact, it may be taken for granted that this is the case.

With regard to the lack of selectivity, it is more than probable the fault lies with the receiver itself. Provided that a set is reasonably well conducted, it is fairly safe to say that the shorter the length of the aerial the greater the selectivity. Look to the insulation of the aerial and make sure that it is adequately spaced from all earthed objects, walls of buildings, etc. Also examine carefully the insulation of the earth system, make sure that the wire leading to the earth point makes a good connection, and that the lead to earth does not run for any distance close to and parallel with the aerial or lead-in from the

aerial. Beyond this, very little helpful advice can be given without examining the set. From the description which the correspondent gives, it would appear that there must be something radically wrong. At a distance of twenty-five miles from Davenport there should be no difficulty in separating 5XX and 5GB. One other point which might be examined is the aerial-inductance coil, which, it is understood, incorporates some form of switching gear for long and short waves. Maybe there is trouble here either in the switch or in the insulation between turns of the coil itself.

With regard to the correspondent's difficulty with his landlord on the question of erecting an aerial, it may be pointed out that the powers which a landlord has in these matters are subject to certain legal limitations. Far be it from "Sparks" to enter into any legal discussion on this or any other matter, but, in protection of his fellow-listeners, he would like to point out that the tenant is just as often exploited by the landlord as is the landlord by the tenant; that in many cases landlords endeavour to impose restrictions which they have no right to enforce and which are entirely unreasonable. As a help to the listener, the B.B.C. has published a small pamphlet entitled "The Listener's Aerial," which has been compiled for them by their legal adviser. In this will be found a number of helpful hints and facts covering the legal rights of the landlord and the tenant *vis-à-vis* one another. The booklet can be obtained free of charge on application to the B.B.C.

WAVELENGTH TABLE CHANGES.

M.	Kc.	
341.6	878	.. Huizen (Holland).
283.2	1059	.. Cologne (Germany).
279	1075	.. Trolhättan (Sweden).

ADDITION.

254.2	1180	.. Linz (Austria).
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Which Station Was That?

ANSWERS TO CORRESPONDENTS

Daedalus (Stourport): Kattowitz (Poland); news from Warsaw (a lady announcer), followed by a relay of dance music from a restaurant. Wireless Willy (Wolverhampton): (1) 2NM, well-known amateur transmitter at Caterham (Surrey); (2) yes, possibly 3LO (Melbourne) received direct, but 2NM (Caterham) frequently relays this station. Der Ritte (Pendleton): Did you hear the call PCJJ? According to other reports, this is IDO, San Paulo (Rome), on 33.4 m., trying to get in touch with the crew of the airship *Italia*. Woodbine Cottage (Witney): (1) Frankfurt-on-Main relaying late concert from the Residenz Café at Cassel (a lady announcer); (2) Barcelona (EAJ1); relay from the Granja Royale (see programme in *World-Radio*). Speed (Scarboro): Huizen (Holland) on 340.9 m. at that time. Gramophone records of the Wembley Tattoo. Crusader Two (Marsfield): This is AFK (pronounced Ah-eff-kah) Döberitz (Germany), on 37.65 m. Horer (Sheffield): (9) Yes, 3LO (Melbourne) received direct; (10) St. Assise (France) on 24.5 m.; (11) Munich; (12) Vienna (EATH) on 37 and 44.4 m.; (13) amateur transmitter at Bath; (14) advertised as amateur at St. Albans; (15) amateur at Penarth; (16) yes, Rugby on 37.5 m.; (17) yes, the Radio Society of Great Britain, Annual Diary and Log Book, 53, Victoria Street, S.W.1. High Tension (W. Hampstead): (1) If French, Radio Toulouse; (2) yes, Stockholm closed down at that time. This station is heard in the United Kingdom, but mostly through the high-power relay at Motala; (3) possibly PTT Paris, but your details are too vague to confirm; (4) apparently Rome (a lady announcer); (5) it is very difficult to estimate WL from your condenser readings, but if you heard the call, yes, Brussels; (6) yes, Breslau and Gleiwitz were relaying dance music from Berlin; (7) Huizen (Holland) is on 340.9 m. at that time. Curious B.B.H. (Horsham): Cologne (chimes from the studio). Word heard was "Achtung!" (Attention!). M. B. (Stratford): You give no WL and no details, only the call, which is incomplete. Apparently an amateur transmitter, but we cannot trace without call sign. International 3 (Clapham Common): Norddeich (Germany) weather report. T. T. (Brighton): (1) Langenberg and Cologne (chimes from the studio); (2) it is very difficult to estimate WL from your condenser readings; apparently Hanover, relaying concert from the Café Continental, and Hamburg, relaying from the Café Wallhof. Argument (Sunderland): Yes, the Hillversum Hawaiian Five consists of three guitars, one bass guitar, and one ukulele. Trebor (Forfarshire): Norddeich (Germany) weather report. Dentist (Warrington): 62R and 2JO, amateur transmitters, but cannot trace call signs; 2II, advertised as amateur at Wallasey; 58U, amateur (London, N.W.1). For list of amateur transmitters see the Radio Society of Great Britain Annual Diary and Log Book, 53, Victoria Street, S.W.1. J. C. (Derry): 6ZY, advertised as amateur transmitter at Belfast. For list of amateur transmitters, see answer to previous inquirer. Ether Searcher 2 (Bristol): An amateur

at Waltham (gramophone records). L. Molling (Barnsey): This was a German station, as the National Anthem for that country is played to the melody of the old Austrian Hymn. Cannot understand your remarks about the time, as German time is the same as B.S.T. Yes, your details tally with the Cologne programme. At a Loss (Mounslow): (1) French station working on about the Radio Paris WL. See paragraph (under France) in *World-Radio*, issue June 1, page 808; (2) PTT Lille. KEVA (Bognor): If you are sure, this was French, PTT Paris, which was relaying from the Coliseum and apparently worked later than advertised in programme. Tara Devi (St. Leonards-on-Sea): Cannot understand WL, but possibly Strasbourg, which is testing on about 1,040 m. Slow Motion (Sheffield): Kattowitz RTZ/O.V.2/J.W.F. (Gromer): Eiffel Tower, Paris (new short wave tests). Cousin Jack (Falmouth): PTT Rennes, relaying English lesson from PTT Paris. Night off (S.W.6): We regret, but your details are too vague to trace; it is seldom that concerts broadcast at that time are detailed in the programmes; possibly an amateur transmission. G. O. B. (Barrow-in-Furness): It is very difficult to estimate WL from your condenser readings, but the only station we can trace which might tally with your details at that time is Huizen (340.9 m.). Voyageur (Norwich): (1) No, PTT Rennes, relaying from the Coliseum at Paris; (2) Too vague, regret, cannot trace. Late Bird (Liverpool Road): No, 2XAF, on 31.4 m. short wave relay of WGY (Schenectady). Adenta (Islington): Kattowitz. J. H. Elston (Devon): We regret, but it is absolutely impossible to trace without some estimate of WL. So many stations give dance music at that time. Jacko (Langwith): Was this in the English language? If so, quite possibly a U.S.A. station, but details are too vague to confirm. Joan (Coseley): S. S. (Goldthorpe): A new short wave station at Bergedorf, about ten miles E.S.E. of Hamburg, on the Elbe. (Call letters: AFL; about 50 m.). We believe this is a listening post intended for the relay of foreign stations. 3 Valve (Southport): (1 and 2) details are much too vague to trace, (3) PTT Lyons on 40.2 m. A. T. C. (Dalston): (1) If you are sure this was the same programme, yes, Barcelona (EAJ1) relaying Madrid (EAJ7), but the former station was advertised as giving its own programme at that time. San Sebastian relays Madrid, but this would have come in below your second station, which was Copenhagen. Fruh (Kettering): A new short wave station at Bergedorf about ten miles E.S.E. of Hamburg on the Elbe (call letters: AFL; about 50 m.). We believe this is a listening post intended for the relay of foreign stations. Possibly for test purposes, this was relayed by Langenberg and Cologne, otherwise, we cannot account for your WL. FAV 3. (Battersea): Yes, KDKA (East Pittsburgh) received direct. W. H. D. (Wood Green): Yes, Kattowitz. Short Wave 3 (Derby): Eiffel Tower, Paris. New short wave tests. Ethelwyn (Harrigate): (1) Budapest, (2) possibly Berlin, with which programme details might tally. PIP (1): In view of the news bulletin, this would tally with the German short wave transmitters at Döberitz. J. J. Y. (Ashford): It is impossible to confirm from details given that you heard KDKA (East Pittsburgh), but it is quite probable, if you were tuned in to the wavelength stated. Trimworth: We cannot trace a performance of *Faust* in any programme on that date. Time

would point to an Italian studio; Naples advertised the opera *Dejanice* (Catalani). This may have been altered, but we cannot confirm. W. T. 6 (Ripley): Cannot understand WL, the only station giving organ recital at that time was Huizen. G. M. H. (The Silent Valley): We cannot understand your WL. Time and details tally with the lunch and dinner music from Hillversum, which included some of the English dance tunes mentioned. Condenser (Manchester): Regret, but your details are too vague to identify transmitter.

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.

WORLD-RADIO (No. 152)

For replies to questions concerning the identity of stations heard, this coupon should be cut out and forwarded, together with particulars, written on a separate sheet of paper, to Editor, *World-Radio*, Savoy Hill, London, W.C.

Particulars should include: Date and time, approximate frequency (or wavelength), call (if heard), fading or not, signal strength, and details of programme. N.B.—Each inquiry must be accompanied by a separate coupon.

The Alternative Postal Service

Whilst retaining in *World-Radio* the usual free published service of "Which Station Was That?" we have instituted a paid postal service, which enables a reply to be posted within forty-eight hours of receipt of details and a stamped addressed envelope. Each enquiry must be accompanied by a coupon and 6d. in stamps or P.O.

If, owing to paucity of details submitted, or for any other adequate reason, the transmission cannot be identified, a further query will be answered *free of charge*. In this event, the answer form sent to the reader must be returned with the new application.

Note.—In the event of queries received in which readers have not complied with the conditions published, replies will not be sent by post, but will be found in these columns.

(5 XX) (1604.3 metres : 187 kc.)

DAVENTRY PROGRAMME

(June 24-30) (25 kw.)

SUNDAY

10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
3.30 p.m.—An Orchestral Concert: Midsummer Day: Elsie Suddaby (Soprano), Robert Maitland (Bass). The Wireless Orchestra (Leader, S. Kneale Kelley), conducted by Leslie Heward.
5.15 p.m.—The Foundations of English Poetry—XIII, Shelley and Keats, read by Miss Fay Compton and Mr. Robert Harris.
5.45 p.m.—6.30 p.m.—Bach Cantata "My Spirit was in Heavenness": Elsie Suddaby (Soprano), Tom Pickering (Tenor), Robert Maitland (Bass). The Wireless Chorus. The Wireless Orchestra, conducted by Stanford Robinson.
8.0 p.m.—A Religious Service from the Edinburgh Studio, conducted by Rev. Prof. Hugh Mackintosh, D.D., D.Phil.
8.45 p.m.—The Week's Good Cause: Appeal on behalf of the Children's Country Holiday Fund by Miss Betty Nuthall.
8.50 p.m.—Weather Forecast, General News Bulletin; Local Announcements. Shipping Forecast.
9.5 p.m.—A Military Band Concert: Esther Coleman (Contralto), Ethel Bartlett and Rae Robertson (Duets for Two Pianofortes). The Wireless Military Band, conducted by B. Walton O'Donnell.
10.30 p.m.—Epilogue: "The Breastplate of Righteousness."

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: Louise Way (Soprano), Mervyn Lambert (Baritone).
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, from St. Michael's Cornhill. Solo Playing Tests for the F.R.C.O. and A.R.C.O. Examinations (July, 1928).
Wimbledon To-day.—A running commentary on the Centre Court matches at the All England Lawn Tennis Club will be given by Colonel R. H. Brand or Captain H. B. T. Wakelam between 3.30 and 5.0 p.m., 6.0 and 6.20 p.m., and 6.45 and 7.0 p.m., unless no matches are then in progress.
3.30 p.m.—Miss Rhoda Power: "Boys and Girls of Other Days (Eighteenth and Nineteenth Centuries)—VIII, The First Steam Trains."
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—VIII, Holda and the Secret of Flax."
3.20 p.m.—Musical Interlude.
3.30 p.m.—A Short Concert by the Marguerite Morgan Trio.
4.0 p.m.—Dance Music: The Savoy Orpheans from the Savoy Hotel.
5.0 p.m.—Household Talk: Miss Marjorie Guy: "Some attractive Cheese Dishes."
5.15 p.m.—The Children's Hour.
6.0 p.m.—The Marguerite Morgan Trio.
6.20 p.m.—Boys' and Girls' Clubs' Bulletins.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—Trio (continued).
7.0 p.m.—Mr. James Agate: Dramatic Criticism.
7.15 p.m.—The Foundations of Music: Modern English Songs, sung by John Thorne (Baritone), songs by Vaughan Williams, The Vagabond, Silent Noon, The Water Mill.
7.25 p.m.—M. E. M. Stéphan: "How to pronounce French—another practical demonstration with an English student."
7.45 p.m.—Gene Gerrard (Comedian).
8.0 p.m.—The British Women's Symphony Orchestra: Conducted by Dr. Malcolm Sargent. An Introduction Talk by Dame Ethel Smyth.
8.5 p.m.—Orchestra: Symphony in G Minor (Mozart), Academic Festival Overture (Brahms), Overture to "Rosamunde" (Schubert).
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—"I Remember": The Rt. Hon. Arthur Ponsonby, M.P.: "Recollections of Sir Henry Campbell-Bannerman."

9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—Vaudeville: The Three New Yorkers, In Harmonized Syncopation, Betty Chester (Contralto).
9.55 p.m.—"Aida": Act III. Relayed from The Royal Opera House, Covent Garden.
10.25 p.m.—Vaudeville: Stainless Stephen (Comedian), Alec Chentrens (Light Comedy Ballads), The Two Hoffmans (Syncopated Pianists on two pianofortes), Jean Paule and Leonie Lascelles (Light Vocal Duets), The B.B.C. Dance Orchestra, personally conducted by Jack Payne.
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.—A Concert. Muriel Marshall (Contralto), Bay Jellett (Violin), Doris Hobson (Pianoforte).
1.0—2.0 p.m.—Georges Boulanger and his Orchestra, from the Savoy Hotel.
Wimbledon To-day. A running commentary on the Centre Court matches at the All England Lawn Tennis Club will be given by Colonel R. H. Brand or Captain H. B. T. Wakelam between 4.0 and 4.15 p.m., 4.30 and 5.0 p.m., 6.0 and 6.30 p.m., 6.45 and 7.0 p.m., unless no matches are then in progress.
2.30 p.m.—Sir Walford Davies: "Elementary Music—VIII, Looking Backward."
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. J. C. Squire, "On Reading Poetry Aloud."
4.30 p.m.—Orchestra (contd.).
5.0 p.m.—"Holidays Abroad," Mr. Bernard C. Newman, "Andorra."
5.15 p.m.—The Children's Hour.
6.0 p.m.—Gramophone Records.
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 Dominions," Mr. Alexander Gilchrist, "Australia, by one who was born there."
7.15 p.m.—The Foundations of Music. Modern English Songs, sung by John Thorne (Baritone). Songs by Peter Warlock: "As ever I saw, The Bayley beareth the bell away, Yarmouth Fair, Sleep, Roister Doister."
7.25 p.m.—Prof. F. W. Burstall, "Engines for the Road and the Air—III, the Essential Parts of the Internal Combustion Engine." Relayed from Birmingham.
7.45 p.m.—A Song Recital by Franz Baumann, the German Radio and Gramophone Tenor.
8.0 p.m.—Mr. J. C. Flugel, "The Psychology of Food and Dress—III, The Functions of Clothing."
8.30 p.m.—A Military Band Concert. Marjorie Parry (Soprano), The Wireless Military Band, conducted by Charles Leggett.
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.—"The Rival Poets," or, The Love Charm. An Operetta in Two Acts. Libretto by W. Herbert Scott. Music by Edward German. Paul Gervais (Village magistrate and oligarch), Kingsley Lark; Carol Corney (His Nephew, an aesthetic poet), Francis Russell; Victor Bonheur (a mountaineer), Harold Williams; Mulberry (a Beadle), Samuel Dyson; ToINETTE (the supposed daughter of Paul Gervais), Dorothy Bennett; Suzanne (Paul's housekeeper and nurse to ToINETTE), Gladys Palmer; The accompaniment will be played from a special arrangement by the Composer for two Pianos, Harp, and Mustel Organ.
11.0 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: Marjorie Ingham (Mezzo-Soprano), Walter Payne (Baritone).
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.

Wimbledon To-day.—A running commentary on the Centre Court matches at the All England Lawn Tennis Club will be given by Colonel R. H. Brand or Captain H. B. T. Wakelam between 3.30 and 3.45 p.m., 4.0 and 5.15 p.m., 6.0 and 6.20 p.m., 6.45 and 7.0 p.m., unless no matches are then in progress.
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—VIII, Masques, Pageants and Plays."
3.30 p.m.—Musical Interlude.
3.45 p.m.—Miss E. G. Clarke: "Food Values in Cooking—III, Fuel Foods."
4.0 p.m.—A Light Classical Concert: Lorraine Tombo (Pianoforte), The Wireless Symphony Orchestra (Leader, S. Kneale Kelley), conducted by John Ansell.
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.—Orchestra (continued).
7.0 p.m.—Mr. L. B. Beale, H.M. Trade Commissioner in New Zealand: "The Work of a British Trade Commissioner."
7.15 p.m.—The Foundations of Music: Modern English Songs sung by John Thorne (Baritone); Songs by John Ireland—Sea Fever, I have twelve oxen, Spring Sorrow, The Soldier.
7.25 p.m.—Dr. H. J. W. Hetherington: "The Meaning of Good—1. The Question. Is an Answer Possible?" (from Liverpool).
7.45 p.m.—A Song Recital by Franz Baumann, the German Radio and Gramophone Tenor.
8.0 p.m.—"Widow Engaging"—a Comedy in One Act by Beatrice Forbes Robertson. Characters: Bessie Chilcote, a widow (Gertrude Elliott); Mildred Todd, an elderly spinster (Vivienne Whitaker); Edward Manley, a bachelor (Ivan Firth).
8.30 p.m.—A Song Recital by Werrenrath (Baritone).
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mr. David Bomberg and Mrs. Stewart Erskine: "The Ancient City of Petra."
9.30 p.m.—Local Announcements and Shipping Forecast.
9.35 p.m.—Tom Jones and the Grand Hotel Orchestra, Eastbourne, relayed from the Grand Hotel, Eastbourne. Overture to "Der Freischütz" ("The Marksman") (Weber); Four Indian Love Lyrics (Woodford-Finden). Tom Jones (Solo Violin): Romance (Svendsen). Orchestra: "L'Extase" ("Ecstasy" (by request) (Thomé). Tom Jones: Rondino (Beethoven, arr. Kreisler), Waltz in A (Brahms, arr. Hochstein), Mignonette (Friml). Orchestra: Grand Fantasia on Wagner's "Tannhäuser."
10.45 p.m.—The Sleep-Walking Scene from "Macbeth," spoken by Edith Sitwell, relayed from the Arts Theatre Club.
10.55—11.5 p.m.—A Short Piano Recital.
11.5 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: Andrew Brown's Quintet, Annette Blackwell (Soprano).
1.0—2.0 p.m.—Gramophone Records.
Wimbledon To-day. A running commentary on the Centre Court matches at the All England Lawn Tennis Club will be given by Colonel R. H. Brand or Captain H.

B. T. Wakelam, between 4.0 and 5.15 p.m. and 6.45 and 7.0 p.m., unless no matches are then in progress.
2.30 p.m.—Mr. Eric Parker: "Out of Doors from Week to Week—VIII, Thunder and Lightning."
3.0 p.m.—Evansong. From Westminster Abbey.
3.45 p.m.—Mr. F. J. Broomhead: "Farm Poultry and Poultry Farming."
4.0 p.m.—Organ Recital, by Edward O'Henry. From Madame Tussaud's Cinema.
4.30 p.m.—The B.B.C. Dance Orchestra. Personally conducted by Jack Payne.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Ministry of Agriculture Bulletin.
6.15 p.m.—Market Prices for Farmers.
6.20 p.m.—The Gershom Parkington Quintet.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—Quintet (continued).
7.0 p.m.—Mrs. M. A. Hamilton: "New Novels."
7.15 p.m.—The Foundations of Music: Modern English Songs, sung by John Thorne (Baritone). Songs by Roger Quilter: Love's Philosophy, Now sleeps the crimson petal, I love the jocund dance, The Fuchsia Tree, Over the Mountains.
7.25 p.m.—Prof. W. M. Tattersall: "Nature's Reaction to Man—III, Animals and Human Disease."
7.45 p.m.—Chamber Music: Megan Foster (Soprano). The English Ensemble: Marjorie Hayward (Violin), Rebecca Clarke (Viola), May Mukle (Violoncello), Kathleen Long (Pianoforte). The English Ensemble: Phantasy Quartet for Violin, Viola, Violoncello and Pianoforte (Frank Bridge).
7.55 p.m.—Megan Foster: Clair de Lune (Fauré), Green (Debussy), D'une prison (Hahn), Les Cigales (Chabrier).
8.5 p.m.—Marjorie Hayward, May Mukle and Kathleen Long: Trio for Violin, Violoncello and Pianoforte (Rebecca Clarke).
8.30 p.m.—Megan Foster: Der Jüngling an der Quelle, Erster Verlust, Fischerweise (Schubert).
8.40 p.m.—The English Ensemble: Quartet in G Minor for Violin, Viola, Violoncello and Pianoforte (K. 478) (Mozart).
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: A Light Entertainment, specially devised and arranged by the well-known Theatrical Producer, Andre Charlot.
10.35 p.m.—12.0 midnight.—Dance Music.

FRIDAY

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. Douglas Cameron (Violoncello), Harry Isaacs (Pianoforte).
12.30 p.m.—An Organ Recital. By Leonard H. Warner. From St. Botolph's, Bishopsgate.
1.0—2.0 p.m.—Lunch-Time Music: The Hotel Metropole Orchestra (Leader, A. Mantovani).
Wimbledon To-day.—A running commentary on the Centre Court matches at the All England Lawn Tennis Club will be given by Colonel R. H. Brand or Captain H. B. T. Wakelam between 4.30 and 5.0 p.m., 6.0 and 6.30 p.m., 6.45 and 7.0 p.m., unless no matches are then in progress.
3.0 p.m.—Mr. Ernest Young and Mr. Clifford Collinson: "Empire History and Geography. History—The Links of Empire; Geography—The Australian Routes."
3.25 p.m.—Musical Interlude.
3.30 p.m.—Play to Schools: "A Midsummer Night's Dream." By William Shakespeare.
4.30 p.m.—A Ballad Concert: Elsie Gaskell (Mezzo-Soprano), Leslie Holmes (Baritone).
5.0 p.m.—Mrs. Marion Cran, A Garden Talk: "On Irises and Peonies."
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. Modern English Songs. Sung by John Thorne (Baritone). Miscellaneous Songs: A Voice by the Cedar Tree (Somervell), The Oak Tree Bough (Baird), Silver Moonbeams (Cyril Scott), The Sergeant's Song (Holst).
7.25 p.m.—Prof. J. Dover Wilson: "Six Tragedies of Shakespeare (An Introduction for the Plain Man); III., King Lear."
7.45 p.m.—The Open Air. The Wireless Orchestra (Leader, S. Kneale Kelley), conducted by John Ansell.
8.10 p.m.—Vivien Lambelet (Soprano), Dorothy Lebish (Contralto) and Orchestra.
9.0 p.m.—Weather Forecast, Second General News Bulletin. Road Report.
9.15 p.m.—Local Announcements: Shipping Forecast.
9.20 p.m.—A Song Recital by Franz Baumann, the German Radio and Gramophone Tenor.
9.35 p.m.—A Discussion.
10.5 p.m.—A Programme of Modern Music. Played by the B.B.C. Dance Orchestra. Personally conducted by Jack Payne.
10.35 p.m.—Students' Choruses: Tom Kinniburgh (Baritone). The Wireless Male Orchestra. Conducted by Stanford Robinson: Come, Landlord, fill the flowing bowl, Little Brown Jug, In Cellar Cool, Down among the dead men, Drink to me only, Here's to the Maiden, The Mermaid, My bonnie, Vive l'Amour! Auld Lang Syne.
11.0 p.m.—12.0 midnight.—Dance Music.

SATURDAY

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 René Taponnier, from the Carlton Hotel.
3.30 p.m.—Wimbledon Lawn Tennis. A description by Colonel R. H. Brand and Captain H. B. T. Wakelam of Centre Court Matches from the All England Lawn Tennis Club, Wimbledon. With interludes by the B.B.C. Dance Orchestra.
4.55 p.m.—Royal Air Force Display, relayed from The Aerodrome, Hendon. Low Bombing Attack, Individual Aerobatics, Air Battle, Night Bombers Fly Past, Attack on an Oil Refinery.
5.50 p.m.—The Children's Hour.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—Wimbledon Lawn Tennis. The description of the matches in the Centre Court by Colonel R. H. Brand and Captain H. B. T. Wakelam will be reserved if play is in progress.
7.0 p.m.—Mr. Basil Maine, "Next Week's Broadcast Music."
7.15 p.m.—The Foundations of Music. Modern English Songs sung by John Thorne (Baritone). Miscellaneous Songs: I heard a piper piping (Bax), And so I made a villanelle (Cyril Scott), Come into the garden, Maud (Somervell).
7.45 p.m.—An Eye-witness Account of the International Horse Show by Lieut.-Col. M. F. McTaggart.
7.45 p.m.—A Song Recital by Franz Baumann, the German Radio and Gramophone Tenor.
8.0 p.m.—Variety including Moyna MacGill (in Irish Monologues), Reg Palmer and Mammie Watson (Musical Comedy Duo), Edith Penville (Flautist). Lawrence Anderson and Mary O'Farrell in "The New Portia," by Dion Titheradge, Part Songs, by Percy E. Fletcher, sung by The Wireless Ladies Choir, conducted by Victor Hely Hutchinson.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mr. A. B. B. Valentine, "Holidays in Britain—VI, Between the Severn and the Usk."
9.30 p.m.—Local Announcements. Shipping Forecast.
9.35 p.m.—A Light Orchestral Concert, The Harmony Eight, The Wireless Orchestra, conducted by John Ansell.
10.30 p.m.—12.0 midnight.—Dance Music.

DAVENTRY (EXPERIMENTAL) PROGRAMME

(5 GB) (491.8 metres : 610 kc.) (25 kw.) (June 24-30)

SUNDAY

3.30 p.m.—*A Band Programme*: The Luton Red Cross Band, conducted by Edward S. Carter. Foster Richardson (Baritone), Marjorie Hayward (Violin).
 5.15 p.m.—8.45 p.m.—(See 5XX).
 8.45 p.m.—*The Week's Good Cause*: Appeal on behalf of the Birmingham Boys' and Girls' Mission, by Canon Carnegie (Founder of the Mission).
 8.50 p.m.—Weather Forecast, General News Bulletin.
 9.0 p.m.—*Chamber Music*: Joaquin Turina (Pianoforte), Sidonie Goossens (Harp), Frank Almgill (Flute), Frederick Thurston (Clarinet). The Brosa String Quartet—Brosa—Greenbaum—Rubens—Pini.
 10.30 p.m.—*Epilogue*.

MONDAY

3.0 p.m.—*The B.B.C. Dance Orchestra*, Personally conducted by Jack Payne, Jack Best and Nelson Darling (in Harmony).
 4.0 p.m.—*Lozell's Picture House Organ*: Frank Newman (Organ), Dorothy Showell (Soprano).
 5.0 p.m.—*A Ballad Concert*: Barbara Frewing (Mezzo-Soprano), Edna Iles (Pianoforte), George Pizzev (Baritone).
 5.35 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, Arthur Smith (Baritone).
 8.0 p.m.—*New Friends in Music*: Arnold Bax, introduced by Percy Scholes and Harriet Cohen (Pianoforte).
 9.0 p.m.—*A Song Recital*, by Franz Baumann, the German Radio and Gramophone Tenor.
 9.15 p.m.—*"The Return"*: A play by Gertrude Robins, presented by Stuart Vinden, Paul Loweski (an old Galician Peasant) (Stuart Vinden), Catherine Loweski (his Wife) (Mildred Forster), Ivan

Loweski (their Son) (William Hughes), Stefan (the friend of his youth) (Vincent Curran).
 9.35 p.m.—*Eleven Fifty-Eight*: A Farical Adventure by Stuart Ready, presented by Stuart Vinden, The Woman (Gladys Joiner), The Swell (William Hughes), The Lady (Margaret Kennedy), The Tramp (Vincent Curran), The Bookie (Wortley Allen), The Blind Man (Stuart Vinden).
 10.0 p.m.—Weather Forecast, Second General News Bulletin.
 10.15 p.m.—11.15 p.m.—*Dance Music*.

TUESDAY

3.0 p.m.—*Paul Moulder's Rivoli Theatre Orchestra*.
 4.0 p.m.—*A Military Band Programme*. The Birmingham Military Band, conducted by W. A. Clarke. Percy Owens (Entertainer), Dorothy Daniels (Pianoforte).
 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.
 7.30 p.m.—*A Ballad Concert*: Maria Marova (Soprano), Ronald Chivers (Baritone).
 8.0 p.m.—*Vaudeville*, including Joseph Bull and George Foster, John Henry (Yorkshire Comedian).
 9.0 p.m.—*Light Music*: The Midland Pianoforte Sextet (Leader, Frank Cantell)—Selection from "Rigoletto" (Verdi, arr. Godfrey).
 9.15 p.m.—*Margaret Wilkinson* (Soprano): Nightingale's Air (Saint-Saëns), My Sweet Sweetynge (Harold Samuel), My heart is like a singing bird (Hubert Parry).
 9.25 p.m.—*Sextet*: Mot d'Amour (Word of Love) (Elgar), Romance (Tchaikovsky), Japanese Intermezzo, "Ke-Sa-Ko" (Chapui).
 9.40 p.m.—*Margaret Wilkinson*: A Spring Morning (Pastoral) (arr. Lane Wilson), Song of Love and June (D'Hardelot), Piper June (Carew).

9.50 p.m.—*Sextet*: Three Dances from "The Bartered Bride" (Smetana).
 10.0 p.m.—Weather Forecast, Second General News Bulletin.
 10.15-11.15 p.m.—*An Orchestral Programme*. The Birmingham Studio Orchestra, conducted by Joseph Lewis. Dennis Noble (Baritone).

WEDNESDAY

3.0 p.m.—*Chamber Music* (from Birmingham): The Wilfred Ridgway Pianoforte Trio, Dorothy Robson (Soprano), Wilfred Ridgway (Pianoforte).
 4.0 p.m.—*The B.B.C. Dance Orchestra*, personally conducted by Jack Payne, Antoniette Beaucaire (Whistling Solos), James and Arthur Acrell (Baritone and Tenor Duets).
 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*: Sylvia Van Dyck (Soprano), J. Lees (Xylophone), Callender's Band, conducted by Tom Morgan.
 8.0 p.m.—*An Orchestral Programme*: The Birmingham Studio Augmented Orchestra (Leader, Frank Cantell), conducted by Joseph Lewis. Miranda Suggden (Soprano), Winifred Browne (Pianoforte).
 9.30 p.m.—*A Vocal and Instrumental Recital*—Hardy Williamson (Tenor), Kathleen Moorhouse (Cello).
 10.0 p.m.—Weather Forecast, Second General News Bulletin.
 10.15-11.15 p.m.—*Dance Music*.

THURSDAY

3.0 p.m.—*Summer Symphony Concert*. Relayed from the Winter Gardens, Bournemouth. The Bournemouth Municipal Augmented Orchestra, Deputy Conductor, Montague Birch. Jennie Bleasdale (Soprano), Kathleen Jacobs (Violoncello), Peers Coetmore (Violoncello).
 4.30 p.m.—*Lozell's Picture House Orchestra*, conducted by Paul

Rimmer. Kathryn Thursday (Soprano), 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. Will Cornish (Handbell Solos).
 8.0 p.m.—*A Military Band Concert*. Herbert Thorpe (Tenor), Harry Brindle (Bass), The Wireless Military Band, conducted by Charles Leggett.
 9.15 p.m.—*A Song Recital* by Franz Baumann.
 9.30 p.m.—*Reading by Gladys Ward*: Fair Hedwig, The Heather Boy, The Fugitives (from "German Ballads" Music by Schumann) (First Broadcast Performance).
 10.0 p.m.—Weather Forecast, Second General News Bulletin.
 10.15-11.15 p.m.—*String Orchestral Concert*. The Wireless Singers, The Wireless String Orchestra, Conducted by Stanford Robinson.

FRIDAY

3.0 p.m.—*An Organ Recital*, by Leonard H. Warner, from St. Botolph's, Bishopsgate. Bella Redford (Mezzo-Soprano).
 4.0 p.m.—*The B.B.C. Dance Orchestra*: Personally conducted by Jack Payne. Antoniette Beaucaire (Whistling Solos), James and Arthur Acrell (Baritone and Tenor Duets).
 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*: Maud Nelson (Mezzo-Soprano), Robert Naylor (Tenor), The Ernest Leggett London Octet.
 8.0 p.m.—*Vaudeville*: Clapham and Dwyer (in "Another Spot of Bother"), Tommy Handley (The Wireless Comedian), Yvette Darnac (Light French Songs), Johnson Brothers and Greenop (Syncopated Harmony), George Foster (Con-

certina), Philip Brown's Dominões Dance Band.
 9.0 p.m.—*A Violin Recital* by Angel Grande: Fugue (Bach), Variations (Tartini, arr. Kreisler), Cancion (Song) (de Falla), Saeta (Nin, arr. Kochanski), Spanish Sercnade (Grande), Zapateado (Sarasate).
 9.20 p.m.—*"La Bohème"*: Act II. Relayed from the Royal Opera House, Covent Garden.
 9.37 p.m.—Pianoforte Interlude from the Studio.
 9.25 p.m. (approx.)—"La Bohème": Act III.
 10.15 p.m.—Weather Forecast, Second General News Bulletin. Road Report.
 10.30-11.15 p.m.—*Dance Music*.

SATURDAY

3.30 p.m.—*A Band Programme*: The Metropolitan Works Band, conducted by George H. Wilson, Albert Voorsanger (Violin), Edith James (Entertainer at the Piano).
 5.0 p.m.—*A Ballad Concert*: Dorothy Bennett (Soprano), Ivor James (Violoncello), John Adams (Tenor).
 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.—*A Military Band Concert*. Relayed from the Bandstand, Cannon Hill Park, Birmingham, The City of Birmingham Police Band, conducted by Richard Wassell, Florence Cleeton (Soprano).
 8.0 p.m.—*A Symphony Concert*: The Birmingham Studio Augmented Orchestra, (Leader, Frank Cantell), conducted by Joseph Lewis.
 9.35 p.m.—*A Story Reading*: "The Man who Stole the Pelican," a short story by Iolo Williams, read by the Author.
 10.0 p.m.—Weather Forecast, Second General News Bulletin.
 10.15 p.m.—*Sports Bulletin*.
 10.20-11.15 p.m.—*Variety*: James Donovan (Saxophone), Vladimir Zaaflov Quartet (Russian Songs), Beatrice de Holthor (Discuse), Cyril Lidington (in Light Songs),

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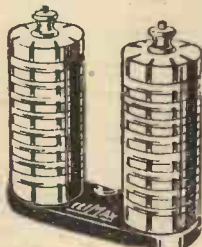
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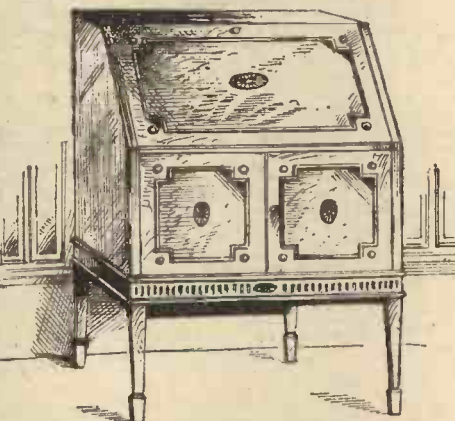
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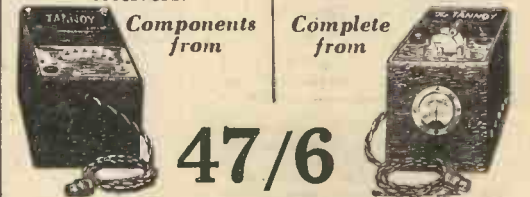
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PROGRAMMES FOR SUNDAY (June 24)

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

BARCELONA (Spain) Radio Barcelona (EA1). 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.—Market Price Quotations. 6.10 p.m.—Orchestral Selections. 1. Hungarian Czardas (Michiels). 2. Pole Star—Waltzes (Waldteufel). 3. Silwa—Tango (Profess-Ralph). 6.30 p.m.—Tenor Song Recital. 1. A Granada (Alvarez). 2. La Balala (Millet). 3. La Ginesta (Pujol). 4. Brindis (Perez Moya). 7 p.m.—History Talk on "Palafox." 7.20 p.m.—Orchestral Selections. 1. Imperial Edward—March (Souza). 2. Selections from "Agua, azu carillos y aguardiente" (Chueca). 3. Celosa—Mazurka (Maria Soler). 7.50 p.m.—Soprano Solo. 1. Mare, vols dir-me (Weckerlin). 2. Selection from "La Tosca" (Puccini). 3. Cancó de Maria (Lamote de Grignon). 4. Serenade (R. Strauss). 8.20 p.m.—Orchestral Selections from the Petite Suite espagnole (Vidal). 8.40 p.m.—Sports Notes and News. 9.0 p.m. (approx.)—Close Down.

BERGEN (Norway) Kringkastingselskap. WL. 369.9 m. (811 kc); 1.5 kw. 10.30 a.m.—Religious Service. 7.30 p.m.—Programme relayed from the Exhibition Theatre. 9.0 p.m.—Talk, "Across the North Atlantic in an Open Boat." 9.30 p.m.—The Exhibition Orchestra. 10.0 p.m.—Weather, News, and Time. 10.15 p.m.—Dance Music Programme from the Exhibition, Bergen. 12 midnight (approx.)—Close Down.

BERLIN (Germany) Königswusterhausen. WL. 1,250 m. (240 kc); 35 kw. 6.30 a.m.—2.0 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 on "Kleist-Wurzburg." 7.0 p.m.—Talk "Arminius in Oratory and Poetry," by Dr. Leffson. 7.30 p.m.—Talk, "The Little Garden in the Life of the People." 8.15 p.m.—Programme relayed from Langenberg. 10.15 p.m. (approx.)—Programme relayed 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. 1. "Idomeneus"—Overture (Mozart) 2. Symphony in C major (Mozart). 3. Chamisso—Variations (Rezicnek). 4. Symphoniete on Russian Themes (Rimsky-Korsakoff). 2.0 p.m.—Programme for Children. 3.0 p.m.—Lesson in Shorthand. 3.30 p.m.—Agricultural Programme. 5.0 p.m.—Orchestral Concert. 7.0 p.m.—Talk, "Five Years of Wireless Journalism," by Hans S. von Heister. "What is the Projection of Animals?" 8.0 p.m.—Talk on "Travelling." 8.30 p.m.—Concert. 1. March of the Olympic Mastersingers (Fucik). 2. "Pretty Annie"—Overture (Cooper). 3. Valse brillante (Schulhof). 4. Torch Dance in C minor (Meyerbeer). 5. Ballet Suite from "Sylvia" (Delibes). 6. Wiener Lebenslust—Waltz (Lehár). 7. Vom Rhein der Wein March (Lincke), followed by News, Time, Weather and Sports Notes. 10.30 p.m.—Dance Music Programme. 12.30 a.m. (Monday, approx.)—Close Down.

BERNE (Switzerland) Radio-Berne. WL. 411 m. (730 kc); 1.5 kw. 11.0 a.m.—Protestant Address. 12.0 noon—Time and Weather. 1.0 p.m.—Orchestral Concert. 2.30 p.m.—Agricultural Talk. 3.30 p.m.—The Kursaal Orchestra. 8.0 p.m.—Time and Weather. 8.5 p.m.—Recital of Violin Solos. 8.30 p.m.—Orchestral Concert and Recital of Ballads. 9.45 p.m.—News and Weather. 10.0 p.m.—The Kursaal Orchestra. 10.35 p.m. (approx.)—Close Down.

BRATISLAVA (Czechoslovakia) Radio-Bratislava. WL. 300 m. (1,000 kc); 0.5 kw. 8.0 a.m.—Programme from Prague. 9.0 a.m.—Agricultural Report. 9.0 p.m.—Orchestral Concert. 4.0 p.m.—Local Sports Notes. 5.0 p.m.—Agricultural Talk. 6.30 p.m.—Talk in Slovakian. 6.50 p.m.—Programme from Prague. 7.15 p.m.—Programme from Prague. 10.20 p.m.—Programme relayed from the Exhibition, Brünn.

BRESLAU (Germany) Schlesische Funkstunde. WL. 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (910 kc). Transmits at intervals from 8.45 a.m. 12.0 (noon)—Concert from the Works of Franz Poenitz. 2.0 p.m.—Talk on Gardening. 2.10 p.m.—Talk for Farmers. 2.35 p.m.—Talk on Chess Problems. 3.0 p.m.—Programme for Children. 3.25 p.m.—Sports Relay from the Breslau-Leerbeutel Stadium. 4.45 p.m.—English Reading, "The Aran Islands" (John M. Synge). 5.10 p.m.—Instrumental Concert. 10.0 p.m.—Weather Report and Talk. 7.20 p.m.—Reading from Gleiwitz, from the Works of Viktor Heeger, on the Occasion of his 70th Birthday. 7.45 p.m.—Talk by Willy Koch. 8.30 p.m.—Variety, "Two Years of Runxendorf"—Ludwig Lommel. 10.0 p.m.—News and Announcements. 10.15 p.m.—With the Microscope through Breslau on the Eve of St. John.

BRÜNN (Czechoslovakia) Komarov. WL. 441.2 m. (680 kc); 2.4 kw. Transmits at intervals from 8.0 a.m. 6.0 p.m.—German Transmission. 7.0 p.m.—Concert of Czech Music. 1. Festive Overture (Smetana). 2. Two Ballads (Fibich). 3. Slavonic Rhapsody in D major, Op. 45 (Dvorák). 4. Persiflora (Foerster). 5. Pianoforte Suite (Suk). 6. Slavonic Dances (Dvorák). 8.0 p.m.—Dvorák Concert. 1. Violin and Pianoforte Sonata, Op. 57. 2. Songs, Op. 83. 3. Pianoforte Solo—Elegies, Op. 90. 9.0 p.m.—Exhibition Orchestra. 10.0 p.m.—News and Announcements. 10.20 p.m.—Programme relayed from the Exhibition.

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.—Programme for Children. 6.30 p.m.—Trio Concert: 1. Marche d'Auvergne (Ganne). 2. Serenade (Rachmaninoff). 3. Gold and Silver (Lehár). 4. The Second Minuet for Pianoforte (de Boeck). 5. Selection from "Thais" (Massenet). 6. Gavotte for Cello and Violin (Roussel). 7. Réverie (Hahn). 8. Redzi (Caludi). 9. Canzonetta for Violin (d'Ambrosio). 10. Intermezzo (Mandl). 7.30 p.m.—"Le Radio-Chronique." 8.15 p.m.—Concert: 1. "Sigurd"—Overture (Reyer). 2. Cavatine (Castillon). 3. (a) Prelude, (b) Serenade, (c) Malaguena (Albeniz). 4. Songs. 5. (a) Chaconne de l'Impératrice (Honneger), (b) Don Quixote (Massenet), (c) La Bohème (Leoncavallo). 8. Songs. 9. (a) Divertissement, (b) Hungarian Dance, (c) Finales (Messager). 10. Songs. 11. Scenes bretonnes (Sarly). 12. Serenade for Strings (Haydn). 13. Ballet Egyptien (Luigini). 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary) Magyar Telephon Híradó és Radio RT. WL. 557.1 m. (538 kc); 25 kw. 9.0 a.m.—News and Beauty Culture. 10.0 a.m.—Protestant Divine Service. 12.0 noon—Chimes, Time and Weather. 12.15 p.m.—Orchestral Concert. 3.30 p.m.—Agricultural Notes. 4.0 p.m.—Programme for Children. 4.45 p.m.—Time and Weather. 5.0 p.m.—Concert of Tzigane Music. Sports and Turf Notes in the Interval. 10.50 p.m.—Time Signal, followed by Dance Music from the Ritz Hotel.

COLOGNE (Germany) Westdeutscher Rundfunk. WL. 293.2 m. (1,039 kc); 4 kw. 9.0 a.m.—11.45 a.m.—See Langenberg.

11.45 a.m.—Reading by Walter Boelsche—from his own Poetical Works. 12.15 p.m.—See Langenberg Station. 1.0 p.m.—The Station Orchestra. 2.50 p.m.—4 p.m.—See Langenberg. 4.0 p.m.—Talk, "Impressions of the Olympic Football Match in Amsterdam," by Dr. B. Ernst. 4.30 p.m.—Concert: Double-Quartet. 1. (a) Märchenzeit (Krasinsky), (b) Die Köigskinder (arr. Schwartz), (c) Frisch gesungen (Silcher). 2. Mandoline Selections, (a) Spring's Awakening (Bach), (b) Spring Magic—Overture (Dittmann). 3. Double-Quartet, (a) Im Holderstrauch (Kirchner), (b) Du, liegst mir am Herzen (arr. Wildt), (c) Upper-Swabian Dance Song (Silcher). 4. Mandoline and Guitar, (a) Souvenir (Drdla), (b) Serenade (Moszkovsky). 5. Double Quartet, (a) Das stille Tal (arr. Schwartz), (b) Am Brunnelle (Trunk), (c) Sandmännchen (arr. Schmidt). 6. (a) Melodies from "The Tales of Hoffmann" (Offenbach), (b) El Turia—Waltz (Granada), (c) Ründe der kleinen Pierrots (March). 7. Double Quartet, (a) Nachtgebet (Neumann), (b) Cradle Song (Bungard), (c) Wanderschaft (Zöllner). 6.45 p.m.—Talk for Workers, followed by Sports Notes. 7.20 p.m.—Talk and Poetry Reading. 8.0 p.m.—Programme from Mulheim (See Langenberg), followed by News, Sports Notes, Evening Music and Dance. 12 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). 10.0 a.m.—Church Divine Service. 3.30 p.m.—Jubilee Meeting of the Jutland Folk Chorus relayed from Roskilde, Choral and Military Music. 6.30 p.m.—Programme for Children. 7.0 p.m.—News and Time, followed by Religious Address. 8.15 p.m.—Midsummer's Day Concert. 1. Selection of Melodies from Heiberg's Vaudeville (Reccensenten og Dyret) (Nielsen). 2. "Midsummer Melody," from "Der var engang" (Lange-Müller). 3. St. John's Waltz (Hartmann). 4. (a) En Tur paa Dyrehavsbakken, (b) Københavns Jerbanegalop (Lumbye). 5. Midsummer Summer Day's Joy. 6. En Skovtur (Anersen). 7. Midsummer Day's Melody (Toft), followed by News. 9.30 p.m.—Concert of Operetta Music. 10.45 p.m.—Dance Music Programme. 12.0 midnight—Chimes. 12.30 a.m. (Mon. approx.)—Dance Music and Close Down.

CORK (Ireland) Cork Broadcasting Station (6CK). WL. 400 m. (750 kc); 1.5 kw. 8.30 p.m.—Concert by the Station Quintet, Leo Rowsome Uilleann (Pipes), Maurice Cole (Pianist), Winifred Small (Violinist), and Maureen Cashman (Mezzo-soprano). 11.0 p.m.—Anthem and Close Down.

CRAGOW (Poland) Polskie-Radio. WL. 567 m. (529 kc); 1.5 kw. Transmits at intervals from 10.15 a.m. 7.10 p.m.—Talk, "Recent Publications." 7.35 p.m.—Talk on Foreign Politics. 8.0 p.m.—Fanfare from Notre Dame. Sports Notes and News, followed by Pianoforte Recital—W. Labunski. 10.0 p.m.—Programme from Warsaw. 10.30 p.m.—Relay from Restaurant. 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.—Programme relayed from Cork (400 m.; 750 kc). 11.0 p.m.—Anthem 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). 8.0 a.m.—Early Morning Recital. 11.0 a.m.—Programme for Parents. 11.30 a.m.—Unveiling Ceremony of the Joseph v. Görres Memorial, relayed from Coblenz. 3.0—4.45 p.m.—Programme relayed from Hamburg. 4.45 p.m.—Orchestral Concert. 6.0 p.m.—Talk, "Voltaire and Rousseau," by Dr. Carl ebbardt.

7.0 p.m.—Organ Recital of English Church Music: 1. Sonata in A major (Grey). 2. Two English Hymns: (a) Angel Voices—ever Singing (Monk), (b) Lead, Kindly, Light (Dykes). 3. Aria from the English Requiem (John Foulds). 4. Te Deum laudamus—Choral. 5. Psalm 27—"The Lord is my Light" (Allitsen). 6. Andante with Variations (Walker). 8.0 p.m.—Sports Announcements. 8.30 p.m.—Orchestral Concert, followed by Voxhaus Programme.

GENEVA (Switzerland) Radio-Genève. WL. 760 m. (395 kc); 0.5 kw. 10.0 a.m.—Address relayed from the Victoria Hall. 8.30 p.m.—Sports Notes and News. 8.40 p.m.—Divine Service. Relayed from the Temple du Carouge. 9.0 p.m.—Organ Recital, by N. Roger Vuataz. Relayed from the Temple du Carouge.

HAMBURG (Germany) Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Relayed by Bremen, on 272.7 m. (1,100 kc); Hanover, 297.9 m. (1,007 kc); and Kiel, 255 m. (1,176 kc). Transmits at intervals from 6.30 a.m. 9.15 a.m.—Sacred Morning Recital. 11.0 a.m.—Talk, "A Stroll Through the Hamburg Museums," by Dr. Hüselar. 11.40 a.m.—(Hamburg and Kiel) Concert from Restaurant Ostermann. 12.30 p.m.—Talk on "Retail Trade." 3.0 p.m.—Norag Afternoon Concert. Relay of Hamburg Derby. 5.0 p.m.—Talk, "Our Native Singing Birds," by L. Zukowsky. 7.0 p.m.—Talk, "A Cruise with the 'Oceana'—Landing in Corfu and an Evening in Venice." 7.30 p.m.—Talk on "The National Workers' Sports Day." 7.40 p.m.—Sports Notes and Weather. 8.0 p.m.—Summer Night Ball, followed by Weather and Topicalities. 10.30 p.m. (approx.)—(Hamburg and Kiel) Café Wallhof Concert.

HILVERSUM (Holland) Algemeene Vereeniging Radio-Omroep. WL. 1,091 m. (280 kc); 5 kw. 10.0 a.m.—Morning Divine Service. 12.40 p.m.—Concert of Trio Music. 2.40 p.m.—Concert relayed from the Kurhaus, Scheveningen. 1. "The Daughter of the Regiment"—Overture (Donizetti). 2. Concerto in E flat major (Liszt). 3. "Robespierre"—Overture (Litolff). 4. Peer Gynt—First Suite (Grieg). 5. The Blue Danube—Waltz (Joh. Strauss), Talk. 5.40 p.m.—Concert. 1. "The Thieving Magpie"—Overture (Rossini). 2. Ballet Music from "Undine" (Lortzing). 3. Serenade for Flute and Cello (Tittl). 4. Baritone Solos, (a) Ungeduld (Schubert), (b) Ik ken eeh Lied (de Mol), (c) An der Weser (Pressel). 5. Toreador and Andalous (Rubinstein). 6. Selection from "The Barber of Seville" (Rossini). 7. Aria from "L'Africaine" (Meyerbeer). 8. Scaramouche (Thomé). 9. Du und du—Waltz (Joh. Strauss). 10. Lolita—Serenade (Buzzi-Peccia). 11. In Seville (Siede). 7.40 p.m.—Time Weather and News. 7.55 p.m.—Concert, relayed from the Kurhaus, Scheveningen. 1. "Rienzi"—Overture (Wagner). 2. "Entry of the Gods into Valhalla" from "The Ringedold" (Wagner). 3. (a) Berceuse (Jarnefeld), (b) Swedish Country Wedding—March (Södermann). 4. Sigurd Jorsalfar—Suite (Grieg). 5. Songs, (a) Alfkönig, (b) Die Mutter singt, (c) Ich (Vollerthun). 6. Prelude to the Third Act of "Island-Saga" (Vollerthun).

HUIZEN (Holland) WL. 1,870 m. (160 kc). 4 kw. 9.10 a.m.—Sacred Music Recital by the Choir of the Lutheran Church at Hilversum. 11.10 a.m.—Divine Service relayed from St. Anne's, Amsterdam. 1.10 p.m.—Concert of Trio Music relayed from Amsterdam. 2.10 p.m.—Talk on "Literature." 3.10 p.m.—Military Band Concert. 5.10 p.m.—Programme for Hospitals. 6.30 p.m.—Divine Service and Address relayed from The Hague. 8.10 p.m.—Talk, followed by Orchestral and Vocal Concert. 11.25 p.m.—Epilogue by the Choir.

JUAN-LES-PINS (France) Radio LL. WL. 239 m. (1,264 kc); 0.25 kw. 1.0 p.m.—Concert. 1. Per aspera ad astra (Urbach). 2. 10 minutes consacrée aux enfants (Savasta). 3. Chanson (Barbirolli). 4. "Coriolan"—Overture (Beethoven). 5. Aubade d'amour (Monti). 6. Sognon (Bonincontri). 7. La dernière valse (Strauss). 8. Serenade (Gandolfo). 9. Sylvia (Delibes). 9.0 p.m.—Symphony Concert, News. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down.

KATTOWITZ (Poland) Polskie Radio. WL. 422 m. (710 kc); 12 kw. 10.30 a.m.—Divine Service Relay by Abbé Rosinsky. 12.0 noon.—Time, and Programme from Cracow. 4.0 p.m.—Talk: "St. Francis of Assisi." 4.20 p.m.—"The Silesian Gardener," followed by Twenty Minutes' Talk. 5.0 p.m.—Mandoline Orchestra. 6.30 p.m.—Miscellaneous News. 7.10 p.m.—Variety Selections, followed by Talk Programme. 8.15 p.m.—Programme from Warsaw. 10.0 p.m.—Time and News. 10.30 p.m.—Dance Music Programme.

KÖNIGSBERG (Germany) Ostmarken Rundfunk. WL. 303 m. (990 kc); 4 kw. Relayed by Danzig on 272.7 m. (1,100 kc). 9.0 a.m.—Sacred Morning Recital. 11.0 a.m.—Weather Forecast. 11.15 a.m.—Choral Concert. 12 noon.—Orchestral Concert. 12.55 p.m.—Time and Weather. 3.0 p.m.—Talk on Chess Problems. 3.45 p.m.—Programme of Gramophone Records of Caruso's Songs. (For Königsberg only). 3.45 p.m.—Gramophone Record Selections (For Danzig only). 4.30 p.m.—Programme for Children. 5.0 p.m.—Concert: 1. "Mignon"—Overture (Thomas). 2. Hungarian Dance (Brahms). 3. Selection from "Der Evangelimann" (Kienzl). 4. Ballet Music from "The Queen of Sheba" (Goldmark). 5. Souvenir de Chopin (Fétras). 6. "Martha"—Overture (Flotow). 7. Peer Gynt—Suite No. 1 (Grieg). 8. Braun oder blond—Waltz (Waldteufel). 9. Selection from "The Gipsy Baron" (Strauss). 7.0 p.m.—Talk, "Shakespeare's Humour." 7.45 p.m.—Pianoforte Recital: 1. Improptu in B flat major, Op. 142. 2. Sonata in B major, Op. 147 (Schubert). 8.30 p.m.—Vocal and Instrumental Concert, followed by News, Sports Notes, and Dance Music. 12 midnight (approx.)—Close Down.

KOVNO (Lithuania) Radio-Kaunas. WL. 2,200 m. (150 kc); 15 kw. 12.0 noon.—Chimes and Music. 12.30 p.m.—Programme for Children. 5.0 p.m.—Report on Agriculture. 6.0 p.m.—Young People's Programme. 6.30 p.m.—Talk on Sports Subject. 7.15 p.m.—Gramophone Selections. 7.30 p.m.—Talk on "Health." 8.30 p.m.—Programme relayed from the War Museum in Kovno. 8.40 p.m.—Time, Weather, News. 9.0 p.m.—Variety Item Concert. 10.0 p.m.—Dance Music Programme.

LAHTI (Finland) WL. 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors 375.9 m. (798 kc); 1.2 kw. 8.0 a.m.—Service (in Finnish). 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.—Concert. 1. Minuten-spiele (Fétras). 2. Finnish Songs (arr. Kauppi). 3. Valse (J. Strauss). 4. Czardas No. 2 (Michiels). 5. Songs. 6. Moksalla ylämällä (Linsen). 7. Berceuse (Jarnefeld). 8. Syystunneima (Kuula). 9. Valse triste (Sibelius). 10. Songs. 11. Melodies from "Die Faschingsfee" (Kalm). 12. Melodies from "Sybil" (Jacobi). 8.45 p.m.—News given in Finnish and Swedish, followed by relay from a Restaurant.

LANGENBERG (Germany) Westdeutscher Rundfunk. WL. 479.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle,

Programmes for Sunday.—(Cont.)

401 m. (748 kc); Cologne, 283.2 m. (1,059 kc); and Münster, 250 m. (1,200 kc).
 9.0 a.m.—Sacred Morning Recital, relayed from Düsseldorf.
 11.0 a.m.—Talk on "Dürer and Grünewald," relayed from Düsseldorf.
 11.25 a.m.—Taxation Talk by Dr Mondorf, relayed from Münster.
 11.45 a.m.—Programme from Cologne.
 12.15 p.m.—"Summer Solstice"—Cantata for three voices (arr. Woerner), relayed from Düsseldorf.
 1.0 p.m.—Programme from Cologne.
 2.50 p.m.—Chess Talk from Düsseldorf.
 3.15 p.m.—Pianoforte Selection from the "Wohltemperiertes Klavier" (Bach), relayed from Düsseldorf.
 4.0 p.m.—8.0 p.m.—Programme from Cologne.
 8.0 p.m.—"The Seasons"—Oratorio (Haydn) from the Town Hall, Mühlheim-on-the-Ruhr, 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).
 7.0 a.m.—Orchestral Concert from the Wittelkind-Bad Halle.
 9.0 a.m.—Sacred Morning Recital.
 11.0 a.m.—Orchestral Programme in celebration of the Nine Hundredth Year of the Jubilee of the Town of Naumberg.
 12.0 noon.—Talk, "From Hand-workers to Machinery," by O. Jensen-Gera.
 12.30 p.m.—Talk, "Orang-utans."
 1.0 p.m.—Agricultural Programme.
 3.0 p.m.—Orchestral Concert, relayed from the "Jahresschau."
 4.0 p.m.—"Juana"—Play (Kaiser).
 5.0 p.m.—Zither Recital.
 6.0 p.m.—Walter Rathenau—Reading.
 6.30 p.m.—See Königswinterhausen.
 7.0 p.m.—Talk, "The Opera Don Juan."
 8.0 p.m.—Programme from Münch.
 10.0 p.m.—Local Sports News.
 10.30 p.m.—Orchestral Concert.
 12.0 midnight (approx.)—Close Down.

LILLE (France)

PIT. WL. 267 m. (1,122 kc); 0.5 kw.
 12.30 p.m.—Concert arranged by the Wireless Association of Northern France, and given by the Lille Radio Club. 1. Liberty Bell—March (Souza). 2. Künstlerleben—Waltz (Strauss). 3. Ouvre tes yeux bleus (Massenet). 4. Minuet (Lederer). 5. Song Recital by M. Bertal. 6. Si mes vers avaient des ailes (Hahn). 7. Song of the Gondoliers (Mendelssohn). 8. "Hans the Flute Player"—Selection (Ganne).
 1.35 p.m.—Report of Oil Prices.
 3.0 p.m.—Probable Relay of part of the Meeting of the "Federation of Musicians of the North and Pas-de-Calais."

LINZ (Austria)

Radio-Linz. WL. 254.2 m. (1,180 kc).
 Programme in celebration of the Opening of the Linz Station.
 11.0 a.m.—Concert. Relayed from the "Redoutensaal" Linz. 1. Festfanfare. 2. Addresses by Dr. Josef Schlegel, Herr Robert Mehr (Bürgermeister of the town of Linz) and General Director Oscar Czajka. 3. "Heiligen Augustinus"—Prelude. 4. Aus der Heimat.
 12.10 p.m.—Organ Recital from the Stift St. Florian. 1. Fantasia on Bruckner Themes. 2. Andante (Bach). 3. Largo, Op. 93 (Reger).
 3.0 p.m.—Concert. Relayed from the "Turnerfesthalle" Linz. 1. "Der Freischütz"—Overture (Weber). 2. The Unfinished Symphony (Schubert). 3. The Ninth Symphony (Bruckner).
 5.0-8.0 p.m.—Programme relayed from Vienna.
 8.0 p.m.—Concert. Relayed from the Redoutensaal. 1. "Rosamunde"—Overture (Schubert). 2. Sphärenklänge—Waltz (J. Strauss). 3. Quartet Selections: (a) Folk Song (Kienzl), (b) D'Blamerln (Reiter). 4. Selection from the Works of Weber (Urbach). 5. Quartet Selections: (a) D'Badahochzeit (Neuhöfer), (b) D'Jaga san da (Vergeiner), (c) Da schlampate Messner (Wegscheider). 6. (a) Potpourri of Alpine Melodies, (b) Greetings to Linz. 7. Quartet Selections: (a) Die dreifache Hochzeit (Koschat), (b) D'Weibalist (Springer), (c) S'Homatlandl (Scherbaum). 8. Humorous Selections: (a) Da blühade Kerschbaum (Stelzhamer), (b) D'Ahn-

beim Launln. (c) Da Mostchädl n'Hansl sein Interhaltung (Hönig), (d) Da neuhe Bada (Krempf), (e) Ein paar Gschichtn aus' Schmirbüchl (Resel). 9. Styrian—Dance (Kienzl). 10. The Blue Danube Waltz (Joh. Strauss). 11. Finale marsch.

MADRID (Spain)

Union Radio (EAJ7). WL. 374 m. (802 kc); 1.5 kw.
 11.30 a.m.—Concert by the Municipal Band, from the "Retiro."
 2.0 p.m.—Orchestral Concert.
 3.0 p.m.—Orchestral Concert, relayed from the Hotel Nacional.
 7.0 p.m.—Programme for Children.
 8.0 p.m.—Dance Music Programme. Programme relayed by San Sebastián, 335 m. (895 kc).
 10.0 p.m.—Time, followed by Popular Concert—Guitar Solos, Flamenco Songs by "Chato de las Ventas," Sextet Selections, and Astronomy Talk, by Don. Enrique Gastardi.
 12.0 midnight.—Dance Music relayed from the Alcazar Theatre, Madrid.
 12.30 a.m. (Monday, 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.—Quartet Concert.
 3.30 p.m.—Concert. 1. Allegro from the First Symphony (Mahler). 2. Soprano Solo from "Marion Delorme" (Poncielli). 3. Scherzo and Nocturne from "A Midsummer Night's Dream" (Mendelssohn). 4. Bass Solo from "Philemon and Baucis" (Gounod). 5. The Second Minuet (Solazzi). 6. Soprano Solo from "Lucrezia Borgia" (Donizetti). 7. Quintet Selections: (a) A te sola (Giuliani), (b) Pattuglia Messicana (Billi).
 4.45 p.m.—Programme for Children.
 5.15 p.m.—Dance Music Programme from the Cova Restaurant, Milan.
 8.35 p.m.—Talk on "Julius Caesar."
 9.0 p.m.—"L'Amore dei Tri Re"—Opera (Montemuzzo). In the Interval: Sports Notes, Talk on "City and Country" and News.
 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) and Kaiserlautern, 204.1 m. (1,470 kc), and Nürnberg, 241.9 m. (1,240 kc).
 11.0 a.m.—Chimes and Weather.
 1.0 p.m.—Chimes and Weather.
 1.5 p.m.—Programme Announcements.
 1.10 p.m.—Lesson in Morse.
 3.0 p.m.—Zither Orchestra Recital.
 4.0 p.m.—Talk on "Map Reading."
 4.30 p.m.—Trio and Vocal Concert.
 6.15 p.m.—Concert from Nürnberg. 1. Four Tenor Solos (Wolf): (a) Der Scholar, (b) Erwartung, (c) Komm, Liebchen, komm, (d) Beherzigung. 2. Intermezzo in F minor, Op. 2 (Dohnany). 3. Valse caprice for Pianoforte (Tchaikovsky). 4. Songs (Liszt): (a) Die Loreley, (b) Im Rhein, im schönen Strome, (c) Es muss ein Wunderbares sein.
 7.15 p.m.—Talk on "Napoleon."
 7.45 p.m.—Local Sports Notes.
 8.0 p.m.—Midsummer Eve Concert.
 10 p.m.—Announcements and News.
 10.25 p.m.—Orchestral Concert. Relayed from the Café Arcadia.

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.—Vocal and Instrumental Concert—Tosti, Mascagni, Sirele, etc.
 8.40 p.m.—Time, and Wireless Talk.
 8.50 p.m.—Concert: 1. "The Nuremberg Doll"—Overture (Adam). 2. Baritone Solo from "The Pearl Fishers" (Bizet). 3. Mezzo-Soprano Solo from "La Reine de Golconda" (Donizetti). 4. "Non, Pagliaccio non son" from "I Pagliacci" (Leoncavallo). 5. Intermezzo from "Soeur Angélique" (Padini). 6. Duet for Mezzo-Soprano and Baritone from "Samson and Delilah" (Saint-Saëns). 7. Anima allegria (Vittadini). 8. Duet for Tenor and Baritone from "Ruy Blas" (Marchetti). 9. Mezzo-Soprano Solo from "Martha" (Flotow). 10. Baritone Solo from "L'Africaine" (Meyerbeer). 11. Tenor Solo from "The Girl of the Golden West" (Puccini). 12. Intermezzo from Act 3 of "La Wally" (Catalani). 13. Duet for Mezzo-Soprano and Tenor from "Aida" (Verdi). 14. Selection from "William Tell" (Rossini).

Sports Notes in the Interval.
 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, on 555.8 m. (540 kc); Fredrikstad, 435 m. (689 kc); Porsgrund, 500 m. (600 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc).
 10.50 a.m.—Chimes and Service from the Military Church.
 7.15 p.m.—News, followed by Talk, "St. John and the Feast of St. John," by Mr. Christensen.
 8.0 p.m.—Time and Concert by the Station Orchestra, from the Works of Richard Wagner.
 9.0 p.m.—Programme from Bergen.
 9.30 p.m.—Concert by the Norwegian Balalaika Orchestra.
 10.0 p.m.—Weather and News.
 10.15 p.m.—Talk, followed by Dance Music from Hotel Bristol.
 12 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 Parlé. Talks on "Health," "Police Anecdotes," "Racing Results."
 8.10 p.m.—Weather Forecast.
 8.30 p.m.—Mario Cazes and his Orchestra. At 8.56 p.m.: Time Signal on 32.5 m. (9,231 kc).
 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 Records, followed by Talk and News.
 9.0 p.m.—Concert. 1. "Mireille"—Overture (Gounod). 2. Selection from "Antar" (Dupont). News.
 9.30 p.m.—Symphony Concert. 1. Symphonie concertante for Violin, Cello, Oboe, Bassoon and Orchestra (Bellanger). 2. Gavotte from the English Suite (Bach). 3. Moorish Rhapsody (Saint-Saëns). 4. Ronde d'amour (Chaminade). 5. Hungarian Dance No. 2 (Brahms). News in the Interval.

PARIS (France)

Radio-Paris (CFR). WL. 1,765 m. (170 kc); 3 kw.
 8.0 a.m.—News and Press Review.
 12.0 noon.—Religious Address and Concert of Religious Music.
 12.45 p.m.—Concert: 1. "Si j'étais roi" (Adam). 2. "Poet and Peasant" (Suppé). 3. Gold and Silver (Lohar). 4. Bilboquet in Variety. 5. Pastel (Paradis). 6. Serenade (Toselli). 7. La fauette du temple (Messager).
 4.30 p.m.—Dance Music. News.
 8.0 p.m.—Report on Agriculture.
 8.15 p.m.—News followed by Concert: 1. "Mignon"—Overture (Thomas). 2. Brandenburg Concerto (Bach). 3. Thérèse (Massenet). 4. Melodies. 5. Appassionato (Büsser). 6. Duets. 7. La ronde de Nuit. 8. Danish Melodies. 9. "Le Caid"—Selection. 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 3.45 p.m.
 11.15 p.m.—Programme of Musical Selections, Baseball Scores, and Variety Items.
 4.0 a.m. (approx., Mon.)—Close Down.

POSEN (Poland)

Polskie-Radio. WL. 343 m. (874 kc); 1.5 kw.
 Transmits at intervals from 11.0 a.m.
 6.30 p.m.—Talk in French on "The Renaissance in France."
 6.50 p.m.—Talk, "Silva Rerum"
 7.10 p.m.—Guessing Competition.
 8.0 p.m.—Programme from Warsaw.
 8.30 p.m.—Male Choir Concert.
 10.0 p.m.—Time, News, Weather and Variety Selections.
 10.50 p.m.—Dance Music Programme from the Palais Royal Restaurant.
 12.0 midnight (approx.)—Close Down.

PRAGUE (Czechoslovakia)

Strasnice. WL. 348.9 m. (860 kc); 5 kw.
 Transmits at intervals from 8.0 a.m.
 6.0 p.m.—German Transmission.
 7.15 p.m.—Popular Music Programme.
 8.0 p.m.—Popular Evening Programme.
 9.30 p.m.—Dramatic Selections.
 10.0 p.m.—News and Announcements.
 10.20 p.m.—Programme from Brünn.

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Programmes for Sunday.—(Cont.)

ROME (Italy)

Unione Radiofonica Italiana. 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. Relayed from the "Casinetta."
 8.40 p.m.—Sports Notes, News, Time.
 9.10 p.m.—Concert: Concerto grosso (Bonporti da Trento). 2. Suite pastorale (Chabrier). 3. Recital of Humorous Lyrics. 4. Une nuit sur le mont chauve—Symphonic Poem (Moussorgsky). 5. Guardando la Santa Teresa del Bernini (Mascagni). 6. Buffalmacco—Prelude (Gasco). 7. Review of Fashion. 8. Pianoforte Solos: (a) Scherzo in E major (Mendelssohn), (b) Tarantelle (Rosati). 9. (a) Selection from "The Twilight of the Gods" (Wagner), (b) Dance of the Apprentices from "The Mastersingers" (Wagner). 10. "Carneval roman"—Overture (Berlioz).
 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 11.30 p.m. Transmits at intervals from 3.30 p.m.
 11.0 p.m.—"Stetson Parade" Legion Band, from Boston.
 12.0 midnight.—Pianoforte Recital by Hans Barth (New York).
 12.25 a.m. (Monday).—Baseball Announcements from New York.
 12.30 a.m.—Capitol Theatre Programme relayed from New York.
 2.0 a.m.—Talk, "Our Government."
 2.15 a.m.—"Atwater Kent Programme." Relayed from New York.
 2.45 a.m.—Time, and "Biblical Drama." Programme from New York.
 3.30 a.m. (approx.).—Close Down.

STAMBOUL (Turkey)

Radio-Stamboul. Societe Anonyme Turque de Telephonie sans fil. WL. 1,180 m. (254 kc.); 5 kw.
 4.30 p.m.—Orchestral Concert.
 5.30 p.m.—Cereal Market Prices.

6.15 p.m.—Concert of Turkish Music.
 8.30 p.m.—Weather and Time.
 8.40 p.m.—Concert. 1. "Oberon"—Overture (Weber). 2. Hungarian Dances (Brahms). 3. Trio (Chopin).
 10.0 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.).
 11.0 a.m.—Religious Service.
 12.45 p.m.—Sports News and Time.
 1.30 p.m.—Choral Concert, relayed from Sundsvall.
 5.0 p.m.—Folk Music, played by peasant fiddlers and pipers.
 6.0 p.m.—Service from St. Peters."
 7.0 p.m.—"Big Klaus and Little Klaus"—Play for Children.
 8.15 p.m.—Open-air Orchestral Concert relayed from Göteborg.
 9.40 p.m.—Dance Music from the Gröna Lund Tivoli, Stockholm.
 12.0 midnight (approx.).—Close Down.

STUTTGART (Germany)

Süddeutscher Rundfunk. WL. 379.7 m. (790 kc.); 4 kw.
 11.15 a.m.—Celebration on the occasion of the two-hundred-years jubilee of the Mannheim Merchants; relayed from the Mannheim Castle: 1. Andante moderato from the String Quartet in A minor, Op. 51, No. 2 (Brahms). 2. Address by Herr Richard Lenz, President of the Chamber of Commerce. 3. Address by Prof. Dr. Blaustein. 4. Congratulations by the administration and representatives of the guests. 5. Andante and Allegro from the String Quartet in D Major, K.V., No. 575 (Mozart). Followed by Gramophone Music.
 2.0 p.m.—Programme from Voxhaus.
 3.0 p.m.—Orchestral Concert. 1. "The Queen's Kerchief"—Overture (Strauss). 2. "Eiskönigler" Waltz (Ert). 3. "Undine"—Ballet Music (Lortzing). 4. Aria from "Czar and Carpenter" (Lortzing). 5. The Cuckoo (Reiff). 6. Strauss-Potpourri (Fétras). 7. Song from "Prince Igor" (Borodine). 8. Gavotte from "Manon"

(Massenet). 9. Waltz (Waldteufel). 10. March (Komzak).
 4.30 p.m.—"Mass in F Minor" (Bruckner), relayed from the cathedral in Rottenburg on the occasion of the Jubilee Festival of the Diocese of Rottenburg.
 6.0 p.m.—Time and Sports Notes.
 6.15 p.m.—Talk by Dr. K. Löwenberg.
 7.15 p.m.—Literary Programme.
 7.45 p.m.—Time and Sports Notes.
 8.0 p.m.—Chamber Music from works of Hans Gal: 1. Pianoforte Sonata, Op. 28. 2. Trio, No. 18, for Pianoforte, Violin and Cello.
 9.0 p.m.—"Cabaret Concert": 1. Minuet from the Symphony in E Flat Major (Mozart). 2. Erbauliche Gedanken eines Tabakrauchers (Bach). 3. Lob der Faulheit (Haydn). 4. Die eheliche Liebe (Lessing). 5. Die glückliche Ehe (Gellert). 6. Die Alte (Mozart). 7. Die Henne (Schubert). 8. Ochsenmenüett (Haydn). 9. The maiden's prayer (Seiffert). 10. Seemans Los. 11. Am Elterngrab. 12. Two dark eyes. 13. Ach, lieber Herr Schaffner. 14. Man steigt nach—Duet. 15. Haben Sie nicht den kleinen Cohn gesehen? 16. Bitte, bitte, lass mich. 17. Mein Herz, das ist con Bienenhaus. 18. Die Gigerlkönigin. 19. Ist denn kein Stuhl da? 20. Komm in meine Liebeslaube! 21. Mein Liebbling heisst Mädi! 22. Ich hab' mein Herz in Heidelberg verloren. 23. Orchids. 24. Homesick. 25. The lovely Adrienne. 26. In Nischni-Nowgorod. 27. The little pagoda. 28. Madonna, du bist schöner als der Sonnenschein. 29. Was machst du mit dem Knie? 30. Waltz Duet from "Countess Maritza" (Kallman). 31. Pasadena. 32. Adieu Marie! Followed by News and Sports Notes.

TOULOUSE (France)

Radiophonie du Midi. WL. 389.6 m. (770 kc.); 3 kw.
 12.45 p.m.—Concert: 1. Moment musicale (Schubert). 2. Serenade for Two Violins, Cello, and Viola (Schubert). 3. Quartet in G (Beethoven). 4. Selections from "Les Cloches de Corneville" (Planquette). 5. Serenade from "Iris" (Mascagni). 6. Margaret's Aria from "Le Roi d'Ys" (Lalo). 7. Selection from "Manon"

(Massenet). 8. Selections from "Le Jongleur de Notre-Dame" (Massenet). 9. Selections from "Madame Butterfly" (Puccini). 10. Choral Selection from "Cavalleria Rusticana" (Mascagni).
 8.0 p.m.—Time and News.
 8.30 p.m.—Guitar Recital. Part I. Hawaiian Guitar. 1. Oloha ohe. 2. Wailana Waltz. 3. Sweet Hawaiian Moonlight. 4. One, Two, Three, Four. 5. Give me your heart. 6. Hawaiian Smile. 7. Farewell dear Hawaii. 8. Come to me dear. 9. Hawaiian Dreams. 10. Honolulu Moon. 11. Dream of Hawaii. 12. For your first kiss. 13. Community Blues. 14. Maria Mari. 15. La Paloma.
 9.15 p.m.—Selections from "Werther" (Massenet). 1. Prelude. 2. Invocation to Nature. 3. Albert's Aria. 4. Moonlight. 5. While dreams the child. 6. Aria. 7. Letter Aria. 8. Two Songs. 9. Prayer. 10. Duet. 11. Prelude to Act IV.
 10.0 p.m.—Dance Music Programme. 1. Gold and Silver—Waltz (Lehár). 2. Golden Rain (Waldteufel). 3. Murrur of the flowers (Blon). 4. Moss Rose (Bosc). 5. Flowers' Dream (Translateur). 6. Narcissus (Nevin).
 10.15 p.m.—"North African Journal."

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).
 11.0 a.m.—3.0 p.m.—Opening of the Linz Broadcasting Station, Programme relayed from Linz.
 5.0 p.m.—Orchestral Concert. 1. "Egmont"—Overture (Beethoven). 2. Krollsbalklänge—Waltz (Lumbye). 3. Selection from "Rigoletto" (Verdi). 4. Serenade for Two Violins (Zamecnik). 5. Volga Song from "The Czarevitch" (Lehár). 6. Peer Gynt—Suite (Grieg). 7. Boby träumt—Waltz—Boston (Geiger). 8. Selection from "Lilac Time" (Schubert-Berté).
 6.20 p.m.—Travel Talk—"On a Farm in the Lower Amazon."
 7.10 p.m.—Recital of Songs and String Quartet, Op. 18, No. 3 in D major (Beethoven).

8.5 p.m.—"Casanova in Vienna"—Three Act Comedy in Verse (Raoul Auernheimer), followed by Dance Music Programme.

WARSAW (Poland)

Polskie-Radio. WL. 1,111.1 m. (270 kc.); 10 kw.
 10.15 a.m.—Divine Service from Wilno.
 12.0 noon.—Time, Fanfare from the Church of Notre Dame at Cracow, Aviation Notes and Weather, followed by Programme from Cracow.
 4.0 p.m.—Agricultural Programme.
 5.0 p.m.—Orchestral Programme.
 6.30 p.m.—Miscellaneous Items.
 7.10 p.m.—Talk on "Alsace-Lorraine."
 7.35 p.m.—Talk, "History of Poland."
 8.15 p.m.—Evening Variety Concert.
 10.0 p.m.—Time, News, Weather, Aviation Notes and Sports.
 10.30 p.m.—Dance Music Programme from the Oaza Restaurant, Warsaw.
 11.30 p.m. (approx.).—Close Down.

WILNO (Poland)

Polskie-Radio. WL. 435 m. (689 kc); 0.5 kw.
 10.15 p.m.—Relay from the Cathedral.
 1.0 p.m.—Programme from Warsaw.
 6.35 p.m.—Talk in Lithuanian.
 7.0 p.m.—Gramophone Selections.
 7.25 p.m.—Talk on Natural Science.
 7.50 p.m.—Programme from Warsaw.

ZAGREB (Yugoslavia)

Radioklub-Zagreb. WL. 309 m. (970 kc); 0.35 kw.
 5.0 p.m.—Orchestral Concert.
 7.45 p.m.—Announcements.
 8.0 p.m.—Relay of an Opera from the Zagreb National Theatre.

ZURICH (Switzerland)

Radio-Genossenschaft. WL. 588.2 m. (510 kc); 1 kw.
 11.15 a.m.—Orchestral Concert.
 12.29 a.m.—Weather Forecast, followed by Quintet Concert.
 4.0 p.m.—Orchestral Concert from the Carlton-Elite Hotel, Zurich.
 7.30 p.m.—Protestant Address.
 8.0 p.m.—Recital of Folk Songs, followed by Orchestral Concert.
 10.0 p.m.—News and Close Down.



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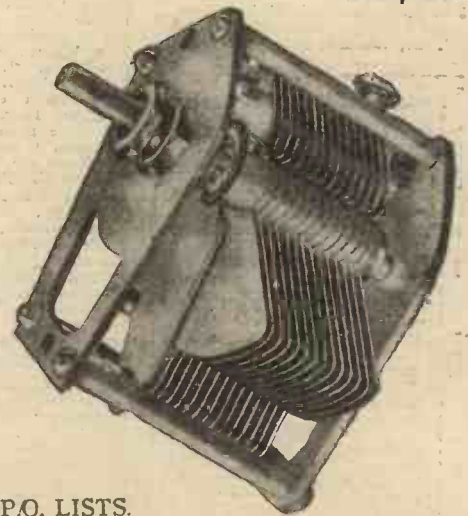
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PROGRAMMES FOR MONDAY

(June 25)

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 10.0 p.m.—Exchange Quotations.
6.10 p.m.—Sextet Selections.
8.30 p.m.—Shakespeare Tales (arr. Portusach)—"Cymbeline."
9.0 p.m.—Exchange and News.
9.5 p.m.—Humorous Review of the Week's Events in Verse (Montero).
9.15 p.m.—Orchestral Selections.
10.0 p.m.—Chimes and Weather.
10.5 p.m.—Soprano Song Recital: 1. Solveig's Song (Grieg). 2. Serenata (Toselli). 3. Selection from Act 1, "La Bohème" (Puccini). 4. Selections from "Carmen"—Act 3 (Bizet).
10.30 p.m.—Concert of Classical Music: Quartet No. 1 in E Flat (Mozart): (a) Allegro, (b) Larghetto, (c) Allegretto.
11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)
Kringkastingselskap. WL. 369.9 m. (611 kc); 1.5 kw.
Transmits at intervals from 11.15 a.m. to 8.0 p.m.—The Wireless Orchestra.
1. Nachtklänge von Ossian—Overture (Gade). 2. Valse phantastique (Heinecke). 3. Veslemøy (Halvorsen). 4. Saeterbilleder (Fredriksen). 5. Gopak (Moussorgsky). 6. Romance for Pianoforte (Sibelius). 7. Rhapsody Slave (Volpati).
9.0 p.m.—Talk, "Norway—the Land of Adventure," by C. W. Suuhl.
9.30 p.m.—Serenade in G major (Sinding), followed by 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 noon to 5.0 p.m.—Programme from Voxhaus.
6.0 p.m.—Talk, "German Small Towns in Literature," by A. Lorenz.
6.30 p.m.—Elementary English Lesson.
6.55 p.m.—Talk, "What Must the Landholder Know About Death Duties," by A. Möller.
7.20 p.m.—Talk, "Water as the Friend and Enemy of Mankind."
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. to 5.0 p.m.—Chamber Music. 1. Quartet in G minor for Two Violins, Viola and Cello (Schubert). 2. Sonata for Three Violins (Marini). 3. Suite for Four Violins (Gabielli). 4. Quartet in A major, Op. 2 for Two Violins, Viola and Cello (Richard Strauss).
6.45 p.m.—Talk, "Motor Regulations."
7.10 p.m.—Talk, "The Trade of the Turner," by Paul Kitzing.
7.35 p.m.—"German for Germans."
8.0 p.m.—Talk, "Past Personalities of the German Stage—Goethe and Immermann."
8.30 p.m.—International Programme from Warsaw, followed by News, Time, Weather, and Sports Notes.

BERNE (Switzerland)
Radio-Berné. 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 by Dr. G. H. Graber.
8.30 p.m.—Concert by the Kursaal Orchestra, and Recital of Folk Songs. News in the Interval.
10.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)
Schlesische Funkstunde. WL. 322.9 m. (920 kc); 4 kw. Relayed by Gletwitz on 329.7 m. (910 kc).
Transmits at intervals from 11.15 a.m. to 7.50 p.m.—Topical Events Review.
8.30 p.m.—Concert of Opera Music: 1. "The Marriage of Figaro"—Overture (Mozart). 2. Baritone Solos—Serenade and Drinking Song from "Don Juan" (Mozart). 3. Orchestra—Selection from "Il Trovatore" (Verdi). 4. Baritone Solos; (a) Selection from "Othello" (Verdi); (b) Aria from "A Masked Ball" (Verdi). 5. Violin Solo—Prize Song (Wagner). 6. Baritone Solos—Two Selections from "Tannhäuser" (Wagner).

9.15 p.m.—Irene Triesch—from the Works of Novalis, Tolstoy, Baudelaire, Strindberg, and Jammes.
10.0 p.m. (approx.)—Close Down.

BRÜNN (Czecho-Slovakia)
Komarov. WL. 441.2 m. (680 kc); 2.4 kw.
Transmits at intervals from 11.0 a.m. to 7.0 p.m.—Cabaret Concert Programme.
8.30 p.m.—Programme from Warsaw.
10.30 p.m.—Exhibition Programme.

BRUSSELS (Belgium)
Radio Belgique. WL. 508.5 m. (590 kc); 1.5 kw.
5.0 p.m.—Gramophone Records.
5.30 p.m.—Orchestral Concert relayed from the Café Métropole.
6.0 p.m.—Talk, "The History of Music."
6.15 p.m.—Talk on "Etiquette."
6.30 p.m.—Trio Concert: 1. March (Siede). 2. My fan (Genskens). 3. Teo Long (Ackermans). 4. Seigneur Andalou—Pianoforte Solo (d'Agreves). 5. "Le Cid" (Massenet). 6. Aubade—Violin Solo (Caludi). 7. Causerie d'amour (Meyer-Helmund). 8. Minuet (Valeria). 9. La poupée de massépain (Zimmer). 10. Romance for cello (d'Agreves). 11. La Servante des montagnes (Simson).
7.30 p.m.—"Le Radio Chronique."
8.15 p.m.—Gramophone Records.
8.30 p.m.—Concert relayed from the Spa Casino. Topical Talk in the Interval.
10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)
Magyar Telephon Hírműve
Radio R.T. WL. 557.1 m. (538 kc); 25 kw.
Transmits at intervals from 12.0 noon to 7.0 p.m.—Wireless Correspondence.
8.0 p.m.—German Language Lesson.
8.45 p.m.—Orchestral and Instrumental Concert—Violin and Viola.
10.30 p.m.—Time and News, followed by Tzigane Music from the Emka Café, Budapest.

COLOGNE (Germany)
Westdeutscher Rundfunk. WL. 283.2 m. (1,059 kc); 4 kw.
Transmits at intervals from 10.15 a.m. to 1.5 p.m.—Orchestral Concert.
4.35 p.m.—Talk, "Man—Technique—Power," by Wilfried Schreiber.
5.15 p.m.—See Langenberg station.
6.0 p.m.—Concert. 1. Motor March (Rosey). 2. Phönixschwinger—Waltz (Strauss). 3. Waldidyllen (Dagwell). 4. Selection from "I Pagliacci" (Leoncavallo). 5. (a) Poem (Fibich), (b) Nur einen Schritt vom Weg—Boston (De Mungo). 6. Potpourri from "La Bayadère" (Kálmán).
7.20 p.m.—Spanish Conversation.
7.45 p.m.—See Langenberg station.
8.10 p.m.—Concert—Oriental Programme. 1. The Story of the Creation (Java). 2. Oriental Ballet from "Lalla Rookh" (David). 3. Short Japanese Tales. 4. The Moon Fish—Chinese Story (Bela Balasz). 5. Persian Dance from "Hovantschina" (Moussorgsky). 6. Poems from the Persian (Hafiz). 7. Oriental Suite "Beni Mora" (Holst). 8. On the Threshold—from the Arabian (Ibn al Khayyat al Demischki). 9. Longing—from the Turkish (Nedim). 10. The Women of Constantinople (Fazil Bey). 11. Ballet Music from "Lakmé" (Delibes). 12. The Eight Faces of the Biwasee—Japanese Legend (Dauthendey). 13. Suite from "Die Liebe zu den drei Orangen" (Prokofieff). 14. From the Chinese: (a) Old Wisdom (Lo-Tschang-Nai), (b) The Faithful Wife (Tschang-Tsi), (c) Tschangan, Oh my Native Land (Thu-fu), (d) The Soldier's Bride (Thu-fu), (e) The Lobster (Li-tai-pe), (f) Chinese Soldiers' Song (Schiking), (g) The Drinking Song of the World's Sorrows (Li-tai-pe). 4. Followed by News, Sports Notes, Evening Concert and Dance Music.
12 midnight (approx.)—Close Down.

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 10.30 a.m. to 6.20 p.m.—English Language Lesson.
7.0 p.m.—News, Exchange, Time.
7.30 p.m.—Talk, "Bornholm's Moorland."
8.0 p.m.—"Paa Krigsstien"—Musical Play in One Act (Nielsen). News.

9.15 p.m.—Reading of Poems.
9.45 p.m.—Concert of Historic Marches. 1. Finnish March. 2. Festsang—March. 3. Mollwitzer March. 4. French Military March. 5. Parisian March. 6. Festmarch (Hartmann). 7. Den tapre Landsoldat (Hornemann). 8. The Boys of Tipperary (Amers).
10.45 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 Music.
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 to 7.30 p.m.—French Language Lesson.
8.0 p.m.—Fanfare from Notre Dame.
8.5 p.m.—Talk: "Poison Gases."
8.30 p.m.—Programme from Warsaw.
10.30 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.—Gramophone Selections.
7.30 p.m.—News and Irish Lesson.
7.45 p.m.—"Ireland for the Tourist—Leinster," by Clare Cooke.
8.0 p.m.—The Station Orchestra.
8.15 p.m.—A Sketch, arranged by Mary O'Hea and Company.
9.0 p.m.—"The Work of Irish Lifeboats," by Herbert J. Solomon.
9.5 p.m.—P. J. O'Toole (Tenor).
9.20 p.m.—Request Orchestral Music.
9.30 p.m.—F. G. O'Brien (Mezzo-Soprano).
9.40 p.m.—"Puccini Music," by the Station Orchestra.
10.0 p.m.—The Ceilidh Trio.
10.30 p.m.—News 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 at intervals from 4.30 p.m. to 5.45 p.m.—Reading from "Ivanhoe."
6.15 p.m.—Wireless Announcements.
6.30 p.m.—Programme for Women. Relayed from Cassel.
6.45 p.m.—Talk, "Chess Games."
7.15 p.m.—Selected English Literature.
7.30 p.m.—English Language Lesson.
8.0 p.m.—Concert by the Madrigal Choir of the University of Cambridge. Followed by Violin Recital and Late Concert. 1. "The Barber of Bagdad"—Overture (Cornelius). 2. Trauer und Trost—Song Cycle (Cornelius). (a) Trauer, (b) Angedenken, (c) Ein Ton, (d) An den Traum, (e) Treue, (f) Trost. 3. Prelude—Symphonic Poem (Liszt). 4. Two Songs (Liszt), (a) Es war ein König in Thule, (b) Die Loreley. 5. Selection from "Hansel and Gretel" (Humperdinck).

HAMBURG (Germany)
Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297.9 m. (1,007 kc); and Kiel, 255 m. (1,176 kc).
Transmits at intervals from 5.45 a.m. to 6.30 p.m.—Relay from Königswusterhausen.
7.0 p.m.—Orchestral Selections.
7.25 p.m.—Talk, "What can German Commercialism learn from America?"
7.55 p.m.—Weather, followed by Fourth Singing Lesson.
9.0 p.m.—Concert of Songs and Arias, followed by Weather, News and Silent Night.

HILVERSUM (Holland)
Algemeene Vereeniging Radio-Omroep. WL. 1,071 m. (280 kc); 5 kw.
11.40 a.m.—Police Information.
12.10 p.m.—Concert of Trio Music.
4.20 p.m.—Programme for Children.
5.40 p.m.—Time followed by Orchestral Concert. 1. "Peter Schmolle"—Overture (Weber). 2. Fantasia on the works of Grieg (Urbach). 3. Fantomime (Frini). 4. Sextet—Selection from "Lucia di Lammermoor" (Donizetti). 5. Il primo amore (Suppé). 6. Selection from "Der arme Jonathan" (Müllacker). 7. Sometimes I'm happy—Fox-trot (Youmans)—8—Finale.
6.55 p.m.—French Language Lesson.
7.25 p.m.—Police Information.
7.40 p.m.—Concert relayed from the Kurhaus, Scheveningen. 1. "The

Mastersingers"—Prelude (Wagner). 2. Good Friday Music from "Parsifal" (Wagner). 3. Wotan's Farewell and Fire Magic from "The Valkyrie" (Wagner). 4. The New World Symphony (Dvorák). News and Weather.
10.15 p.m. (approx.)—Close Down.

HUIZEN (Holland)
WL. 341.6 m. (878 kc); 4 kw. (Until 6.40 p.m.) Transmits from 6.40 p.m. on 1,870 m. (160 kc).
1.10 p.m.—Organ Recital.
4.40 p.m.—Programme for Hospitals.
6.55 p.m.—Lesson in Photography.
8.10 p.m.—Lesson in Singing.
8.40 p.m.—Instrumental Concert.

JUAN-LES-PINS (France)
Radio L. L. WL. 230 m. (1,304 kc); 0.25 kw.
Transmits at intervals from 1.0 p.m. to 9.0 p.m.—News and Talk.
9.15 p.m. (approx.)—Concert.
10.0 p.m.—Dance Music Programme.
10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. WL. 303.6 m. (988 kc); 4 kw. Relayed by Danzig on 272.7 m. (1,100 kc).
Transmits at intervals from 11.0 a.m. to 6.20 p.m.—Talk, "The Creative Child."
6.50 p.m.—Talk on a Legal Subject.
7.20 p.m.—English Language Lesson.
8.10 p.m.—Concert of "Animal Music."
10.0 p.m. (approx.)—Weather and News, followed by Sports Notes.
10.15 p.m.—Concert of Old and Modern Madrigal Music. 1. (a) Agnus Dei (Hassler), (b) Kreuzfahrlerlied (arr. Hensel), (c) Landknechtständchen (Lasso). 2. Eine Kleine Nachtmusik (Mozart). 3. Songs. 4. Serenade in C major, Op. 14 (Fuchs). 5. Songs (Lendvai).

KOVNO (Lithuania)
Radio-Kaunas. WL. 2,000 m. (150 kc); 15 kw.
9.0 p.m.—Orchestral Concert: 1. "Titans" March (Heinecke). 2. "Norma"—Overture (Bellini). 3. Romance sans paroles (Rebikoff). 4. Les romances célèbres (Kahnt). 5. Selection from "The Tales of Hoffmann" (Offenbach). 6. (a) Moderato con moto, (b) Allegro non troppo (Laurischkus). 7. Comedy—Overture (Keler-Bela). 8. Dubinuschka—Potpourri (Schirmann). 9. Mexican Legend (Jessel). 10. Waltz—Boston (Herbert). 11. Moonlight Night in Rio (Wertheimer).

LAHTI (Finland)
WL. 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw.
6.15 p.m.—Talk by Vilho Serälä.
6.35 p.m.—Orchestral Concert. 1. Polonaise (Sibelius). 2. Berceuse (Sibelius). 3. Autrefois (Sibelius). 4. Finnish Songs (arr. Kauppi). 5. Münchner Kindl (Komzak). 6. Song and Story (Komzak). 7. Gavotte (Roubier).
8.0 p.m.—Concert. 1. Recital of Songs. 2. Melodies (Offenbach). 3. Extase (Ganne). 4. Finnish March (Borenjus).
8.45 p.m.—News given in Finnish and Swedish, followed by Programme from a Restaurant.
10.0 p.m. (approx.)—Close Down.

LANGENBERG (Germany)
Westdeutscher Rundfunk. WL. 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283.6 m. (1,059 kc) and Münster, 250 m. (1,200 kc).
Transmits at intervals from 10.15 a.m. to 5.5 p.m.—See Cologne Station.
5.15 p.m.—Programme from the Educational Seminary for Teachers. Relayed from Bonn.
6.0—7.45 p.m.—See Cologne Station.
7.45 p.m.—Talk for Parents, by Herr Ebel; Relayed from Dortmund.
8.10—12.0 midnight.—See Cologne.

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 4.30 p.m.—Orchestral Concert.
5.15 p.m.—Various Announcements.
6.30 p.m.—See Königswusterhausen.
6.55 p.m.—Weather and Time.
7.0 p.m.—"Don Juan"—Opera in Two Acts (Mozart). Relayed from the Opera House, Dresden.

10.0 p.m. (approx.)—News and Sports.
10.15 p.m.—Light Orchestral Music and Dance Music Programme.
12 midnight (approx.)—Close Down.

LILLE (France)
P.T.T. WL. 267 m. (1,122 kc); 0.5 kw.
Transmits at intervals from 12.30 p.m. to 7.0 p.m.—Talk in Esperanto.
7.30 p.m.—Market Prices of Hay, Corn, Flour, Sugar, Maize, Metals, etc., and Exchange Quotations.
7.40 p.m.—Concert. 1. "Phèdre"—Overture (Massenet). 2. "Ninon"—Tenor Song (Darion). 3. Recitatif and Polonaise, from Concerto No. 2 (Weber). 4. Un Mot—Recitation. 5. Symphonie funèbre (Berlioz). 6. Talk by M. Debuigne. 7. Andante and Allegro from the Fifth Symphony (Beethoven). 8. Vieux Tu (De Wenzel). 9. La Doloise Polka (Wetteg). 10. "Pasquille Tourquennoise." 11. "Retraite," with Pianoforte Accompaniment.
9.15 p.m.—Gala Concert, in celebration of the Founding of the "Union Symphonique Lilloise."

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.—Orchestral Selections. 1. Las bribones—Selection (Calleja). 2. Les dragons de L'Imperatrice (Messager). 3. El solo de trompa—Selection (Serrano). In the interval, Selections by Luis Medina.
8.0 p.m.—Dance Music Programme.
8.30 p.m. (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 Lesson in Technical Wireless.
9.45 p.m.—Relay of an Opera. During the interval: a Talk.
10.55 p.m. (approx.)—News.
11.0 p.m.—Dance Music. Relayed from the "Fiaschetta Toscana."
11.30 p.m. (approx.)—Close Down.

MÜNICH (Germany)
Deutsche Stunde in Bayern. WL. 536 m. (559 kc); 4 kw. Relayed by Augsburg, on 566 m. (530 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.—English Language Lesson.
7.30 p.m.—Talk: "German Dialects."
8.15 p.m.—Choral Concert relayed from Nürnberg.
9.5 p.m.—Orchestral Concert: 1. "Czar and Carpenter"—Overture (Lortzing). 2. Selection from "The Magic Flute" (Mozart). 3. Second Movement from the Symphony in C Major, No. 7 (Haydn). 4. Diverstissement in D Major (Mozart). 5. "Heimkehr aus dem Fremde"—Overture (Mendelssohn).
10.5 p.m.—News and Chess Talk.

NAPLES (Italy)
Unione Radiofonica Italiana (I.R.A.). WL. 333.3 m. (900 kc); 1.5 kw.
Transmits at intervals from 2.0 p.m. to 8.40 p.m.—Time, and Harbour Notes.
8.50 p.m.—"Manon Lescaut"—Opera in Four Acts (Giacomo Puccini).
10.55 p.m.—News and Close Down.

OSLO (Norway)
Kringkastingselskapet. WL. 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, on 555.8 m. (540 kc); Frederikstad, 435 m. (680 kc); Porsgrund, 500 m. (600 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc).
Transmits at intervals from 11.10 a.m. to 7.15 p.m.—News and Talk, "Foreign Affairs," by Mr. Victor Mogens.
8.0 p.m.—Time and Talk, "Telemark." Relayed from Frederikstad.
9.30 p.m.—Song Recital: 1. Aria from "Der Evangelist" (Kienzl). 2. Air from "Eugen Onegin" (Tchaikovsky). 3. Air from "Rigoletto" (Verdi). 4. Air from "Martha" (Flotow). 5. Air from "I Pagliacci" (Leoncavallo).
10.0 p.m.—Weather and Time.
10.15 p.m.—Talk on Topical Events.
10.30 p.m. (approx.)—Close Down.

PARIS (France)
Eiffel Tower (F.L.). WL. 2,650 m. (113 kc); 5 kw.
8.50 a.m.—Time Signal on 32.5 m. (9,231 kc).

Programmes for Monday.—(Cont.)

10.26 a.m.—Time Signal on 2,650 m. 6.45 p.m.—"Le Journal Parle". Talks on "Life among the Artists," "The Week in the Theatres," "New Things in Wireless," etc. 8.10 p.m.—Weather Forecast. 8.30 p.m.—Concert: 1. (a) Petites villes de province, (b) Le fou de la mer (J. Fragerolle). 2. Songs: (a) Les amours passent, (b) La tisane du buveur (Bousquat and Fragerolle). 3. Recitations: (a) Le voiture à travers les ages (Hello), (b) C'est l'oisin (Charlys). 4. Songs by Michel Herbert. 5. Baritone Solos by Georges Martin. 6. Songs by Paul Weil. 7. Songs: (a) Simple cantilène, (b) Le racomodeur de fatence (Solier). 8. Tenor Solos. 9. Songs by Maurice Frot. At 8.56 p.m.—Time Signal on 32.5 m. (9,231 kc). 9.30 p.m.—Educational Programme. Talks on "Good Humour," "Advice to Mothers," "Electricity." 11.26 p.m.—Time Signal on 2,650 m.

PARIS (France)

Radio-Paris (CFR). WL 1,765 m. (170 kc); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert. 1. Petite Suite (Debussy). 2. La Verbena (Lacôme). 3. "Samson and Delilah"—Selection (Saint-Saëns). 4. Vieil air, jeune chanson (Thomé). 5. La Glaneuse (Fourdrain). 6. Cantilène (Grecourt). 7. Première suite murcienne (Jacquet-Mouton). 8. Qu'en dit l'Abbé (Urgel-Letory). 1.50 p.m.—Exchange Quotations. 3.30 p.m.—Market Prices, Bourse. 3.45 p.m.—Concert. 1. Première danse espagnole (de Falla). 2. "Cello Concerto (Schumann). 3. Prelude to "Mais Micoulin" (Bruneau). 4. Pianoforte Solos, (a) Seguedille (Albeniz), (b) Les mouches (Talex). 5. Sadko (Rimsky-Korsakoff). 6. Violin Sonata (Fasdel). 7. Kermaria (Erlanger). 4.45 p.m.—Exchange Closing Prices. 9.0 p.m.—Agricultural Report, Exchange, and Gardening Talk by G. Truffaut. 8.45 p.m.—"Rip"—Operetta Selection (Planquette). 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. 11.0 p.m.—Orchestral Concert. 11.55 p.m.—Baseball Announcements. 12.30 a.m. (Tuesday). — "Roxy's Gang." 2.0 a.m.—"Riverside Programme." 2.30 a.m.—"Marimba Melodies." 3.0 a.m.—Programme from the Works of Great Composers. 3.30 a.m.—Time, Weather, Baseball Announcements, 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 on Sociology. 8.0 p.m.—Report on Finance. 8.30 p.m.—Programme from Warsaw. 10.0 p.m.—Time, News, Weather and Variety Item 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. 6.35 p.m.—French Language Lesson. 7.15 p.m.—Popular Music Programme. 8.0 p.m.—Dramatic Selections. 8.30 p.m.—Programme from Warsaw. 10.0 p.m.—News and Announcements. 10.20 p.m.—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.—French Language Lesson. 8.58 p.m.—Time, News, Exchange. 9.15 p.m.—Concert of Light Music. 1. "Bohémiens russes"—Overture (Spialek). 2. Pablo—Tenor Solo (Mignone). 3. Naja—Tenor Solo (Mignone). 4. Rose of Malaga— for Quartet (Rulli). 5. Russia—

Tenor Solo (Stocchetti). 6. Cantane le Gitane (Raimondi). 7. Tra le Rose (Consorti). 8. Humorous Verse Recital. 9. Un signore senza pace—Soprano and Tenor Duet (Rulli). 10. "The Merry Widow"—Soprano Solo (Lehár). 11. Al Tabarin—Pot-pourri of Modern Dance Music (Malberto). 12. Miniera (Bixio). 13. Variété—Tenor Solo (Rusconi). 14. Adagio Biagio—Tenor Solo (Mascheroni). 15. Signorò—Tenor Solo (Falvo). 16. Variations on "La Paloma" (Mannfred). 17. "Don Gil dalle calze verdi"—Soprano Solo (Carrabella). 18. Cinci-là (Ranzato). 19. Dance Music. 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 a.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News Items. 11.25 p.m.—Baseball Announcements. 11.30 p.m.—Dinner Music from the Hotel van Curler, Schenectady. 12.25 p.m. (Tuesday). — Baseball Scores. 12.30 a.m.—The Warren Telechron Company's Programme. 1.30 a.m.—4.0 a.m.—Programme relayed from New York. 1.30 a.m.—"The A. & P. Gipsies." 2.30 a.m.—"General Motors Family." 3.0 a.m.—"Cabin Door" Programme. 3.30 a.m.—Fisk Time to Retire Boys in their Variety Repertoire. 4.0 a.m.—Time, and "Max Smith and his Cavaliers" from Rochester. 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. 6.15 p.m.—Concert of Turkish Music. 8.30 p.m.—Weather and Time. 8.40 p.m.—Concert. 1. "Eugen Onegin" (Tchaikovsky). 2. Meditation from "Thais" (Massenet). 3. "Cello Solos: (a) Le Cygne (Saint-Saëns), (b) Ava Maria (Schubert), (c) "Peer Gynt" Suite (Grieg). 10.0 p.m.—News and Close Down.

STOCKHOLM (Sweden)

Radiojämsst (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.—Light Musical Programme. 7.0 p.m.—Talk by H. Nauckhoff. 7.30 p.m.—Orchestral Music from the Operakällar Restaurant. 8.10 p.m.—Reading of Poetry. 8.30 p.m.—Cello and Soprano Solos. 9.15 p.m.—News and Weather. 9.40 p.m.—German Talk: "Summer on the Black Sea," by Dr. P. Grassmann. 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 and Weather. 6.15 p.m.—Talk, "The German Nursery Song," by Dr. Hirschberg. 6.45 p.m.—Talk on "Wireless." 7.15 p.m.—Economics, Finance and Exchange Notes. Time and Weather. 8.0 p.m.—"In the Ether"—Play (R. Masur). Followed by Concert from Freiburg, 574.7 m. (522 kc); 1. Quartet in D minor, No. 3 (Cherubini). 2. Songs from Abt, Franz and Cornelius. 3. String Quartet in D major (Schubert). Followed by News Bulletin.

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, Bourse. 8.30 p.m.—Concert from the Works of Mozart. 1. Symphony in C major. 2. "Der Schauspieler Direktor"—Overture. 3. "The Magic Flute"—Overture. 4. "Don Juan"—Overture. 5. "The Marriage of Figaro"—Overture. 6. "Cosi fan tutte"—Overture. Followed by Dance Music Programme. 10.15 p.m.—"North African Journal."

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); Klagenfurt, on 272.7 m. (1,100 kc); and Linz, on 254.2 m. (1,180 kc).

Transmits at intervals from 11.0 a.m. 6.20 p.m.—Talk, "The Viennese Stamp Collecting Carnival Week." 6.30 p.m.—Talk, "Are Animals Intelligent?" by Dr. Schneider. 7.0 p.m.—Talk on "Rousseau." 7.30 p.m.—Talk, "Austrian Art from 1700—1900," by A. Stix. 8.0 p.m.—Gramophone Selections. 8.30 p.m.—Programme from Warsaw.

WARSAW (Poland)

Polskie Radio. WL 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 12 noon. 6.15 p.m.—Dance Music. Relayed from the Café Gastronomja, Warsaw. 7.5 p.m.—Agricultural Report. 7.15 p.m.—Miscellaneous Items. 7.35 p.m.—Elementary French Lesson. 8.30 p.m.—International Concert: 1. Suite for Orchestra (Marek). 2. Concerto for Violin and Orchestra (Mieczyslas Karłowicz). 3. Polish Rhapsody (Fitelberg). 4. Songs, (a) Le désenchantement (Moniuszko), (b) Veni Creator (Niewiadomski), (c) Le chant d'un cornemuseur (Paderewski). 5. (a) Romance from the Violin Concerto in D Minor, (b) Couliavien (Wieniawski).

WILNO (Poland)

Polskie-Radio. WL 435 m. (689 kc); 0.5 kw. Transmits at intervals from 1.0 p.m. 6.15 p.m.—Light Open Air Concert. 7.5 p.m.—Programme for Children. 7.30 p.m.—Talk, "The Lake of Narocz." 7.55 p.m.—News & Announcements. 8.30 p.m.—Programme from Warsaw. 10.30 p.m. (approx.)—Close Down.

ZURICH (Switzerland)

Radio-Genossenschaft. WL 588.2 m. (510 kc); 1 kw. Transmits at intervals from 12.30 p.m. 4.0 p.m.—Concert by the Carletti Orchestra from the Carlton-Elite Hotel, Zurich. 5.20 p.m.—Talk for Women. 5.55 p.m.—Weather Report. 7.47 p.m.—Talk by Herr Martin Holtz, Berlin: "The Woman in Greece of To-day." 8.15 p.m.—Two One-act Plays (Kurt Goetz): 1. "Lohengrin." 2. "Tobby." Followed by Weather, News and Close Down.

Advertisement for Brown Disc Loud Speaker. Features a large image of the speaker, a background illustration of an elephant in India, and text: "Round the World with the Brown", "The 'Brown' Disc Loud Speaker Prices: £7 7 0 & £8 8 0", "In India (Land of the Rajahs)", "The name of 'Brown' has spread over the whole continent and carried with it, wherever it has gone, a reputation for all that is clearest and purest in Broadcast reproduction.", "They listen to the Brown", "The Loud Speaker on which the sun never sets".

PROGRAMMES FOR TUESDAY (June 26)

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. 6.0 p.m.—Exchange Quotations.
6.10 p.m.—Review of Fashion.
6.30 p.m.—Sextet Selections.
8.40 p.m.—Elementary English Lesson.
9.0 p.m.—Exchange and News.
9.5 p.m.—Orchestral Selections: 1. Stat fortiter—March (Monestes). 2. Charmant—Waltz (Worsley). 3. De tres cepas—Schottische (Lerma). 4. Al Tango . Ricura (Joves). 5. Andalusian Rhapsody. (Ross). 6. Spring Song (Mendelssohn). Astropomical Talk in the interval.
10.0 p.m.—Chimes and Weather.
10.5 p.m.—Vocal and Instrumental Concert by the Orfeo Sarriancenc.
11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)
Kringkastingsselskap. WL. 369.9 m. (811 kc); 1.5 kw.
Transmits at intervals from 11.15 a.m. 8.0 p.m.—The Wireless Orchestra. 1. "Egmont"—Overture (Beethoven). 2. Zorohayda—Legend (Svendsen). 3. Selection from "La Bohème" (Puccini).
8.30 p.m.—Songs by Oscar Halseth.
9.0 p.m.—Talk, "Ola Mossefin."
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 noon. 5.0 p.m.—Programme from Leipzig.
6.0 p.m.—Talk: "Dramatic Art throughout the Ages." Scene from "Die Räuber," by S. Schach.
6.30 p.m.—Elementary French Lesson.
6.55 p.m.—Talk: "Introduction to the Study of Plastic Art."
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. 5.30 p.m.—Orchestral Concert.
6.40 p.m.—Talk on "Salesmanship."
7.5 p.m.—Talk on "Optimism."
7.50 p.m.—Talk, "Jubilees of German Towns," by E. Hahnwald.
7.55 p.m.—Talk, "The Great Powers in their World Political and Economical Importance—Italy."
8.30 p.m.—Relay of the Tri-Ergon Phonofilm 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, "Interesting Points in the History of Technology."
8.30 p.m.—Programme from Lausanne.
9.30 p.m.—The Kursaal Orchestra.
9.45 p.m. (In the Interval)—News.
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 5.25 p.m. 7.0 p.m.—Slovakian Concert. 1. Talks. 2. Recitations of Works by Young Slovakian Poets. 3. Piano-forte Selections: (a) from the Works of Smetana, (b) de Severac, (c) Lauko.
8.0 p.m.—Programme from Prague.
9.0 p.m.—Programme from Brünn.
10.0 p.m.—News from Prague.

BRESLAU (Germany)
Schlesische Funkstunde. WL. 322.9 m. (929 kc); 4 kw. Relayed by Gleiwitz on 329.7 m. (910 kc).
Transmits at intervals from 11.15 a.m. 6.0 p.m.—Legal Talk, "The Employee and the Question of Dismissal." Relayed from Gleiwitz.
6.30 p.m.—See Königswusterhausen.
7.25 p.m.—Talk, "The Taking of Rome," by Georg Lichey.
7.50 p.m.—Literary Talk, on the occasion of the 10th Anniversary of the Death of Peter Rossegger.
8.30 p.m.—Orchestral Concert. 1. "Benvenuto Cellini"—Overture (Berlioz). 2. Three Selections from "The Damnation of Faust"

(Berlioz). 3. Italian Caprice (Tchaikovsky). 4. Preludes—Symphonic Poem (Liszt).
10.0 p.m.—News and Wireless Notes.
10.15 p.m. (approx.)—Close Down.

BRÜNN (Czecho-Slovakia)
Komarov. WL. 441.2 m. (680 kc); 2.4 kw.
Transmits at intervals from 11.0 a.m. 6.0 p.m.—Time and German Transmission, followed by Talk.
7.0 p.m.—Slovakian Programme.
8.0 p.m.—Weekly Review, Recitation.
9.0 p.m.—Exhibition Programme.
10.0 p.m.—News and Announcements.
10.15 p.m.—Exhibition Orchestra.

BRUSSELS (Belgium)
Radio-Belgique. WL. 508.5 m. (590 kc); 1.5 kw.
5.0 p.m.—Gramophone Records.
5.30 p.m.—Orchestral Concert from the Café Métropole, Brussels.
6.0 p.m.—French Language Lesson.
6.30 p.m.—Trio Concert. 1. Columbia March (Rust). 2. Epithalame (Lassen). 3. Lied—Fotxtrot (May). 4. Arabesque—Pianoforte Solo (Delcroix). 5. "Le Roi l'a dit" (Delibes). 6. Serenade for Violin (Raynel). 7. Le jour et la nuit (Lecocq). 8. Canzonetta—Cello Solo (Caludi). 9. Interlude (Gelosio). 10. Sérénade au Lido (Schut).
7.15 p.m.—"Le Radio-Chronique."
8.0 p.m.—Concert from Antwerp. 1. Marche héroïque (Waelput). 2. Selection from "Euryanthe" (Weber). 3. (a) Valse, (b) Polonaise (Chopin). 4. Selection from "The Valkyrie" (Wagner). 5. Topical Talk. 6. "Le Cid"—Overture (Massenet). 7. Aria (Bach). 8. Gavotte (Saint-Saëns). 9. Wienerblut—Waltz (Joh. Strauss).
10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)
Magyar Telephon Hirmonde es Radio R.T. WL. 557.1 m. (538 kc); 25 kw.
Transmits at intervals from 12 noon. 7.0 p.m.—Wireless Notes for Amateurs.
8.0 p.m.—Songs and Recitations. In the interval, Racing News.
9.30 p.m.—Time and News.
9.50 p.m.—Military Concert. 1. March (Faulwetter). 2. Les Brunettes—Waltz (Ganne). 3. "Leonora"—Fourth Overture (Beethoven). 4. Selection from "Aida" (Verdi). 5. "Der Rosenkavalier"—Waltz (Strauss). 6. Czarda Scene No. 3 (Hubay).

COLOGNE (Germany)
Westdeutscher Rundfunk. WL. 283.2 m. (1,059 kc); 4 kw.
Transmits at intervals from 10.15 a.m. 1.5 p.m.—Orchestral Concert.
3.40 p.m.—Children's Programme.
4.45 p.m.—See Langenberg station.
6.0 p.m.—Chamber Music. 1. Quartet (de Cal). 2. (a) Minuet (Giuliani), (b) Pierrot (Wirtz). 3. Songs to the Lute: (a) Abschied (Daibelli), (b) Der Phönix (Ph. E. Bach), (c) Serenade (Haydn). 4. Serenade in A major (de Call).
7.20 p.m.—French Conversation.
7.45 p.m.—Talk, "The Internal Secretions in Health and Sickness," by Dr. Haberland.
8.15 p.m.—Robert Koppel Programme. 1. North Sea Pictures (Strauss). 2. Songs: (a) Wenn zwei am Rhein von Liebe träumen (May), (b) Ständchen (Rottstein), (c) Komm Mädchen mir nicht auf die Stube (Rottstein), (d) Es liegt in der Luft (Spolianski). 3. Sizielieta (Blon). 4. Songs: (a) Wein nicht Mütterchen (Denes), (b) Bel einer Flasche Mosel (May), (c) Spinn, spinn (Ruch), (d) Schusters Abendlied (Ruch), (e) Schnuteken (Thiele). 5. Humoresque (Dvorak). 6. Recitations: (a) Der Bölestin (Müller), (b) Mein Onkel aus Pommern (von Wildenbruch). 7. Love Songs (Czibulka). 8. Dance Songs: (a) Ja so ein Mädlel (Bertuch), (b) Eine kleine Liebelei (Ralton), (c) Ich fahr mit Dorothee (Geusler), (d) Warum hast du mich nicht mehr lieb (Profes), (e) Ich weiss Bescheid, ich bin im Bilde (Milton), (f) Wenn die Glocken leis erklingen (Heagney), (g) Was sagt mein Madel dazu (Benatzky), (h) Du bist als Kind zu heiss bebadet worden (May), (j) Wenn ein Fräulein keinen Herrn hat (Johnson, Tobian and Stermann). Followed by News, Sports Notes and Silent Night.

HAMBURG (Germany)
Norrag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297.9 m. (1,007 kc); and Kiel, 255 m. (1,176 kc).
Transmits at intervals from 5.45 a.m. 5.0 p.m.—Talk, "Travel Reminiscences."
5.30 p.m.—Talk, "Leading Articles."
6.0 p.m.—Programme of Waltzes.
6.45 p.m.—Short Talk for Women.
7.0 p.m.—Talk, "The parasites to be found in meat." Weather.
7.25 p.m.—"The Barber of Seville"—Opera-comique (Rossini) relayed from Hanover.
10.15 p.m. (approx.)—Topical Talk, Weather and News Bulletin.
10.30 p.m. (approx.)—(Hamburg and Kiel)—Norrag Dance Orchestra.

HELSEINGFORS (Finland)
WL. 375.9 m. (798 kc); 1.2 kw.
6.15 p.m.—Agricultural Report.
6.30 p.m.—Programme from Lahti.

HILVERSUM (Holland)
Algemeene Vereeniging Radio-Omroep. WL. 1071 m. (280 kc); 5 kw.
11.40 a.m.—Police Information.
12.10 p.m.—Concert of Trio Music.
5.10 p.m.—Concert: 1. "Mitradata"—Overture (Mozart). 2. (a) Bagatelle in E Flat Major, Op. 33 (Beethoven), (b) Rondo in G Major, Op. 51 (Beethoven). 3. Minuet from the Symphony in E Flat Major (Mozart). 4. Ballet Suite—"Le Roi s'amuse" (Delibes). 5. (a) Soeur Monique (Couperin), (b) Sonata in A Major, No. 3, Op. 1 (Méhul). 6. Turkish March (Beethoven). 7. Verschmähte Liebe (Lincke). 8. Selection from "Lilac Time" (Schubert-Berté). 9. March.

COPENHAGEN (Denmark)
Copenhagen Radio. WL. 337.4 m. (889 kc); 1 kw. Relayed by København, on 1,153.8 m. (260 kc).
Transmits at intervals from 7.30 a.m. 6.20 p.m.—Talk, "Stone Fruit."
7.0 p.m.—News, Exchange, Time.
7.30 p.m.—Talk on "Dr. Hirschfeld."
8.0 p.m.—Danish Poetry Programme.
8.45 p.m.—Concert of Modern Danish Melodies. News.
9.30 p.m.—Concert of Danish Ballet Music. 1. Kysset—Suite (Enna). 2. Lackschi—Suite (Nielsen). 3. Selection from "Den lille Havfrue" (Henriques). 4. Selection from "Sommerfugle" (Andersen).
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 Music.
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. 6.40 p.m.—Variety Items and News.
7.5 p.m.—Report on Agriculture.
7.20 p.m.—Relay from Kattowitz.
10.0 p.m.—Programme from Warsaw.
10.30 p.m.—Relay from Restaurant.
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 Faimte Talk.
7.45 p.m.—Spanish Language Lesson.
8.0 p.m.—The Station Orchestra.
8.15 p.m.—Josephine Curran (Soprano)
8.30 p.m.—The Station Orchestra.
8.45 p.m.—Jack MacGarvey (Banjo).
9.0 p.m.—Music Talk by H. R. White.
9.15 p.m.—A Variety Half-hour by Dorothy Day and Company.
9.45 p.m.—Victor Love (Pianist).
10.0 p.m.—The Station Orchestra.
10.30 p.m.—News 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 at intervals from 12.30 p.m. 6.15 p.m.—Wireless Announcements.
6.30 p.m.—Talk from Cassel.
7.0 p.m.—Talk, "Beneficial Holidays."
7.30 p.m.—"Die Fledermaus"—Opera-etta (Joh. Strauss), from the National Theatre, Cassel. Followed by Selections from the Works of Peter Rossegger.

KOVNO (Lithuania)
Radio-Kaunas. WL. 2,000 m. (150 kc); 15 kw.
9.0 p.m.—Trio Concert. 1. Ballet Suite (Popy). 2. Souvenir—Waltz (Waldfteul). 3. Serenade (Goumd) 4. Oi, ruta, rutele (Petrauskas). 5. Troubadour Song (Schytte). 6. Elegy (Glinka). 7. Quand l'amour (Diudet).

LAHTI (Finland)
WL. 1,522.8 m. (197 kc); 25 kw.
6.15 p.m.—Talk by Kalle Korhonen.
6.30 p.m.—Orchestral Concert. 1. March (Blon). 2. Valse Serenade (Translator). 3. Salome's Vision (Bodewakt-Lampe). 4. Canzone amoroso (Carobio). 5. Valse romantique (Heinecke).
7.0 p.m.—Concert. 1. Flute Solos. 2. "The Caliph of Baghdad"—Overture (Boieldieu). 2. Selection from "Mamselle Nitouche" (Hervé). 3. Valse passionnée (Gustin). 4. Liebestanz (Hoschna). 5. Czardas (Grimaly). 6. Selection from "The Geisha" (Jones). 7. Hornmodjglansen (Lanner). 8. Hofballtänze (Lanner). 9. Hoch Heidecksburg (Herzer).
8.45 p.m.—News given in Finnish and Swedish, followed by Programme from a Restaurant.
10.0 p.m. (approx.)—Close Down.

LANGENBERG (Germany)
Westdeutscher Rundfunk. WL. 479.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283.2 m. (1,050 kc); and Münster, 250 m. (1,200 kc).
Transmits at intervals from 10.15 a.m. 1.5—4.45 p.m.—See Cologne Station.

6.55 p.m.—Police Information.
7.25 p.m.—German Language Lesson.
7.40 p.m.—March Programme by Band of the Royal Grenadiers: 1. (a) Marche aux Lanternes (Dunkler), (b) Qui vive (Linden), (c) Homage March (Boer). 2. Marche aux flambeaux No. 2 (Meyerbeer). 3. (a) York March (Beethoven), (b) Military March (Beethoven). 4. (a) Les Saltimbanques (Ganne), (b) Entry of the Guests from "Tannhäuser" (Wagner). 5. (a) March of the Young Prince of Friesland (arr. Boer), (b) March "Holland" (arr. Boer). 6. Hungarian March (Berlioz). 7. March of the Priests from "The Magic Flute" (Mozart). 8. Occident and Orient (Saint-Saëns). 9. Funeral March (Schubert). 10. Military March (R. Strauss). 11. Egyptian March (Schubert). 12. Homage March from "Sigurd Jorsalfar" (Grieg).
10.10 p.m.—Weather and News.
10.30 p.m. (approx.)—Close Down.

HUIZEN (Holland)
WL. 341.6 m. (878 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 by the "Trio Winkels" from Amsterdam.
6.40 p.m.—Evening Concert.
8.10 p.m.—Ecclesiastical Latin Lesson.
8.40 p.m.—Vocal Concert and Talk.

JUAN-LES-PINS (France)
Radio L. L. WL. 230 m. (1,304 kc); 0.25 kw.
Transmits at intervals from 1.0 p.m. 9.0 p.m.—News and Medical Talk.
9.15 p.m. (approx.)—Concert.
10.0 p.m.—Dance Music Programme.
10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. WL. 303.6 m. (988 kc); 4 kw. Relayed by Danzig on 272.7 m. (1,100 kc).
Transmits at intervals from 11.0 a.m. 6.25 p.m.—Talk from Danzig, "The German Spirit in the East."
7.0 p.m.—Talk, "German Fisheries."
7.30 p.m.—Spanish Language Lesson.
8.5 p.m.—Concert from the "Kurgarten Zoppot": 1. "A Carnival in Rome"—Overture (Berlioz). 2. Largo from the Sonata, Op. 7 (Beethoven). 3. Unfinished Symphony (Schubert). 4. Suite from "Der Rosenkavalier" (Strauss).
9.15 p.m.—Programme of Recitations and Songs, arr. by Von Fieltz.
10.15 p.m.—News, followed by Concert. 1. "The Bartered Bride"—Overture (Smetana). 2. "Madame Butterfly"—Selection (Puccini). 3. Aus dem Hochwald—Waltz (Kaulisch). 4. (a) In meiner Heimat, (b) Der Spielmann (Hildach). 5. Wien bei nacht—Potpourri (Komzak).

LAHTI (Finland)
WL. 1,522.8 m. (197 kc); 25 kw.
6.15 p.m.—Talk by Kalle Korhonen.
6.30 p.m.—Orchestral Concert. 1. String Quartet in G major, No. 387. 2. Soprano Solos: (a) Ich wurd auf meinem Pfad; (b) Der Zaubrer; (c) Die Zufriedenheit; (d) Lied der Freiheit. 3. Quintet for Flute, Oboe, Clarinet, and two horns in B flat major, Op. 56. 4. Soprano Solos: (a) Un moto di gioia; (b) Lied der Trennung; (c) An Chloë; (d) Warnun. 5. String Quartet in E flat major (Dittersdorf).
9.30 p.m.—Reading and News.
10.25 p.m.—Gramophone Records.

MILAN (Italy)
Unione Radiofonica Italiana. WL. 549.3 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. Talk on "Individual Characteristics of Man."
8.45 p.m.—Variety Concert: 1. Orchestral Selection. 2. (a) Der Lindenbaum (Schubert), (b) Herdenglocke (Schubert). 3. (a) L'Assiuolo (Zandonai), (b) Jota (De Falla). 4. Neroni (Boito). 5. Two Tuscan Songs (Pieraccini). 6. Viola Solos. 7. Talk: "North South." 8. "Rigoletto"—Duet (Verdi). 9. Der Erlkönig—Mezzosoprano Solo (Schubert). 10. Canto di Capinera (Bettinelli). 11. Orchestral Selection.
10.55 p.m.—News, followed by Dance Music from Fiaschetteria Toscana.
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) Kaiserlautern, 204.1 m. (1,470 kc) and Nürnberg 241.9 m. (1,240 kc).
Transmits at intervals from 11.20 a.m. 6.50 p.m.—Talk, "Peter Rossegger."
7.30 p.m.—Mozart Concert of Chamber Music from the Kaisersaal der Residenz, Würzburg: 1. String Quartet in G major, No. 387. 2. Soprano Solos: (a) Ich wurd auf meinem Pfad; (b) Der Zaubrer; (c) Die Zufriedenheit; (d) Lied der Freiheit. 3. Quintet for Flute, Oboe, Clarinet, and two horns in B flat major, Op. 56. 4. Soprano Solos: (a) Un moto di gioia; (b) Lied der Trennung; (c) An Chloë; (d) Warnun. 5. String Quartet in E flat major (Dittersdorf).
9.30 p.m.—Reading and News.
10.25 p.m.—Gramophone Records.

NAPLES (Italy)
Unione Radiofonica Italiana (I.N.A.). WL. 333.3 m. (900 kc); 1.5 kw.
Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time and Harbour Notes.
8.50 p.m.—Classical Concert: 1. Concerto in A Minor (Vivaldi). 2. Three Songs. 3. Polonaise in A Flat for Pianoforte (Chopin). 4. Selections (Debussy): (a) Two Preludes, (b) L'île joyeuse. 5. Selection (Schubert). 6. Triste est la steppe (Gretchaninoff). 7. Girottondo dei goloso (Castellonovo). 8. Improviso (Bloch). 9. Waltz

4.45 p.m.—Educational Literature Talk, relayed from Krefeld.
5.35 p.m.—Talk from Düsseldorf.
6.0 p.m.—Programme from Cologne.

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.—Orchestral Concert. 1. "Ruy Blas" Overture (Mendelssohn). 2. Ballet Music from "Rienzi" (Wagner). 3. Mozartiana Suite (Tchaikovsky). 4. Northern Dance (Grieg). 5. Intermezzo from "Tiefland" (d'Albert). 6. Waltz Intermezzo from "Mona Lisa" (Schillings).
6.5 p.m.—Talk, "Poultry Breeding."
6.30 p.m.—See Königswusterhausen.
7.0 p.m.—Talk, "Wild Animals as Doctors," by Joseph Delmont.
7.30 p.m.—Talk, "With a Camera through the City," by W. Winkler.
8.0 p.m.—Weather, Time and News.
8.15 p.m.—Rossegger Concert. Talk and Recitation of Poems.
9.30 p.m.—Variety Item Concert.
10.30 p.m.—News and Sports Notes.
10.45 p.m.—Light Orchestral Music and 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 Selections. 1. Pepe Gallardo (Elvire—Chapi). 2. Le roman d'Elvire—Selection (Thomas). 3. El salto del pasiego—Selection (Caballero). In the interval—Talk on "The Poetry of Gabriel and Galán."
8.0 p.m.—Dance Music Programme. Programme relayed by San Sebastián 335 m. (895 kc).
10.0 p.m.—Time and Exchange Quotations.
10.10 p.m.—Selection from "A Masked Ball"—Opera (Verdi).
12.20 a.m. (Wednesday)—News.
12.30 a.m. (approx.)—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. WL. 549.3 m. (546 kc); 7 kw.
Transmits at intervals from 12.15 p.m. 7.47 p.m.—German Language Lesson.
8.35 p.m.—Time. Talk on "Individual Characteristics of Man."
8.45 p.m.—Variety Concert: 1. Orchestral Selection. 2. (a) Der Lindenbaum (Schubert), (b) Herdenglocke (Schubert). 3. (a) L'Assiuolo (Zandonai), (b) Jota (De Falla). 4. Neroni (Boito). 5. Two Tuscan Songs (Pieraccini). 6. Viola Solos. 7. Talk: "North South." 8. "Rigoletto"—Duet (Verdi). 9. Der Erlkönig—Mezzosoprano Solo (Schubert). 10. Canto di Capinera (Bettinelli). 11. Orchestral Selection.
10.55 p.m.—News, followed by Dance Music from Fiaschetteria Toscana.
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) Kaiserlautern, 204.1 m. (1,470 kc) and Nürnberg 241.9 m. (1,240 kc).
Transmits at intervals from 11.20 a.m. 6.50 p.m.—Talk, "Peter Rossegger."
7.30 p.m.—Mozart Concert of Chamber Music from the Kaisersaal der Residenz, Würzburg: 1. String Quartet in G major, No. 387. 2. Soprano Solos: (a) Ich wurd auf meinem Pfad; (b) Der Zaubrer; (c) Die Zufriedenheit; (d) Lied der Freiheit. 3. Quintet for Flute, Oboe, Clarinet, and two horns in B flat major, Op. 56. 4. Soprano Solos: (a) Un moto di gioia; (b) Lied der Trennung; (c) An Chloë; (d) Warnun. 5. String Quartet in E flat major (Dittersdorf).
9.30 p.m.—Reading and News.
10.25 p.m.—Gramophone Records.

NAPLES (Italy)
Unione Radiofonica Italiana (I.N.A.). WL. 333.3 m. (900 kc); 1.5 kw.
Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time and Harbour Notes.
8.50 p.m.—Classical Concert: 1. Concerto in A Minor (Vivaldi). 2. Three Songs. 3. Polonaise in A Flat for Pianoforte (Chopin). 4. Selections (Debussy): (a) Two Preludes, (b) L'île joyeuse. 5. Selection (Schubert). 6. Triste est la steppe (Gretchaninoff). 7. Girottondo dei goloso (Castellonovo). 8. Improviso (Bloch). 9. Waltz

Programmes for Tuesday.—(Cont.)

(Brahms). 10. Burslesque (Suk).
10.55 p.m.—Calendar and Announcements.
11.0 p.m. (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. WL. 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar on 555.8 m. (540 kc); Fredrikstad, 435 m. (689 kc); Fosgrund, 500 m. (600 kc); Norddalen, 412 m. (728 kc); and Rjukan, 448 m. (670 kc).
Transmits at intervals from 11.10 a.m. 6.30 p.m.—Talk for Housewives.
7.15 p.m.—News and Talk, "Physical Hygiene," by M. A. Arnesen.
8.0 p.m.—Time and Agricultural Talk.
8.30 p.m.—Concert. 1. Victory March (Blankenburg). 2. Wine, Women and Song (Strauss). 3. Czardas (Lindsay-Theimer). 4. La Phantou (Mouton). 5. Military March (v. Bion).
9.30 p.m.—Pianoforte Recital.
10.0 p.m.—Recitation by Mme Reimers. Weather and News.
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); 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," Talks on "Books," "Wireless."
8.10 p.m.—Weather Forecast.
8.30 p.m.—Concert of Irish, Scottish, Welsh and Breton Melodies, followed by "En pays celtique"—Orchestral Suite (Duhamel). At 8.56 p.m.—Time Signal on 32.5 m. (9,231 kc).
9.30 p.m.—Educational Programme. Talks on "Unknown France," "French West Africa," etc.
10.0 p.m.—Relay of the Gala Programme of the "Confédération des Travailleurs Intellectuels," from the "Salon des Artistes Décorateurs." National Songs and Dances, Sketches and Variety, etc. Among the artistes are Yvette Guilbert, Paulette Darty, Dranem, Bétové, etc. At 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 Record Selections, Talk, and News.
9.0 p.m.—Concert. 1. Prelude de la Habanera (Laparra). 2. Pain de Ménage (Renard). News.
9.30 p.m.—Concert. 1. Le Festin de l'arraignée (Roussel). 2. Shylock (Fauré). 3. Selection from "Hélène" (Messager). 4. Aubade du Divertissement (Lalo). 5. "Terena du ballet," from "Lakmé" (Debussy). News during the Interval.

PARIS (France)

Radio-Paris (CFR). WL. 1,765 m. (170 kc); 3 kw.
Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert. 1. Works of Schubert: (a) Rosamunde—Overture, (b) Moment Musical, (c) The Trout, (d) Minuet, (e) March. 2. Works of Massenet: (a) Scènes pittoresques, (b) Werther, (c) "Thais"—Meditation, (d) Ballet Music from "Le Cid."
1.50 p.m.—Exchange Quotations.
3.30 p.m.—Market Prices, Bourse.
3.45 p.m.—Concert. 1. Cadet Roussel (Fourdrain). 2. Violin Concerto (d'Amrosio). 3. Eternal Silence (Laparra-Grecourt). 4. Pianoforte Solos: (a) Provencale (de la Tombe), (b) Tarentelle (Roux). 5. Russian Dance (Moszkovsky). 6. "Cello Concerto (Haydn). 7. Isoline (Messager).
4.45 p.m.—Exchange Closing Prices.
8.0 p.m.—Agricultural Report, Market Prices followed by News and Talk.
8.40 p.m.—Messager Concert, followed by "The Fire Bird" (Stravinsky). News during the interval.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw. Relayed at intervals from 63 m. (4,752 kc) and 27 m. (11,111 kc).
Transmits at intervals from 3.0 p.m. (approx.).
11.15 p.m.—Orchestral Concert.
11.55 p.m.—Baseball Announcements.
12 midnight.—Time and Four One Minute Men Programme.
12.30 a.m. (Wednesday)—The Hall-Bakers Variety Programme.

1.0 a.m.—Stromberg Carlson Hour. Relayed from New York.
3.0 a.m.—Time, and Happiness Programme by the Merry Maytag Ramblers.
3.30 a.m.—Sacred Song Recital.
4.0 a.m.—Time, Weather, Baseball Scores, and Close Down.

PRAGUE (Czechoslovakia)

Strasnice. WL. 348.9 m. (860 kc); 5 kw.
Transmits at intervals from 11.0 a.m. 8.10 p.m.—Popular Evening Programme.
9.0 p.m.—Programme from Brünn.
10.0 p.m.—News and Announcements.
10.20 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.—English Language Lesson.
8.58 p.m.—Time, News, Exchange.
9.15 p.m.—Vocal and Instrumental Concert: 1. Passacaglia (Frescobaldi). 2. Burslesque (Scarlati). 3. "The Prophet"—Soprano Solo (Meyerbeer). 4. Abendlied (Schumann). 5. Guitar (Moszkovsky). 6. "E arrivato il ministro." Comedy (Serretta). 7. Petite fugue (Traetta). 8. Canzonetta (Mendelssohn). 9. "Cleopatra"—Overture (Mancinelli). 10. "A Masked Ball"—Baritone Solo (Verdi). 11. "The Barber of Seville" (Soprano and Baritone Duet (Rossini). 12. Simple Avenu (Thomé). 13. Tarantelle (Poppa). 14. Topical Review.
15. "A Masked Ball"—Soprano Solo (Verdi). 16. "Don Pasquale"—Soprano and Baritone Duet (Donizetti).
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.—Exchange and News.
11.25 p.m.—Baseball Announcements.
12.30 a.m. (Wednesday)—"Soconylund Sketches," from New York.
1.0 a.m.—Agricultural Programme.
1.30—4.30 a.m.—Programme relayed from New York.

1.30 a.m.—"The Seiberling Singers."
2.0 a.m.—"Eveready Hour" Programme.
3.0 a.m.—"Clicquot Club Eskimos" in a Musical Programme.
3.30 a.m.—Time, followed by Rolfe's Palais d'Orchestra.
4.30 a.m.—Dance Music Programme, relayed from Buffalo, N. Y.

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); and 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.—Children's Programme.
7.0 p.m.—Talk on "Tangiers."
7.30 p.m.—The Station Orchestra.
8.45 p.m.—Song Recital by A. Claesson.
9.0 p.m.—Agricultural Talk.
9.15 p.m.—News and Weather.
9.40 p.m.—Pianoforte Recital. 1. Selection (Debussy). 2. Dance (Debussy). 3. Two Arabesques: (a) E major, (b) G major (Debussy). 4. La fille aux cheveux de lin (Debussy). 5. Valse Gaux (Jahn). 6. Spring rivers (Jahn).
10.5 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. 2.30—5.0 p.m.—Festival Programme relayed from Rottenburg.
6.0 p.m.—Time and Weather.
6.15 p.m.—Talk, "The Tenth Anniversary of Peter Rosegger's Death."
6.45 p.m.—Talk, "German Nursery Songs," by Dr. L. Hirschberg.
7.15 p.m.—Talk, "The German Press in Rumania," by E. Neugeboren.
7.45 p.m.—Time, Weather and Wireless Club News.
8.0 p.m.—Symphony Concert. 1. Chamber Suite (Lendvai). 2. Songs (Mahler): (a) Ich bin der Welt abhanden kommen, (b) Um Mitternacht, (c) Urlicht. 3. Serenade for Two Small Orchestras (Reger). Followed by "Grotesque Programms": 1. Gramophone Selections. 2. Sketch (Baring). 3. Gramophone Selections. 4. "How I got Married"

(Tcheckov). 5. Gramophone Selections. 6. "Neumann spielt Komödie" (Hans Reimann). 7. Gramophone Selections. 8. "Der Windstoss" (Jerusalem). 9. Gramophone Selections. 10. "Der gemütliche Kommissär" (Courteline). 11. Gramophone Selections, 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.—Dance Music Programme.
9.10 p.m.—"L'Arlesienne"—Overture and Selections (Bizet).
9.30 p.m.—Concert of Opera and Opera-comique Melodies. 1. Selection from "Les Cloches de Corneville" (Planquette). 2. Selections from "Le Roi d'Ys" (Lalo). 3. "Adieu Mignon" from "Manon" (Massenet). 4. Aria from "Résurrection" (Tolstoi). 5. Aria from "Lohengrin" (Wagner). 6. Air from "Sophie Arnould." 7. Selection from "The Damnation of Faust" (Berlioz). 8. Aria from "Rigoletto" (Verdi).
10.15 p.m.—"North African Journal."

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); Klagenfurt, 272.7 m. (1,100 kc); and Linz, 254.2 m. (1,180 kc).
Transmits at intervals from 11.0 a.m. 6.0 p.m.—Talk: "The Collaboration of Banks," by Dr. R. Kerschagl.
6.30 p.m.—Talk for Workers.
7.0 p.m.—Advanced French Lesson.
7.30 p.m.—"The Merry Wives of Windsor"—Opera (Nicolai), relayed from the Academy Theatre.

WARSAW (Poland)

Polskie-Radio. WL. 111.1 m. (270 kc); 10 kw.
Transmits at intervals from 1.0 p.m. 7.20 p.m.—Relay from Katowitz. In the Interval, News in French.
10.0 p.m.—Time, Aviation Notes, Weather, News and Sports Notes.
10.20 p.m.—Dance Music Programme, from the Oaza Restaurant, Warsaw.
11.30 p.m. (approx.)—Close Down.

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PROGRAMMES FOR WEDNESDAY (June 27)

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. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Sextet Selections. 8.40 p.m.—Castilian Grammar Lesson. 9.0 p.m.—Exchange and News. 9.5 p.m.—Orchestral Selections. 1. The Dwarfs' Patrol—March (Rinaldi-Woodhouse). 2. Selections from "La chaste Susanne" (Gilbert-Fétras). 3. Katarina—Czardas (Michiels). 4. Ondina—American Dance (Raurich). 5. Ochsén Menuet (Haydn). 6. Demande et Réponse (Coleridge-Taylor). Poetry in the Interval. 10.0 p.m.—Chimes and Weather. 10.5 p.m.—Concert of Band Music. 11.0 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. 8.0 p.m.—The Wireless Orchestra. 1. Nu til Bergen turen gaar (Lambach). 2. Scandinavian Suite (Fredriksen). 3. Romance for Violin (Svendsen). 4. Talk, "Norway—the Land of Adventure." 5. Fanutellen (Ole Olsen). 6. Nocturne (Grieg). 7. Waltz (Sinding). 8. Dance of the Insects (Svendsen). 9.30 p.m.—Recitations from Victor Hugo, Obsfelder and Nils Collett Vogt. 10.0 p.m.—Weather, News and Time. 10.15 p.m.—The Exhibition Orchestra. 11.0 p.m. (approx.)—Close Down.

BERLIN (Germany) Königswusterhausen. WL. 1,250 m. (240 kc); 35 kw. Transmits at intervals from 12 noon. 5.0 p.m.—Programme from Hamburg. 6.0 p.m.—Talk on "The Economic Importance of Aviation." 6.30 p.m.—Advanced French Lesson. 6.55 p.m.—Talk on Electro-Technology. 7.0 p.m.—Talk, "Introduction to the Study of Music," by Dr. Mersmann. 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.—Programme for Children. 6.45 p.m.—Talk by Dr. Erich Wolff. 7.35 p.m.—Talk, "Social Thought in Modern Literature—North European Towns," by Dr. Rosenfeld. 8.0 p.m.—Talk on Legal Problems. 8.30 p.m.—"Mark" Concert, followed by News, Time and Weather. 10.30 p.m.—"Garden" Concert. 1. (a) Still der Garten schief ein (Bébé), (b) In der Rosenlaube. 2. Tenor Solos: (a) Was nützt mir ein schöner Garten—Folk Song, (b) Monatsrose, (c) Wilde Rose (Eulenburg). 3. (a) "Im Garten" from the Symphony "Ländliche Hochzeit" (Goldmark), (b) "Fest im Garten" from "Alt-China" Suite (Niemann). 4. Tenor Solos: (a) Auf der Gartenbank, (b) The Rose Garden (Krome). 5. (a) Blumengefűster (Blon), (b) Gartenstűndchen (Meyer-Helmund), (c) Blumenlied (Lange). 6. Tenor Solos: (a) Weisses fieder (Knopf), (b) Ich hab' in Pichelsdorf'nen kleinen Blumengarten (Leux). 7. (a) So war von mei' Ahnl der Garten—Viennese Song (Ehrich), (b) Unter duftendem Jasmin (Prager), (c) Sonnenblume—Foxtrot (Eysoldt).

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 and Chamber Music. 9.15 p.m.—Light Variety Concert. 9.45 p.m.—News and Weather. 10.0 p.m.—The Kursaal Orchestra. 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. (910 kc). Transmits at intervals from 11.15 a.m. 6.30 p.m.—See Königswusterhausen. 7.25 p.m.—Talk, "How Does the Workman Spend his Free Time?" 7.50 p.m.—Art and Literary Review.

8.30 p.m.—Popular Concert, from Gleiwitz. 1. An die Gewehr—March (Lehnhard). 2. "Le Maçon" (Auber). 3. "The Wedding of the Winds"—Waltz (Hall). 4. Selection from "William Tell" (Thiem). 5. "La belle Galathée"—Overture (Suppé). 6. Nachtschwärmer —Waltz (Ziehrer). 7. Rainbow —Intermezzo (Wenrich). 8. Siamese Parade—Character Piece (Lincke). 9. Noch sind die Tage der Rosen (Baumgartner). 10. Zick-Zack —Potpourri (Schenk). 11. Unter dem Siegesbanner—March (Blon).

BRUNN (Czecho-Slovakia) Komarov. WL. 441.2 m. (689 kc); 2.4 kw. Transmits at intervals from 11.0 a.m. 7.0 p.m.—Concert of French Music. 1. "The Corsair"—Overture (Berlioz). 2. Symphonic Poem, Op. 31 (Saint-Saëns). 3. Undine (Ravel). 8.0 p.m.—Recitation, followed by Chamber Music—Orchestral Suite, Op. 20 (Chlubna). 9.0 p.m.—Programme from Exhibition. 10.0 p.m.—Time and News, followed by Programme from Exhibition.

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.—Belgian History Lesson. 6.15 p.m.—Talk, "Famous Voyages round the World," by A. Bouckaert. 6.30 p.m.—Chamber Music. 1. Sonata for Violin and Flute (Handel). 2. Piece for Pianoforte. 3. Sonata for Violin (André). 4. Sonata for Flute and Violin (Bach). 7.30 p.m.—"Le Radio-Chronique." 8.15 p.m.—"The Pearl Fishers"—Opera Selection (Bizet). In the Interval, Talk, "Pierre Flouquet" and Flemish Literature Selection. 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary) Maygar Telephon Hirmonde es Radio R.T. WL. 557.1 m. (538 kc); 25 kw. Transmits at intervals from 12 noon. 7.0 p.m.—Lesson in Shorthand. 7.35 p.m.—Talk, "Pilgrimage to America," by Dr. Lazar. 8.15 p.m.—Three Wireless Plays from the Studio. 1. "Aranyos arégh." 2. "Lelek andorlas." 3. "Osiribiri." 10.0 p.m.—Time and News. 10.20 p.m.—Gramophone Selections.

COLOGNE (Germany) Westdeutscher Rundfunk. WL. 283.2 m. (1,059 kc); 4 kw. Transmits at intervals from 10.15 a.m. 1.5 p.m.—See Langenberg Station. 3.45 p.m.—Talk, "Modern Welfare." 4.25 p.m.—See Langenberg Station. 5.0 p.m.—Educational Talk. 5.30 p.m.—Talk, "Prometheus and James Watt," by Wilfred Schreiber. 6.0 p.m.—See Langenberg Station. 7.20 p.m.—Reading for Workers. 7.50 p.m.—See Langenberg Station. 8.15 p.m.—Symphony Concert: 1. Sunrise (Spiess). 2. Concerto for Cello and Orchestra (Bettingen). 3. The Seasons—Suite (Unger). Followed by News, Sports Notes and Concert, relayed 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. (2,650 kc). Transmits at intervals from 7.30 a.m. 6.20 p.m.—Wireless Announcements. 7.0 p.m.—News, Exchange, Time. 7.30 p.m.—Talk, "Pig Rearing." 8.0 p.m.—Russian Evening Concert, by the String Orchestra. 1. Serenade (Glazounov). 2. Reading. News. 9.15 p.m.—Symphony Concert, from the Works of Tchaikovsky. 1. Overture to "Romeo and Juliet." 2. The Sixth Symphony in B minor, Op. 74. 10.30 p.m.—Dance Music Programme. 12.0 midnight.—Chimes.—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 Music. 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.

7.35 p.m.—Talk, "The Basis of Magic in Popular Medicine," by Prof. Wyrobek. 8.0 p.m.—Fanfare from Notre Dame. 8.0 p.m.—Answers to Correspondents.

8.30 p.m.—Concert. 1. American Variety Items. 2. "Jean qui pleure, Jean qui rit"—Operetta (Offenbach). 3. American Variety. 10.0 p.m.—Programme from Warsaw. 10.30 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.—Programme for Women. 7.20 p.m.—News and Irish Lesson. 7.45 p.m.—German Language Lesson. 8.0 p.m.—The Station Orchestra. 8.15 p.m.—Charles Hindley (Baritone). 8.40 p.m.—The Station Orchestra. 9.0 p.m.—Lecture Recital given with Illustrations, by Chevalier W. H. Grattan Flood. 9.30 p.m.—Nancy Reilly (Soprano). 9.40 p.m.—Mick Browne (Pianist). 9.50 p.m.—"A Triple Bill," by the Station Orchestra. Musical Duologue—"A Love Circle." Musical Idylle—"Good Night Babette." Musical Sketch—"Faust and Gretchen." 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany) Südwestdeutscher Rundfunk. WL. 429 m. (600 kc); 4 kw. Relayed by Cassel, on 252.1 m. (1,190 kc). Transmits at intervals from 12.15 p.m. 6.15 p.m.—Talk on "The Religion of Persia—Zarathustra." 6.45 p.m.—Lesson in Shorthand. 7.15 p.m.—Natural Science Talk. 7.30 p.m.—French Language Lesson. 8.15 p.m.—"Storm in the Pacific"—Play (W. Möhring). 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); and Hanover, 297.9 m. (1,097 kc); and Kiel, 255 m. (1,176 kc). Transmits at intervals from 5.45 a.m. 5.0 p.m.—Concert of Gallant Dances. 6.0 p.m.—Orchestral Selections. 6.45 p.m.—Talk, "Chess Events." 7.0 p.m.—Talk, "The Bronze Age in Lower-Saxony," from Hanover. 7.25 p.m.—Talk, "How to Appreciate a Tour Through Scandinavia." 7.50 p.m.—Market Prices and Weather. 8.0 p.m.—"Montmartre"—Introductory Talk by Marcel Collin, Paris. 10.15 p.m. (approx.)—Weather Report. 10.30 p.m. (approx.) (Hamburg and Kiel).—Café Wallhof Concert.

HILVERSUM (Holland) Algemeene Vereeniging Radio-Orchestr. WL. 1,071 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Concert of Trio Music. 2.40 p.m.—Programme for Women. 5.10 p.m.—Concert: 1. "Ruy Blas"—Overture (Mendelssohn). 2. (a) Sonata in A major (Handel); (b) Old German Shepherd Madrigal (Kreisler). 3. Gipsy Life (Schumann). 4. To the Sea (Mac Dowell). 5. From Gluck to Wagner (Schreiner). 6. (a) Andantino (Menu-Dushkin); (b) Mosquitoes (Fairchild-Dushkin); (c) Minuet (Paderewski-Kreisler); (d) Introduction and Tarentella (Sarate). 7. Les belles de Valence (Morena). 8. Un soir de fête à Havane (Filippucci). 9. Zingaresca (Ellerton). 10. Finale. 6.55 p.m.—Talk and Police News. 7.55 p.m.—Concert under the direction of Prof. G. Schnevoigt, from the Kurhaus, Scheveningen. 10.10 p.m. (approx.)—Weather and News. 10.20 p.m.—Dance Music Programme. 11.40 p.m. (approx.)—Close Down.

HUIZEN (Holland) WL. 341.6 m. (878 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.—Concert and Talk.

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

KÖNIGSBERG (Germany) Ostmarken Rundfunk. WL. 303.6 m. (988 kc); 4 kw. Relayed by Danzig, on 272.7 m. (1,100 kc). Transmits at intervals from 9.0 a.m. 6.20 p.m.—Talk on "Psychology." 6.50 p.m.—Talk, "The Pleasures and Inconveniences of the Rainy Season in Africa." 7.30 p.m.—Review of Books (Königsberg only). 7.30 p.m.—Literary Talk (Danzig only). 8.5 p.m.—"Rund um die Liebe"—Operetta (Oskar Straus). Weather and News.

KOVNO (Lithuania) Radio-Kaunas. WL. 2,000 m. (150 kc); 15 kw. 9.0 p.m.—Orchestral Concert: 1. Hail, Europe! (Blon). 2. "Le Magon"—Overture (Auber). 3. Narcissus (Neom). 4. Czardas (Kempner). 5. Selection (Elliot). 5. Hungarian Comedy Overture (Keler-Bela). 6. The Awakening of Spring (Bach). 7. A Talk with Delibes (Urbach). 8. "L'amour perdu (Stolz). 10. The Gipsy Camp (Spelz).

LAHTI (Finland) WL. 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw. 6.15 p.m.—Orchestral Concert. 1. Pierrot March (Bosc). 2. Gold and Silver (Lehar). 3. Selection from "I Pagliacci" (Leoncavallo). 4. Chanson viennoise (Leopoldi). 7.0 p.m.—Concert. 1. Recital of Songs. 2. Selection from "Gri-Gri" (Lincke). 3. Ballet Egyptian (Luigini). 4. Elégie (Söhlinström). 5. Drömmbilder (Lumbye). 6. Un Peu Rocco (Malmström). 7. Polenbit (Nedbal). 8. Toreador et Andalouse (Rubinstein). 9. March (Souza). 8.45 p.m.—News given in Finnish and Swedish, followed by Programme from a Restaurant. 10.0 p.m. (approx.)—Close Down.

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.—Concert from Dortmund. 3.45 p.m.—Programme from Cologne. 4.25 p.m.—Reading in dialect, "From the waterside to the Alps," from Düsseldorf. 5.0—5.55 p.m.—See Cologne Station. 6.0 p.m.—Concert from Münster: 1. Trio in G major No. 5 (Köchel). 2. Variations on a Mozart theme (Rombert). 3. Variations on "Ich bin der Schneider Kakadu" in G major, Op. 121 (Beethoven). 7.20 p.m.—Programme from Cologne. 7.50 p.m.—Talk, "The signification of our family names," from Dortmund. 8.15 p.m.—Programme from Cologne, followed by Concert from the Hofgarten-Rheinterrasse, Düsseldorf. Close Down 12 (midnight).

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. 6.30 p.m.—See Königswusterhausen. 7.0 p.m.—Talk, "World Philosophical Problems in Modern Natural Science," by Dr. Weygand. 7.30 p.m.—Sports Talk, by Prof. Allrook. 8.0 p.m.—Weather and Time. 8.15 p.m.—Schubert Concert. 1. Sonatina in D major, Op. 137. No. 1 for Pianoforte and Violin. 2. (a) Nacht und Träume, (b) Der Einsame. 3. Fantasia in C major, Op. 159 for Pianoforte and Violin. 4. (a) Der Zwerg, (b) Der Jüngling and der Quelle. 9.15 p.m.—Male Choir Concert. 10.15 p.m.—News and Sports Notes. 10.30 p.m.—Orchestral Concert. 12.0 midnight (approx.)—Close Down.

LILLE (France) PTT. WL. 367 m. (1,122 kc); 0.5 kw. 12.30 p.m.—Concert. 1. "L'avocate" (Ackermans). 2. Lebensfreude (Strauss). 3. Serenade arabe (Tarega). 4. Selection from "Mon-sieur Beaucaire" (Messenger). 5. Bohème joyeuse (Gillet). 6. L'Enfant du regiment (Fucik).

1.35 p.m.—Exchange Quotations, Market Prices and Shipping Forecast for Dunkirk. 7.30 p.m.—Market Quotations. 7.40 p.m.—Concert and News.

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 Selections. 1. "El gaitero"—Selection (Nieto). 2. "Polio"—Selection (Donizetti). 3. "El grumete"—Selection (Arrieta). In Interval—Talk on "Petroleum Deposits." 8.0 p.m.—Dance Music Programme. 9.45 p.m.—Talk, "Deciding Factors in the Adoption of Motor Machinery in Spanish Agriculture." 10.0 p.m.—Time and Exchange Quotations.

10.10 p.m.—Concert. 1. Talk on "Beethoven and Teresa of Brunswick," with musical illustration. 2. "Fidelio"—Overture (Beethoven). 3. "Don Juan"—Aria (Mozart). 4. "The Magic Flute"—Aria (Mozart). 5. Le Rouet d'Omphale—Symphonic Poem (Saint-Saëns). 6. Soprano Arias: (a) La Violette (Scarlatti), (b) Aria from "The Magic Flute" (Mozart). 7. Sextet Selections: (a) Sarabande (Debussy), (b) Polonaise in A flat, Op. 53 (Chopin). 11.50 p.m.—News and Dance Music. 12.30 a.m. (Thursday).—Close Down.

MILAN (Italy) Unione Radiofonica Italiana. WL. 549.3 m. (546 kc); 7 kw. Transmits at intervals from 12.15 p.m. 7.47 p.m.—French Language Lesson. 8.35 p.m.—Time, Astronomy Talk. 8.45 p.m.—Concert of Light Music: 1. Selections (Mattani), (a) Presso la fonte, (b) Novelletta. 2. Maquita (Montanari). 3. Monelli in festa (Crisculi). 4. A Comedy. 5. "Angelus"—from "Scènes pittoresques" (Massenet). 6. Danse gracieuse (Parelli). 7. "La Traviata"—Prelude to Act 3 (Verdi). 8. "La Bohème"—Potpourri (Puccini). 10.30 p.m.—Dance Music. Relayed from the "Restaurant Cova," Milan. 12.0 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); Kaiserlautern on 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.—Chess Talk for Boys. 7.0 p.m.—Talk on "Income Tax." 7.30 p.m.—Talk, "Thinkers and Idealists—Ludwig Klages." 8.15 p.m.—Wagner Concert. 1. "Rienzi"—Overture. 2. Selection from "Rienzi." 3. "Lohengrin"—Overture. 4. "The Legend of the Grail," from "Lohengrin." 5. "The Flying Dutchman"—Overture. 6. "Tannhäuser"—Selections. 10.0 p.m.—Announcements and News. 10.20 p.m.—Dance Music Programme from the Hotel Reichsadler.

NAPLES (Italy) Unione Radiofonica Italiana (1 NA). WL. 393.3 m. (900 kc); 1.5 kw. Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time and Harbour Notes. 8.50 p.m.—Concert: 1. "The Mute of Portici"—Symphony (Auber). 2. "Rigoletto"—Selection (Verdi). 3. Polio—Selection (Donizetti). 4. "Lohengrin"—Choral and Orchestral Selection (Wagner). 5. "Robert le Diable"—Soprano Solo (Meyerbeer). 6. Edmea—Prelude (Catalani). 7. "Il Guarany" Soprano and Tenor Duet (Gomes). 8. "Mephistopheles"—Selection (Boito). 9. "Norma"—Choral Selection (Bellini). 10. "Il Trovatore"—Soprano Solo (Verdi). 11. "Fedora"—Tenor Solo (Giordano). 12. "William Ratcliff"—Prelude (Mascagni). 13. "Il Trovatore"—Soprano and Tenor Duet (Verdi). 10.55 p.m.—Calendar and Announcements. 11.0 p.m. (approx.)—Close Down.

OSLO (Norway) Kringkastingselskapet. WL. 451.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 555.8 m. (540 kc); Fredrikstad 435 m. (689 kc) I'ors-garden, 500 m. (600 kc); Notodden 412 m. (728 kc); and Rjukan, 448 m. (760 kc). Transmits at intervals from 11.10 a.m. 6.15 p.m.—Talks for Boys. News.

Programmes for Wednesday.—(Cont.)

7.30 p.m.—Concert from the works of Schubert: 1. Overture in Italian style. 2. Ballet Music from "Rosamunde." 3. Unfinished Symphony.

8.0 p.m.—Time and Concert (contd.) 8.30 p.m.—Talk, "An Air Journey across Europe," by M. E. Maehle.

PARIS (France) Eiffel Tower (FL). WL 2,650 m. (113 kc); 5 kw.

issement (Mozart). News in the Interval.

PITTSBURGH (U.S.A.)

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

POSEN (Poland)

Polskie-Radio. WL 343 m. (874 kc); 1.5 kw.

PRAGUE (Czechoslovakia)

Strasnice. WL 348.9 m. (860 kc); 5 kw.

9.40 p.m.—Recital of Pianoforte Music by Professor Herman.

ROME (Italy)

Unione Radiofonica Italiana. WL 450 m. (666 kc); 3 kw.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). WL 379.5 m. (790 kc); 50 kw.

STAMBOUL (Turkey)

Radio-Stamboul Societe Anonyme Turque de Telephonie sans fil.

STETTIN (Germany)

Funkstunde A.G. WL 236.7 m. (1,267 kc); 0.75 kw.

Aria from "The Cousin from Nowhere" (Künneke). 3. "Anneliese von Dessau"—Duet (Winterberg).

STOCKHOLM (Sweden)

Radiojansst (SASA). WL 453.8 m. (661 kc); 1.5 kw.

STUTT GART (Germany)

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

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.—Viennese Dance Music.

VIENNA (Austria)

Radio-Wien. WL 577 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw.

WARSAW (Poland)

Polskie Radio. WL 1,111.1 m. (270 kc); 10 kw.

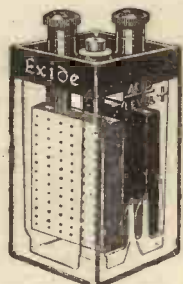
WILNO (Poland)

Polskie-Radio. WL 435 m. (688 kc); 0.5 kw.

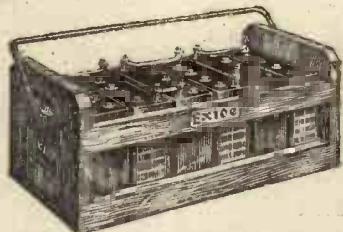


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PROGRAMMES FOR THURSDAY (June 28)

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. 6.30 p.m.—Programme for Children. 6.50 p.m.—Talk, "The Streets of Barcelona," by Senor Torsky. 8.40 p.m.—English Language Lesson. 9.0 p.m.—Exchange and News. 9.5 p.m.—Orchestral Selections. 1. Vimy Ridge—March (Bidgood). 2. A toda vela—American Dance (Coto). 3. Bluets et Coquelicots (Waldteufel). 9.25 p.m.—Flamenco Songs, with Guitar, Accompaniment. 10.0 p.m.—Chimes and Weather. 10.5 p.m.—Dance Music Programme. 11.15 p.m.—Schubert Festival Concert.

BERGEN (Norway) Kringkastingselskap. WL 369.9 m. (811 kc); 1.5 kw. Transmits at intervals from 11.15 a.m. 8.0 p.m.—The Wireless Orchestra. 1. "Hamlet"—Overture (Bach). 2. Gipsy Love and Gipsy Life (Translater). 3. Japanese Ballet—Suite (Dvorak). 4. Valse Lyrique (Sibelius). 5. Ice Flowers—Russian Potpourri (Leuschner). 9.0 p.m.—Talk, "A Walking Tour from Bodø to Glomfjord." 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. 5.0 p.m.—Programme from Voxhaus. 6.0 p.m.—Talk on "World Politics." 6.55 p.m.—Talk, "German Hop Growing." 7.20 p.m.—Talk, "Warehousing Agreements" by Dr. Wieg. 8.0 p.m.—Talk, "The Work of a Local Reporter," by Dr. Dovifat. 8.30 p.m.—Talk, "The Beginning of the Labour Movement in Europe." 9.0 p.m.—Talk, "My Reminiscences of Argentina," by Dr. Ado Baesler. 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. 5.0 p.m.—Concert. 1. Soprano Solos, (a) The Violet, (b) Die Verschweigung (Mozart), (c) Wiegeliend (Fliess). 2. Sonata in E major for Cello and Pianoforte (Valentini). 3. Sonata in B flat major, No. 4 (Mozart). 4. Soprano Solos, (a) Im Herbst, (b) Bitte, (c) Mutter, o sing' mich zur Ruh, (d) Der Schmetterling, (e) Auf dem Meere (Franz). 5. Vier Stücke im Volkston, Op. 102 (Schumann). 6. Variations in C major (Mozart). 7. Soprano Solos (Rich. Strauss), (a) Heimkehr, (b) Die Georgine, (c) Meinem Kinde, (d) All' meine Gedanken. 7.0 p.m.—Talk—"The Opera Othello." 7.30 p.m.—English Talk, "The Problems of Social Work in England—Social Work in Industry," by R. Pender. 8.0 p.m.—Talk, "Literature and the Present Day—Bernard Shaw." 8.30 p.m.—Talk, "The Progress of Events in China," by Dr. Wegener. 9.0 p.m.—Lehar Concert. 1. "Gipsy Love"—Overture. 2. "Beautiful Italy," from "Pagani." 3. On the Green Danube. 4. Schön ist die Welt"—Soprano Solo from "Endlich allein." 5. Soprano and Tenor Duet from "Endlich allein." 6. Soprano Solos, (a) Intermezzo from "Das Fürstkind," (b) "Kindchen, sei hübsch brav," from "Das Fürstkind." 7. Ballet Music from "The Czarewitsch." 8. Duet from "Die schöne Risetete." (b) Duet from "Jugend in Mai." (c) Tenor and Choral Selections, (a) Prelude to the Third Act from "Der liebe Augustin," (b) Marching Song from "Der liebe Augustin." Followed by News, Time, Weather, and Sports Notes. 10.30 p.m.—Dance Music Programme. 12.30 a.m. (Fri.)—Close Down.

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, "The Family's Walk." 8.30 p.m.—Orchestral and Vocal Concert of Slavonic Music. 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. (910 kc). Transmits at intervals from 11.15 a.m. 6.0 p.m.—Talk, from Gleiwitz—"Wit van Dorring, the Adventurer." 6.25 p.m.—Extracts from a Diary (Wolfgang Zucker)—"The Nights, the Language and the Sundays in England." 6.50 p.m.—English Reading—"The Happy Prince and other Tales." 7.15 p.m.—Talk, "A Film Photographer in Africa" (Lubinski). 7.55 p.m.—Introductory Talk on the following Transmission. 8.0 p.m.—"Le Postillon de Lonjumeau"—Opera-Comique (Adam). 10.0 p.m.—News and Answers to Correspondents on Wireless Questions. 10.20 p.m. (approx.)—Close Down.

BRÜNN (Czecho-Slovakia) Komarov. WL 441.2 m. (689 kc); 2.4 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—German Transmission. 6.25 p.m.—Agricultural Talk. 6.40 p.m.—Talk, "Italian Literature." 7.0 p.m.—"Alone at Last"—Comedy (Oliva). 8.0 p.m.—Programme from Prague. 10.30 p.m.—Exhibition Programme.

BRUSSELS (Belgium) Radio-Belgique. WL 508.5 m. (590 kc); 1.5 kw. 5.0 p.m.—Organ Recital from the Church RR.PP. Carmes. 5.30 p.m.—Orchestral Concert from the Café Metropole. 6.0 p.m.—Flemish Language Lesson. 6.30 p.m.—Trio Concert. 1. Tout Bruxelles de monoplan (Jomaux). 2. Wang (Huget). 3. Roses of the South (Strauss). 4. Minuet for Pianoforte (Scharres). 5. Gismonda (Février). 6. Zulu Wail (Schimer). 7. A Blue Serenade (Signorelli). 8. Quo Vadis—Cello Solo (Nougues). 9. Soir et Matin (Mel Bonis). 10. Méditation—Violin Solo (Henssens). 11. Here and There (Chapell). 7.30 p.m.—"Le Radio-Chronique." 8.15 p.m.—Gramophone Records. 8.30 p.m.—Concert relayed from the Spa Casino. Topical Talk during the Interval. News. 10.30 p.m. (approx.)—Close Down.

BUDAPEST (Hungary) Magyar Telephon Hírmondó es Radio R.T. WL 557.1 m. (538 kc); 25 kw. Transmits at intervals from 12.5 p.m. 7.30 p.m.—Concert. 1. Variations in C minor (Beethoven). 2. Violin Solos. 3. (a) Rhapsody No. 8 (Liszt), (b) Tarantelle from "The Mute of Portici" (Auber). 4. Violin Selections. 5. Rakoczy March (Liszt), followed by Vocal Concert. 1. (a) Pieta Signor Stradella, (b) Quella fiamma (Benedetto), (c) Komm, süsster Tod (Bach), (d) Schläfe, mein Kind (Bach). 2. (a) Du bist die Ruhe (Schubert), (b) Ode (Brahms), (c) Es hat die Rose (Franz), (d) Ich bin der Welt abhanden (Mahler), (e) Morgen (Strauss). 3. (a) Schaj (Radnai), (b) Selection (Radnai), (c) Osz utoja (Tarnay), (d) Oserebogar (Lanyi). 9.35 p.m.—Time and News, followed by Tzigane Music from the Café Emka.

COLOGNE (Germany) Westdeutscher Rundfunk. WL 283.2 m. (1,059 kc); 25 kw. Transmits at intervals from 10.15 a.m. 1.5 p.m.—Orchestral Concert. 4.30 p.m.—See Langenberg Station. 5.5 p.m.—Reading by J. Luzian. 5.30 p.m.—Talk, "Music in the Fairy Tales of Various Nations." 5.50 p.m.—Talk for Gardeners. 6.0 p.m.—Concert. 1. Contralto Solos, (a) Nicht mehr zu dir zu gehen (Brahms), (b) Immer leiser wird mein Schlummer (Brahms), (c) Seit dem mein Aug' in deine

schaute. (R. Strauss), (d) Meine Mutter hat's gewollt (Trunk). 2. Pianoforte Solos, (a) Zwei Stimmungen aus dem Lande der tausend Seen (Sibelius), (b) Prelude, Op. 28, No. 20 (Chopin), (c) Nocturne, Op. 55, No. 1 (Chopin), (d) Prelude, Op. 28, No. 22 (Chopin). 3. Contralto Solos, (a) Es muss ein Wunderbares sein (Liszt), (b) Das verlassene Mägdlein (Wolf), (c) In dem Schatten meiner Locken (Wolf), (d) Mädchen Klage (Akimenko). 4. Pianoforte Solos, (a) Intermezzo and Caprice (Brahms), (b) Erotik (Grieg), (c) Lied ohne Wroet (Grünfeld). 5. Contralto Solos, (a) So schnell vergessen (Tchaikovsky), (b) Die Lüge (Fleck), (c) Ich liebe Dich (Grieg).

7.20 p.m.—See Langenberg Station. 7.45 p.m.—Talk by Wilfrid Schreiber. 8.15 p.m.—Concert. 1. "The Force of Destiny"—Overture (Verdi). 2. Selections by the Orchestra and Baritone Solos from "Il Trovatore" (Verdi). 3. Ballet Music from "Sicilian Vespers" (Verdi). 4. Prelude to the Third Act of "La Wally" (Catalani). 5. Baritone Solo from "Rigoletto" (Verdi). 6. Intermezzo (Zandonai). 7. Triumphal March from "Cleopatra" (Mancinelli). 8.50 p.m.—Talk on "Traumulus." 9.0 p.m.—"Traumulus"—Tragic-Comedy (Holz and Jerschke), News and Sports Notes. 11.0 p.m.—Concert and Dance Music. 12 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. 7.0 p.m.—News; Exchange; Time. 7.30 p.m.—Talk, "The Slum Mission." 8.0 p.m.—Violin Duets from the Works of Pleyel, Mozart and Kreutzer. 8.45 p.m.—A Comedy (Bernard Shaw). News. 9.30 p.m.—Horn and Soloist Concert. 10.45 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 Music. 6.15 p.m.—Programme from Dublin.

CRACOW (Poland) Polskie-Radio. WL 567 m. (529 kc); 1.5 kw. Transmits at intervals from 12.35 p.m. 7.15 p.m.—Variety Item Programme. 7.30 p.m.—English Language Lesson. 8.0 p.m.—Fanfare from Notre Dame. 8.15 p.m.—Programme from Warsaw. 10.30 p.m.—Concert relayed from the Pavillon Restaurant, Cracow. 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. 7.15 p.m.—News and French Lesson. 7.45 p.m.—Talk on "History." 8.0 p.m.—An Orchestral Overture. 8.10 p.m.—A Melodrama, arranged by Elizabeth Young and Company. 8.30 p.m.—Duets, by P. J. Byrne (Baritone) and T. Warren (Tenor). 8.45 p.m.—The Celeste Orchestra. 8.50 p.m.—Peter Lynch (Tenor). 9.0 p.m.—A Recital of Poems. 9.15 p.m.—The Lorraine Dance Band. 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany) Südwestdeutscher Rundfunk. WL 429 m. (600 kc); 4 kw. Relayed by Cassel on 252.1 m. (1,190 kc). Transmits at intervals from 1.30 p.m. 6.15 p.m.—Wireless Announcements. 6.30 p.m.—Talk, "The Historical and Legendary Buddha," from Cassel. 6.45 p.m.—Talk, "The Co-operation of the Senses," by O. Baum. 7.45 p.m.—Oskar Baum gives a reading from his own Works. 8.15 p.m.—Chamber Music. 1. Sonata for Viola and Harp (Arnold Bax). 2. Lieder. 3. Quartet for Flute, Saxophone, Trombone and Harp (Ernst Schoen). 9.15 p.m.—"The New Woman"—a Wireless Dialogue, followed by Programme from Mannheim (see Stuttgart).

HAMBURG (Germany) Norag (ha, in Morse). WL 306 m. (757 kc); 4 kw. Relayed by Bremen on 272.7 m. (1,100 kc); Hanoover, 297.9 m. (1,007 kc); and Kiel, 256 m. (1,176 kc). Transmits at intervals from 5.45 a.m. 5.0 p.m. (Hamburg and Kiel)—Concert from Café Wallhof. 6.0 p.m.—Orchestral Selections. 6.45 p.m.—Short Talk for Women. 7.0 p.m.—Talk, "In a Glass Factory." 7.30 p.m.—Talk, "The Increase of Dairy Produce." Weather Report. 8.0 p.m. (Hamburg and Kiel)—Choral Concert by the "Liederefreunde" Choral Society. 9.15 p.m.—Recital for Cello and Pianoforte, from Kiel. 1. Sonata in G minor, Op. 19 (Rachmaninoff). 2. Sonata in F major, Op. 6 (Richard Strauss). 10.15 p.m. (approx.)—News and Weather. 10.30 p.m. (approx.) (Hamburg, Bremen and Kiel)—Restaurant Ostermann Concert Programme.

HILVERSUM (Holland) Algemeene Vereeniging Radio-Omroep. WL 1,071 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Concert of Trio Music. 2.40 p.m.—Programme for Hospitals. 5.40 p.m.—Concert by Radio Trio. 6.55 p.m.—English Language Lesson. 7.25 p.m.—Police Information. 7.40 p.m.—Illustrated Music Talk. 8.45 p.m.—Concert. 1. Musical Play—Overture (Lincke). 2. Souvenir de Bade (Komzak). 3. (a) Flapperette, (b) Tango, (c) Foxtrot (Beuker-Denjis). 4. Selection from "Rose Marie" (Friml). 5. John MacDuncan in Bagpipe Selections. 6. Blue Bells of Scotland—Paraphrase (Meyer). 7. The Soldier of Fortune (Arphorpe). 8. (a) Why, (b) If you knew Susie, (c) Voices of Spring (Joh. Strauss). 9. Songs of Scotland (Lampe). 10. Selected Items by John MacDuncan. 11. Barbara (Silver). 12. The Handicap March (Rosey). In the interval: Weather and News Bulletin. 10.40 p.m. (approx.)—Close Down.

HUIZEN (Holland) WL 341.6 m. (878 kc); 4 kw. (Until 6.40 p.m.). Transmits from 6.40 p.m. on 1,870 m. (160 kc). 1.10 p.m.—Soprano Song Recital. 6.10 p.m.—Soprano and Contralto Songs. 8.10 p.m.—Talk by Mr. J. Gorter. 8.40 p.m.—Vocal and Instrumental Concert, followed by Talk.

JUAN-LES-PINS (France) Radio L. L. WL 230 m. (1,304 kc); 0.25 kw. Transmits at intervals from 1.0 p.m. 9.0 p.m.—News and Literary Talk. 9.15 p.m. (approx.)—Concert. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany) Ostmarken Rundfunk. WL 303.6 m. (988 kc); 4 kw. Relayed by Danzig, on 272.7 m. (1,100 kc). Transmits at intervals from 11.0 a.m. 6.20 p.m.—Talk, "African Sketches." 6.50 p.m.—Talk, "New World Construction." 7.30 p.m.—Talk, "Points to Note when Filing in my Income Tax Return." 8.5 p.m.—Reception of the German Medical Delegates on the occasion of their Visit to the Senate of the Free State of Danzig, relayed from Danzig. 1. Greetings by the President of the Senate, Dr. Sahn. 2. German National Hymn. Address by Dr. Stauder, Nürnberg. 4. Danzig Hymn. 8.35 p.m.—Orchestral Concert. 1. Academic—Carnival Overture (Brahms). 2. Violin Concerto in D major, Op. 77 (Brahms). 3. (a) Romance for Violin and Orchestra in F major, Op. 50 (Beethoven), (b) Andante from the Concerto for Violin in D major (Mozart). 4. Violin Concerto in D minor, Op. 55 (Dvorak). Weather, and News followed by Sports Notes.

KOVNO (Lithuania) Radio-Kaunas. WL 2,000 m. (150 kc); 15 kw. 9.0 p.m.—Concert of Trio Music.

LAHTI (Finland) WL 1,522.8 m. (197 kc); 25 kw. Programme also for Helsinki, 375.9 m. (798 kc); 1.2 kw.

6.15 p.m.—Programme for Children. 7.0 p.m.—Orchestral Concert. Talk given in the Interval. 8.45 p.m.—News given in Finnish and Swedish, followed by Programme from a Restaurant. 10.0 p.m. (approx.)—Close Down.

LANGENBERG (Germany) Westdeutscher Rundfunk. WL 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283.2 m. (1,059 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. 1.5—4.30 p.m.—See Cologne Station. 4.30 p.m.—Reading from Düsseldorf. 5.5—7.20 p.m.—See Cologne Station. 7.20 p.m.—Spanish Language Lesson. Relayed from Münster. 7.45 p.m.—12.0 midnight.—Programme relayed from Cologne.

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. 6.5 p.m.—Talk on Legal Problems. 6.30 p.m.—See Königswusterhausen. 7.0 p.m.—Talk on "Technical Physics." 7.30 p.m.—Talk, "The Children's Friendly Association," by Dr. Siemen.

8.0 p.m.—Weather, Time, News. 8.15 p.m.—"Pictures of the South" Concert. 1. Pictures of the South (Nicodé); (a) Bolero, (b) Moorish Dancing Song, (c) Serenade, (d) Andalusienne, (e) March of Provence, (f) In der Taberna. 2. Roma—Suite (Bizet). 3. Italian Caprice (Tchaikovsky). 4. Piedmont Dance (Sinigaglia). 10.5 p.m.—News and Sports Notes, followed by Silent Night.

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.—Concert by the Municipal Band from the "Retiro." Programme relayed by San Sebastián, 335 m. (895 kc). 10.0 p.m.—Time and Exchange Quotations. 10.10 p.m.—"Surprise Programme." 11.50 p.m.—News and Dance Music. 12.30 a.m. (Friday)—Close Down.

MILAN (Italy) Unione Radiofonica Italiana. WL 549.3 m. (546 kc); 7 kw. Transmits at intervals from 12.15 p.m. 7.47 p.m.—English Language Lesson. 8.45 p.m.—Time, and Talk on "The Life and Habits of the Arab Women." 8.45 p.m.—"L'Amore dei Tre Rei"—Opera (Montemezzi). During the Intervals, Sports Notes and News. 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); Kaiserslautern, on 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.—Agricultural Talk. 7.0 p.m.—Orchestral Concert. 1. The Phantom Brigade (Myddleton). 2. Selection from "Die versunkene Glocke" (Respighi). 3. Scherzo for Flute and Orchestra (Heuer). 4. "Pique Dame" Overture (Suppé). 5. Humoresque (Dvorak). 6. Gaucho (Grosjeanne). 7. The Washington Post (Souza). 8. Zingaresca (Ellerton). 8.5 p.m.—"Am Tage des Gerichts"—Play in Four Acts (Rosegger). 9.0 p.m.—Announcements and News.

NAPLES (Italy) Unione Radiofonica Italiana (I NA). WL 333.3 m. (900 kc); 1.5 kw. Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time, and Harbour Notes. 8.50 p.m.—"Silhouette"—Operetta in three Acts (E. Bellini). 10.55 p.m.—Calendar and Announcements. 11.0 p.m. (approx.)—Close Down.

OSLO (Norway) Kringkastingselskapet. WL 461.5 m. (650 kc); 1.5 kw. Relayed by Hamar, 555.8 m. (549 kc); Fredriksstad, 435 m. (689 kc); Porsgrunn, 500 m. (600 kc); Notodden, 412 m. (728 kc); and Rjukan, 448 m. (670 kc). Transmits at intervals from 11.0 a.m. 6.45 p.m.—Religious Studio Service,

Programmes for Thursday.—(Cont.)

7.15 p.m.—News and Talk and Time. 8.2 p.m.—Concert. 1. Prelude (Järnefeldt). 2. Selection from "La Tosca" (Puccini). 3. (a) Liebesleid (b) Liebesfreud (Kreisler) 4. Berceuse (Gretschaninoff). 5. Mazurka in B flat major (Godard). 6. Suite comédienne (Mascagni). 9.0 p.m.—Talk, "The Life of the Beduins," by M. G. W. Sejersted. 9.30 p.m.—Pianoforte Recital. 10.0 p.m.—Weather and News. 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.); 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 "Books," "Wireless," "The Cinema," "Notes on the Palais de Justice," etc. 8.10 p.m.—Weather Forecast. 8.30 p.m.—Concert of Trio Music. 1. Trio (Mendelssohn). 2. Scherzo (Balakirew). 3. Impromptu (Fauré). 4. Violin Suite (Beunke). At 8.56 p.m. Time Signal on 32.5 m. (9,231 kc.). 9.30 p.m.—Educational Programme. Talks on "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 Record Selections, Talk and News. 9.0 p.m.—Concert. 1. "Mignon"—Overture (Thomas). 2. Griseldis (Massenet). 3. Symphony in E flat (Mozart). 4. Trio for Violin, Horn and Pianoforte (Haas). 5. Coppelia—First Suite (Delibes). 6. "Sur les cimes," from "Impressions d'Italie" (Charpentier). 7. Marche héroïque (Saint-Saëns). News in the Intervals.

PARIS (France) Radio-Paris (CFR). WL. 1,765 m. (170 kc.); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert. 1. Works of Kreisler, (a) Marche miniature viennoise, (b) Liebesleid, (c) Ro-

mance, (d) La Gitana, (e) Polichinelle, (f) Syncopation. 2. Works of Chabrier, (a) Joyeuse Marche, (b) Bourée fantasque, (c) L'Heureuse, (d) Gwendoline. 1.50 p.m.—Exchange Quotations. 3.30 p.m.—Market Prices, Bourse. 3.45 p.m.—Concert. 1. "La Preciosa."—Overture (Weber). 2. Cello Sonata (Jullien). 3. Talk. 4. Nocturne (Février). 5. Trio (Schumann). 4.45 p.m.—Agricultural Report, Market Prices, News, and Esperanto Talk. 8.30 p.m.—Concert. 1. "Jean le Veinard"—Play (Morel). 2. Sonate appassionata (Beethoven). 3. Selections of Chamber Music. 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.—Orchestral Concert. 12.0 midnight.—Baseball Announcements. 12.0 midnight.—Telechron Time. 1.0 a.m. (Friday, approx.).—Programme from WJZ, New York. 1.0 a.m.—"Retold Tales." 1.30 a.m.—Variety Items. 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, Time and Close Down.

POSEN (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 Report. 8.0 p.m.—Report on Finance. 8.30 p.m.—Concert of Russian Music. 1. Baritone Solos: (a) Sur la Steppe (Kalinnikoff), (b) Lettre brûlée (Cui), (c) Two Songs (Tchaikovsky). 2. Soprano Solos—Russian Songs. 3. Pianoforte Solos: (a) Prelude in G flat, Op. 23, No. 10 (Rachmaninoff), (b) Barcarolle, Op. 10, No. 3 (Rachmaninoff), (c) Etude, Op. 42, No. 7 in F minor (Scriabin). 4. Baritone

Solos—Three Songs (Rimsky-Korsakoff). 5. Baritone Solos (Glière and Rachmaninoff). 6. Soprano Solos—Russian Songs. 7. Pianoforte Solos—Selections from the Works of Glazounoff: (a) Prelude and Variations, (b) Prelude and the "Romanesca," (c) Etude, Op. 31, No. 1. 8. Baritone Solos—Selections from the Works of Bleichman and Keneman. 9. Duets from "Snieguzka" (Rimsky-Korsakoff). 10.0 p.m.—Time, News, Weather and Variety Item Selections. 10.50 p.m. (approx.).—Close Down.

PRAGUE (Czecho-Slovakia) 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.—French Language Lesson. 7.15 p.m.—Dramatic Selections. 8.0 p.m.—Czech Philharmonic Concert. 1. Selections from "The Puppet Play" (Weinberger). 2. Slavonic Rhapsody. 3. Symphony in D minor (Ridky). 10.0 p.m.—News and Announcements. 10.15 p.m. (approx.).—Close Down.

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.—"Il Biricchino di Parigi"—Opera (Montanari). In the Interval: Topical Talk. 11.20 p.m.—News and Close Down.

SCHENECTADY, N.Y. (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. 11.45 a.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News Items. 11.25 p.m.—Baseball Announcements. 11.30 p.m.—Dinner Music from the Hotel de Witt Clinton. 12.25 a.m. (Fri.).—Baseball Scores. 12.30 a.m.—Talk for Fishermen. 12.45 a.m.—Studio Music Programme.

1.0 a.m.—"The River Choristers" Programme from New York. 1.30 a.m.—The Hoover Sentinels. 2.0 a.m.—Cathedral Echoes—Mixed Vocal Quartet Selections. 2.30 a.m.—Programme from Studio. 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 from the Strand Theatre, Albany. 5.30 a.m. (approx.).—Close Down.

STAMBOUL (Turkey) Radio-Stamboul. Societe Anonyme Turque de Téléphonie sans fil. WL. 1,180 m. (254 kc); 5 kw. Transmits at intervals from 4.30 p.m. 6.15 p.m.—Concert of Turkish Music. 8.30 p.m.—Weather and Time. 8.40 p.m.—Concert. 1. "The Marriage by Lantern Light"—Overture (Offenbach). 2. Selection from "Manon Lescaut" (Puccini). 3. Romance (Tosti). 4. Serenade (Tocelli). 10.0 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. (271 kc); Malmö, 260.9 m. (1,150 kc); and Söndsvall, 545.8 m. (550 kc). Transmits at intervals from 12.35 p.m. 6.30 p.m.—Religious Studio Service. 7.0 p.m.—Talk on Topical Subjects. 7.30 p.m.—Concert. 1. Serenade for Flute and Guitar (Carulli). 2. Songs: (a) Summer Fragrance (Alfven), (b) Summer-time (Nordqvist), (c) Selection (Jonsson), (d) Summer Night (Rangström). 8.0 p.m.—"Three Little Girls"—Musical Comedy (Kollo) from the Djurgårds Theatre. 11.0 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 and Weather. 6.15 p.m.—Talk from Freiburg, 574.7 m. (522 kc) "Molière." 6.45 p.m.—Talk, "Schiller as a Medical Man." 7.15 p.m.—Chess Club News.

7.45 p.m.—Talk: "Hints for Week-ends and Holidays." 8.0 p.m.—"La Bayadere"—Opera (Kalman). Followed by News. 10.30 p.m.—Dance Music from Mannheim: 1. Dancing Tambourine. 2. Clasa Lopez. 3. Lopez Speaking. 4. Doll Dance. 5. Lopeziara. 6. Patry. 7. Valse vanité. 8. Nanette. 9. Up and Down the Keys. 10. Igloo Stomp. 11. A few Moments at the Piano. 12. Miss Chocolate (1). 13. Marilyn. 14. Miss Chocolate (2). 15. Loose Fingers.

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, Bourse. 8.30 p.m.—Orchestral Concert. 9.0 p.m.—Concert. 1. "L'Enfant du Régiment"—March (Fucik). 2. La chanson des abeilles (Filippucci). 3. Gold and Silver—Waltz (Lehar). 4. Ballet Music from "Les Deux Pigeons" (Messager). 5. Selections from "La Mascotte" (Audran). 6. "Pique Dame"—Overture (Suppé). 7. Serenata (Sadun). 8. Les Erynnies—Orchestral Suite (Massenet). 9. Selection from "Manon" (Massenet). 10. Cordoba—Paso doble (Logano). 11.0 p.m.—"North African Journal."

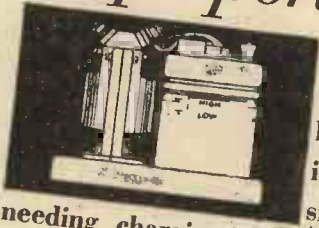
VIENNA (Austria) Radio-Wien. WL. 577 and 517.2 m. (520 and 580 kc.); 0.75 and 5 kw. Relayed by Innsbruck on 294.1 m. (1,020 kc.); Klagenfurt on 272.7 m. (1,100 kc.); and Linz, 254.2 m. (1,180 kc.). Transmits at intervals from 11.0 a.m. 6.45 p.m.—Esperanto Lesson. 7.0 p.m.—Advanced French Lesson. 7.30 p.m.—Advanced English Lesson. 8.5 p.m.—Concert relayed from the "Roten Bretze," Lerchenfeld.

WARSAW (Poland) Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 1.0 p.m. 7.15 p.m.—Agricultural Report. 8.15 p.m.—Orchestral Concert relayed from the "Dolina Szwajcarska." Programme from the works of Tchaikovsky. In the Interval, News given in French. 10.0 p.m.—Time, Weather and News. 10.30 p.m.—Dance Music Programme. 11.30 p.m. (approx.).—Close Down.

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PROGRAMMES FOR FRIDAY (June 29)

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. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Orchestral Selections: 1. March (Sousa). 2. Les Fleurs—Waltz (Waldteufel). 3. Tango (Albeniz). 6.30 p.m.—Baritone Song Recital. 7.0 p.m.—Humorous Recitations. 7.20 p.m.—Orchestral Selections: 1. Czardas (Michiels). 2. Selection from "The Geisha" (Jones). 3. La brujula—Mazurka (Coto). 7.50 p.m.—Soprano Song Recital. 8.20 p.m.—Orchestral Selections: First Suite of the Ballet "Coppelia" (Delibes). 8.40 p.m.—Sports Notes and News. 9.0 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. 8.0 p.m.—The Wireless Orchestra. 1. Vivat Academia—Festival Overture (Zimmer). 2. Vineta Glocken Waltz (Lindsay-Theimer). 3. Persian Dance (Svendsen). 4. Cadet March (Sousa). 8.30 p.m.—Talk on "Belgium." 9.0 p.m.—The Wireless Orchestra. 1. Selection from "Dalibor" (Smetana). 2. Romance (Tchaikovsky). 3. Turkish March (Beethoven). 9.30 p.m.—Recitations from Works of Victor Hugo, Kielland and Vilhelm Krag, followed by 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 noon. 5.0 p.m.—Programme from Leipzig. 6.0 p.m.—Talk, "International Protection for Musical Works." 6.30 p.m.—Advanced English Lesson. 6.55 p.m.—Technical Talk for Workers, by Professor Woltdt. 7.20 p.m.—Talk for Doctors. 7.25 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 from the Ostseebad Ahlbeck. 6.40 p.m.—Italian Language Lesson. 7.0 p.m.—Talk, "The Lökmitz-Tal." 7.25 p.m.—Talk on "Othello." 7.30 p.m.—"Othello"—Opera (Verdi), relayed from the Opera House, Unter den Linden, followed by News, 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 on Sports. 8.55 p.m.—The Kursaal Orchestra. 8.55 p.m.—Talk, "What Modern Woman has Forgotten." 9.25 p.m.—Recital of Songs. 9.45 p.m.—News and Weather. 10.0 p.m.—The Kursaal Orchestra. 10.15 p.m. (approx.)—Close Down.

BRESLAU (Germany)
Schlesische Funkstunde. WL 322.9 m. (920 kc); 4 kw. Relayd by Glewitz, on 329.7 m. (910 kc). Transmits at intervals from 11.15 a.m. 6.30 p.m.—Talk, "Through Woods and Meadows," by E. Bernert. 7.25 p.m.—Talk, "The Basis of English Social Economies." 7.50 p.m.—Talk on "Philosophy." 8.30 p.m.—Reading from the Works of Peter Rosegger—on the Tenth Anniversary of his Death (June 26, 1918). 9.15 p.m.—Soprano and Baritone Recital from the Works of W. Retlich. The Composer at the Pianoforte.

BRÜNN (Czecho-Slovakia)
Komarov. WL 441.2 m. (689 kc); 2.4 kw. Transmits at intervals from 9.0 a.m. 6.0 p.m.—German Transmission, followed by Talk and reading. 7.0 p.m.—Slovakian Programme. 9.0 p.m.—Exhibition Programme. 10.0 p.m.—Programme from Prague. 10.25 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.—Talk on "The History of Music," by André Guery. 6.15 p.m.—Flemish Literature. 6.30 p.m.—Chamber Music: 1. Trio (Haydn). 2. Pianoforte pieces (Schumann). 3. Trio (Godart). 7.30 p.m.—"Le Radio-Chronique." 8.15 p.m.—Orchestral Concert: 1. Pantins et poupées (de Tave). 2. Spanish Talk by M. Aznar Casanova. 3. Selection from "Le Petit Faust" (Hervé). 4. Les Syrènes (Waldteufel). 6. Topical Talk. 6. La poupée de porcelaine (Lincke). 7. Menuet valse (Gillet). 8. Sérénade hongroise (Joncieres). 9. Songs. 10. Un Voyage à Naples (Bing). 11. Suite for Violin (Gillon). 12. Le siège de la Rochelle (Balfe). 13. Songs. 14. Impressions scandinaves (Fredericksen). 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)
Magyar Telephon Hirmonde es Radio R.T. WL 557.1 m. (538 kc); 25 kw. Transmits at intervals from 9.0 a.m. 12.0 noon.—Chimes, Time and Weather. 12.15 p.m.—Orchestral Concert. 4.0 p.m.—Programme for Children. 5.0 p.m.—Military Concert. 6.40 p.m.—Sports Notes, followed by Talk, "What we saw in America." 7.20 p.m.—Sports Talk and News. 7.30 p.m.—"The Barber of Seville"—Comedy (Beaumarchais). In the Interval, Racing News. 9.40 p.m.—Time and Sports Notes. 10.0 p.m.—Orchestral Concert relayed from the Café Ostende.

COLOGNE (Germany)
Westdeutscher Rundfunk. WL 283.2 m. (1,059 kc); 4 kw. Transmits at intervals from 10.15 a.m. 1.15 p.m.—See Langenberg Station. 3.15 p.m.—Review of New Books. 3.50 p.m.—Programme for Children. 4.30 p.m.—Concert of Choral Music. 6.25 p.m.—English Language Lesson. 7.15 p.m.—See Langenberg Station. 7.35 p.m.—Concert. 1. "Anacreonte" Overture (Cherubini). 2. Hungarian Fantasia for Cello and Orchestra (Grützmacher). 3. Ballet Egyptian (Luigini). 4. Polonaise from "Struensee" (Meyerbeer). 5. Rhapsody on Swabian Folk Melodies (Kämpfert). 6. Variations on a Tyrolian Folk Song for Flute and Orchestra (Böhm). 7. Gewitterzene (Hellmesberger). 8. Die Blumen—Waltz (Waldteufel). 8.45 p.m.—Concert from Dortmund (see Langenberg station). 10.30 p.m.—News, Sports Notes, and Concert from Café Corso, Dortmund 12 midnight (approx.)—Close Down.

COPENHAGEN (Denmark)
Copenhagen Radio. WL 337.4 m. (889 kc); 1 kw. Relayd by Kalundborg, on 1,153.8 m. (260 kc). Transmits at intervals from 7.30 a.m. 7.0 p.m.—News; Exchange; Time. 7.30 p.m.—Talk, "Precaution in the Use of Guns," by W. Bisgaard. 8.0 p.m.—Pianoforte Recital. 8.45 p.m.—Reading (Jack London). 9.30 p.m.—Swiss Concert. 1. Jodelle Songs: (a) Wie baas isch mir da obe (Krenger), (b) Mälche (Krenger). 2. Swiss Dance (Näf). 3. Songs: (a) Fleurette—French Folk Song, (b) Nostalgie—Jodelle Song. 4. Swiss Dance (Näf). 5. Four Italian Songs: (a) Era un bel lunedì, (b) La vegna, (c) Bionda, gli occhi neri, (d) Adieu à l'Engadina (Gaugler). 6. (a) Berner March, (b) Eulenbacher March, (c) Vaterlandshymne. 7. Songs: (a) Was heimelig sig—Jodelle Song, (b) Ihr Berge lebt wohl (Brunnen). 10.45 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 Music. 6.15 p.m.—Programme from Dublin.

CRACOW (Poland)
Polskie-Radio. WL 567 m. (529 kc); 1.5 kw. Transmits at intervals from 10.15 a.m. 7.15 p.m.—Variety Item Programme. 7.35 p.m.—Geographic-Economic Notes.

8.0 p.m.—Fanfare from Notre Dame. 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.—Programme for Children. 7.0 p.m.—Gramophone Selections. 7.20 p.m.—News and Gardening Talk. 7.45 p.m.—Italian Language Lesson. 8.0 p.m.—Vocal and Instrumental Music arranged by the Leinster School of Music. 8.30 p.m.—The Station Orchestra. 9.0 p.m.—F. Gallagher (Baritone). 9.15 p.m.—A Revue, arranged by John McDonagh and Company. 10.0 p.m.—"Amhrain Gaedhilige." 10.15 p.m.—Orchestral Music. 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany)
Südwestdeutscher Rundfunk. WL 429 m. (690 kc); 4 kw. Relayd by Cassel, on 252.1 m. (1,190 kc). Transmits at intervals from 1.0 p.m. 6.15 p.m.—Wireless Announcements. 6.30 p.m.—Radio Club Notes. 6.45 p.m.—Reading from Malay Legends by Herr Roedemeyer. 7.15 p.m.—Twenty Minutes of Science and Technology. 8.5 p.m.—Weekly Film Review. 8.15 p.m.—Robert Koppel Evening. 1. Song. 2. Ich weiss ein kleines Ständchen (Waldau). 3. Franz Schubert, in Dich ist die Welt verliebt (Steinberg-Frank). 4. Was sagt mein Mädel dazu (Benzatzky). 5. Lieber Leierkastenmann (Edgar Alban). 6. Orchestral Selection. 7. Drinking Song (Kistenmacher). 8. Die schönsten Augen hat meine Frau (Erwin). 9. Am Rhein (Stransky). 10. Komm mit mir an die See (Stransky). 11. Orchestral Selections. 12. Dance Songs with Orchestral Accompaniment. Followed by Concert of Oriental Music. 1. "Le Fils du Mandarin"—Overture (Cesar Cui). 2. Aus dem west-östlichen Divan (Goethe). 3. In the Crimea—Suite (Moussorgsky). 4. Hafis—Tone Poem, Op. 10 (Pataky). 5. Poems of Li-tai-pe. 6. Pictures of the Orient, Op. 66 (Schumann). Followed by late Concert from Cassel.

HAMBURG (Germany)
Norag (ha, in Morse). WL 396 m. (757 kc); 4 kw. Relayd by Bremen on 272.7 m. (1,100 kc); and Hanover, 297.9 m. (1,007 kc); and Kiel, 256 m. (1,176 kc). Transmits at intervals from 5.45 a.m. 6.0 p.m.—Orchestral Selections. 6.30 p.m.—See Königswusterhausen. 7.0 p.m.—Orchestral Selections. 7.25 p.m. (Hamburg only)—Talk, "Walking Tours—From Amelinghausen-Uelzen to Isenhausen." 7.45 p.m.—Talk, "The Hamburg Produce Exchange," by G. Leuckfeld. 8.15 p.m.—"Der Hochtourist"—Three-act Farce (Kraatz-Neal). 10.15 p.m. (approx.)—Topical Talk, Weather and News Bulletin. 10.30 p.m. (approx.) (Hamburg and Kiel)—Cabaret Concert Programme.

HILVERSUM (Holland)
Algemeene Vereeniging Radio-Omroep. WL 1,071 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Concert of Trio Music. 5.10 p.m.—Concert. 1. "Das Nachtlager von Granada"—Overture (Kreutzer). 2. Phantastic Ballet (Ralf). 3. To Spring (Grieg). 4. Mezzo-soprano Solos. 5. Spring's Awakening (Bach). 6. Selection from "The Prophet" (Meyerbeer). 7. Mezzo-soprano Solos. 8. Idylle passionnelle (Razigade). 9. Aus der Woche (Thiele). 10. Gamerra March (Gungl). 6.55 p.m.—Weekly Book Review. 7.25 p.m.—Police News and Time. 7.50 p.m. (approx.)—Concert. 1. Mass in A major (Bach). 2. "Fidelio"—Overture (Beethoven). 3. Choral Fantasia (Beethoven). 10.10 p.m.—Weather and News. 10.20 p.m. (approx.)—Close Down.

HUIZEN (Holland)
WL 341.6 m. (878 kc); 4 kw. (Until 6.30 p.m.). Transmits from 6.40 p.m. on 1,870 m. (160 kc). 1.10 p.m.—Concert of Trio Music. Relayd from Amsterdam. 4.40 p.m.—Gramophone Selections. 5.40 p.m.—Vocal and Instrumental Concert.

7.40 p.m.—Gregorian Lesson. 8.10 p.m. (approx.)—Close Down.

JUAN-LES-PINS (France)
Radio L. L. WL 230 m. (1,304 kc); 0.25 kw. Transmits at intervals from 1.0 p.m. 9.0 p.m.—News and Household Talk. 9.15 p.m. (approx.)—Concert. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. WL 303.6 m. (988 kc); 4 kw. Relayd by Danzig, on 272.7 m. (1,100 kc). Transmits at intervals from 11.0 a.m. 6.25 p.m.—Talk, "Can Technique help Agriculture?" by Herr Gallwitz. 7.0 p.m.—Spanish Language Lesson. 8.5 p.m.—Hints for Wireless Amateurs. 8.20 p.m.—"Improvisationen in Juni"—Comedy (Mohr). Weather, News, followed by Sports Notes. 10.15 p.m.—Dance Music Programme.

KOVNO (Lithuania)
Radio-Kaunas. WL 2,000 m. (150 kc); 15 kw. 12.15 p.m.—Afternoon Concert. 8.30 p.m.—War Museum Programme. 9.0 p.m.—Quintet and Solo Concert.

LAHTI (Finland)
WL 1,522.8 m. (197 kc); 25 kw. Programme also for Helsingfors, 375.9 m. (798 kc); 1.2 kw. 6.15 p.m.—Programme for Children. 7.0 p.m.—Concert. 1. Radio March (Lassy). 2. Selection from "Cavalleria Rusticana" (Mascagni). 3. Talk. 4. March (Blankenburg). 5. An Dich (Czibulka). 6. Swedish Dances (Urbom). 7. Czardas (Grossmann). 8. Wedding of the Winds—Waltz (Hall). 8.45 p.m.—News given in Finnish and Swedish, followed by Programme from a Restaurant. 10.0 p.m. (approx.)—Close Down.

LANGENBERG (Germany)
Westdeutscher Rundfunk. WL 470.9 m. (637 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283.2 m. (1,059 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 9.0 a.m. 1.5 p.m.—Concert from Düsseldorf. 3.15—7.15 p.m.—See Cologne. 7.15 p.m.—Legal Talk from Münster. 7.35 p.m.—Programme from Cologne. 8.45 p.m.—Concert from Dortmund. 1. Introductory Talk. 2. Der Waffenschmied—Overture (Loertz). 3. Selections from the Poem "Der Kleine Held" (Dehmel). 4. "Wie ich Schneiderlehrling wurde" from "Waldheimat" (Rosegger). 5. Der rechte Barbier (Charmisso). 6. Kein Meister fiel von Himmel (Baritone Solo (Wolf)). 7. Wie ich zum Gesellen freigesprochen" from "Waldheimat" (Rosegger). 8. "Abschied des Gesellen" from "Hanne Nüte" (Reuter). 9. Die Tulipan—Ballad (Strauss). 10. Light Songs to the Lute. 11. "Aufnahme der Gesellen in die Zunft" from "Der Schneider von Ulm" (Eyth). 12. Die Kesselschmiede (Lersch). 13. "Lob des Schusters" from "Der Hungerpastor" (Raabe). 14. Two Songs: (a) Cobblers' Song from "The Mastersingers of Nürnberg" (Wagner), (b) Uhmachers Abendlied (Zeller). 15. Die Nagelschmiede (Reider). 16. Was haben denn wir Schneider gross für ein Gewicht (Falke). 17. Light Tales and Songs. 10.30 p.m.—News from Cologne. 10.50 p.m.—Concert. Relayd from the Café Corso, Dortmund. 12 midnight (approx.)—Close Down.

LEIPZIG (Germany)
Mitteldeutscher Rundfunk. WL 366 m. (818 kc); 4 kw. Relayd by Dresden on 275.2 m. (1,090 kc). Transmits at intervals from 10.0 a.m. 4.30 p.m.—Orchestral Concert of Popular Italian Music. 1. Selection from "Madame Butterfly" (Puccini). 2. Ballet Egyptian (Luigini). 3. Melodies from "Rigoletto" (Verdi). 4. Minuet (Bolzoni). 5. Tesoro mio—Waltz (Beucci). 6. Selection from "La Traviata" (Verdi). 6.5 p.m.—Review of New Books. 6.30 p.m.—See Königswusterhausen. 7.0 p.m.—Talk on "Gardening." 7.30 p.m.—Talk on "Animal Biology." 8.0 p.m.—Weather, Time, and News.

8.15 p.m.—"Waldmeister"—Opera in Three Acts (Joh. Strauss). 10.30 p.m.—News and Sports Notes. 10.45 p.m.—Dance Music Programme. 12 midnight (approx.)—Close Down.

LILLE (France)
PTT. WL 267 m. (1,122 kc); 0.5 kw. 12.30 p.m.—Concert. 1. Gwendoline (Chabrier). 2. Le Tombeau de Couperin (Ravel). 3. Hungarian Dance No. 1 (Brähms). 4. Sadko (Rimsky-Korsakoff). 5. Selection from "Manon Lescaut" (Puccini). 1.35 p.m.—Market Quotations and Shipping Forecast. 7.30 p.m.—Exchange Quotations. 7.40 p.m.—English Language Lesson. 8.15 p.m.—News, followed by Talks on Horticulture and Agriculture. 8.30 p.m.—Concert. News.

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.—Concert of Chamber Music. 1. Caprichos romanticos (Del Campo). 2. Songs: (a) Ojos que habeis hecho llorar a mis ojos (De Villar), (b) La araña (de Grognon), (c) Nupcial (de Grognon). 3. Trio, Op. 1 (Arbós). 4. Songs: (a) With You (Morera), (b) La Maja dolorosa (Granados), (c) Dance No. 5, arr. for Voice (Granados). 10.0 p.m.—Time and Exchange Quotations. 10.10 p.m.—Concert, relayed from the Hotel Nacional, Madrid. 11.50 p.m.—News and Dance Music. 12.30 a.m. (Saturday)—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. WL 549.3 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 Medical Talk. 8.45 p.m.—Symphony Concert. 1. "Coriolan"—Overture (Beethoven). 2. Schéhérazade (Rimsky-Korsakoff). 3. Literary Talk. 4. Spanish Symphony (Lalo). 5. Mary Magdalene—Intermezzo and Dance (Pedrollo). 5. Andantino in the Old Style (Marinuzzi). 7. "The Bartered Bride"—Overture (Smetana). 10.55 p.m.—News and Close Down.

MÜNICH (Germany)
Deutsche Stunde in Bayern. WL 536 m. (559 kc); 4 kw. Relayd by Augsburg on 566 m. (530 kc); Kaiserlautern, on 204.1 m. (1,470 kc); and Nürnberg, on 241.9 m. (1,240 kc). Transmits at intervals from 11.0 a.m. 6.0 p.m.—Talk, "My Year of Service in Strassburg," by Herr Boertner. 6.30 p.m.—Mandoline Recital. 7.0 p.m.—Reading on "Early Summer Days in Vienna." 7.30 p.m.—Symphony Concert from the Works of Mozart: 1. "The Marriage of Figaro"—Overture. 2. Suzanne's Aria from "The Marriage of Figaro." 3. Zerline's Aria from "Don Juan." 4. Symphony in G minor No. 40. 6.30 p.m.—Talk, "Art and Artists." 7.0 p.m.—"Wanderers' Programme." 10.20 p.m.—Wireless Notes and News. 10.45 p.m.—The Week's Sports Review.

NAPLES (Italy)
Unione Radiofonica Italiana (INA). WL 333.3 m. (900 kc); 1.5 kw. Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time and Harbour Notes. 8.50 p.m.—"Dejanice"—Opera in Four Acts (Alfredo Catalani). 10.55 p.m.—Calendar and Announcements. 11.0 p.m. (approx.)—Close Down.

OSLO (Norway)
Kringkastingselskapet. WL 461.5 m. (650 kc); 1.5 kw. Relayd by Hamar, 555.8 m. (540 kc); Fredrikstad, 435 m. (689 kc); Porsgrund, 500 m. (600 kc); Notodden, 412 m. (728 kc); and Rykan, 448 m. (670 kc). Transmits at intervals from 11.10 a.m. 6.15 p.m.—Concert of Norwegian Music. 7.15 p.m.—News and Talk in French on "Madame de Maintenon." 8.0 p.m.—Time and Recitation. 8.30 p.m.—Recital of Songs. 9.0 p.m.—Talk on "Telemark" (Part II). 9.30 p.m.—Recital of 'Cello Music. 10.0 p.m.—Weather and News. 10.15 p.m.—Talk on Topical Events. 10.30 p.m. (approx.)—Close Down.

Programmes for Friday.—(Cont.)

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, "The Palais de Justice," by M. Marcel Bloch, etc. 8.10 p.m.—Weather Forecast. 8.30 p.m.—"The Club du Faubourg." Discussions on "The Idea of Marriage," "Does the Dream Husband Exist, or the Model Wife?" "Where are the Heroes of Romance?" "What is Conjugal Happiness?" etc. At 8.56 p.m. Time Signal on 32.5 m. (9,231 kc). 9.30 p.m.—Educational Programme. Talks, "Great Writers at Home," "Pierre Lasserre," 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. 9.0 p.m. (approx.)—Close Down.

PARIS (France) Radio-Paris (CFR). WL 1,765 m. (170 kc); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert. 1. "La Princesse Jaune" (Saint-Saens). 2. Aphrodite (Erlanger). 3. Crépuscule (Massenet). 4. L'âne blanc (Hue). 5. Two Songs. 6. Romance for Violin (Glière). 7. Serenade (Widor). 8. Poem (Fibich). 9. Arioso (Delibes). 10. "Cello Solo. 11. L'Enfant Prodige (Debussy). 12. Berceuse (Boellmann). 13. Prés d'un ruisseau (Maurice). 1.50 p.m.—Exchange Quotations. 3.30 p.m.—Market Prices. Bourse. 3.45 p.m.—Concert. 1. Danse Macabre (Saint-Saens). 2. Violin Solos. 3. Le Sommeil du roi (Léhar). 4. Pianoforte Solos. 5. Chanson revée (Pesse). 6. "Cello Sonata (Grieg). 7. Suite Bergamasque (Debussy). 8.45 p.m.—Exchange Closing Prices. 8.0 p.m.—Agricultural Report, Market Prices, followed by News. 8.30 p.m.—Concert. 1. "La Vivandière"—Opera Comique Selection (Godard). 2. Rapsodie

bas que (Bord es). News during 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.—Orchestral Programme from the William Penn Hotel. 11.30 p.m.—Children's Programme, relayed from WJZ, New York. 12.0 midnight.—Time and Baseball Announcements. 12.30—3.0 a.m. (Sat.)—Programme relayed from WJZ, New York. 3.0 a.m.—"Automatic Agitators." 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 1.0 p.m. 7.30 p.m.—Talk and Finance Report. 8.15 p.m.—Programme from Warsaw. 10.0 p.m.—Time, News, Weather and Variety Item Selections. 10.50 p.m.—Dance Music Programme from the Wielkopolanka Café. 12.0 midnight (approx.)—Close Down.

PRAGUE (Czechoslovakia) Strasnice. WL 348.9 m. (860 kc); 5 kw. Transmits at intervals from 9.0 a.m. 5.20 p.m.—Czech-German Conversation. 5.30 p.m.—Talk for Workers. 6.0 p.m.—German Transmission. 7.0 p.m.—Programme from Brünn. 9.0 p.m.—Programme from Brünn. 10.0 p.m.—Time, News and Announcements. 10.20 p.m.—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.—Orchestral and Vocal Concert. 1. Prelude and Fugue with Chofale (Bacl). 2. Three Contredanses (B-ethoven). 3.

"La Favorita"—Soprano and Baritone Duet (Donizetti). 4. Toccata Op. 7 for pianoforte (Schumann). 5. Schéhérazade (Rimsky-Korsakoff). 6. "La Gioconda"—Duet (Ponchielli). 7. Talk, "Errors of Justice throughout the Ages—Tortures of the Middle Ages." 8. "La Belle Hélène,—Selection (Offenbach)." 9. Silenzio Cantatore (Lama). 10. Luntna mia (Nardella). 11. Songs and Imitations (Gelli). 12. Kisses—Foxtrot (Candiolo). 13. Nun è Carmela mia—Tenor Solo (Valente). 14. Tarantella Internazionale—Tenor solo (Tagliaferrri). 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 2 XAD on 21.96 m. (13,661 kc) from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News Items. 11.25 p.m.—Baseball Announcements. 11.30 p.m.—Orchestral Concert. 12.20 a.m. (Saturday).—Baseball Scores. 12.25 a.m.—Talk on "Health." 12.30 a.m.—The WGY Players. 1.0 a.m.—"Fro-Joy" Programme. 2.0 a.m.—"An Evening in Paris." 2.30 a.m.—"La France" Programme. 3.0 a.m.—Palmolive Hour Programme. 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 from 4.30 p.m. 6.15 p.m.—Concert of Turkish Music. 8.30 p.m.—Weather and Time. 8.40 p.m.—Concert. 1. "Poet and Peasant"—Overture (Suppé). 2. Selection from "The Huguenots" (Meyerbeer). 3. Valse triste (Nedbal). 4. Czardas (Grossmann).

STOCKHOLM (Sweden) Radiotjänst (SASA). WL 453.8 m. (661 kc); 1.5 kw. Relayed by Motala on 1380 m. (217 kc); Göteborg, 416 m. (271 kc); Malmö, 260.9 m. (1150 kc); and Sundsvall, 545.8 m. (550 kc). Transmits at intervals from 12.35 p.m. 6.30 p.m.—Children's Programme. 7.0 p.m.—Annual Meeting of the

Swedish Hunting Association—relayed from Örebro. 7.30 p.m.—Concert. 1. "The Magic Flute"—Overture (Mozart). 2. Symphony in C minor, No. 9 (Haydn). 3. Baritone Solos, (a) Aria from "Don Juan" (Mozart), (b) Aria from "Euryanthe" (Weber). 4. Romance in F major for Violin and Orchestra (Beethoven). 5. Baritone Solos, (a) Auf dem Kirchhofe (Brahms), (b) Immer leise wird mein Schlummer (Brahms). 6. Academic Festival Overture (Brahms). 9.0 p.m.—Talk on Agriculture. 9.15 p.m.—News and Weather. 9.40 p.m.—Talk, "Adventures on the Chinese rivers," by Capt. Sigurd Sternwall. 10.0 p.m. (approx.)—Close Down.

STUTT GART (Germany) Süddeutscher Rundfunk. WL 379.7 m. (790 kc); 4 kw. Transmits at intervals from 12.15 p.m. 6.0 p.m.—Time, Weather followed by Agricultural Report. 6.15 p.m.—Talk: "At the Sources of Symphony" by Dr. K. Grunsky. 6.45 p.m.—Wireless for All. 7.15 p.m.—Esperanto Lesson. 7.45 p.m.—Announcements for the coming week in Esperanto, Time and Weather Report. 8.15 p.m.—"Sturm über dem Pacific."—Play by O. Möhring. Followed by Military Concert, News and Sports Notes.

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. Selections from "I Pagliacci" (Leoncavallo). 2. Czardas—Violin Solo (Hubay). 3. Selection from "The Caliph of Baghdad" (Boieldieu). 4. Le canari (Poliakini). 5. Im Wienerwald (Joh. Strauss). 6. Larghetto for 'Cello (Handel). 7. Minuet for 'Cello (Dambé). 8. Entry of the Gladiators. 9. Ave Maria (Gounod). 9.30 p.m.—Concert of Opera and Opera-comique Melodies. 1. Airs from "Carmen" (Bizet). 2. Air from "Werther" (Massenet). 3. Song from "Le Châlet" (Adam). 4. Le cor (Flégier). 5. Song of the Toreador from "Carmen" (Bizet). 6. "Don Juan"—Seren-

ade in Italian (Puccini). 7. Alleluia—in Latin (Mozart). 8. Air from "The Tales of Hoffmann" (Offenbach). 9. Song from "Lakmé" (Delibes). 10. Aria from "Faust" (Gounod). 11. Air from "Sigurd" (Reyer). 10.15 p.m.—"North African Journal."

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); Klagenfurt, 272.7 m. (1,100 kc); and Linz, 254.2 m. (1,180 kc). Transmits at intervals from 10.30 a.m. 5.0 p.m.—Variety Programme. 5.35 p.m.—Programme for Children. 6.0 p.m.—Franz Keim Recital. 6.30 p.m.—"Tannhäuser"—Opera (Richard Wagner), relayed from the Vienna Opera House, followed by Concert of Light Music.

WARSAW (Poland) Polskie Radio. WL 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 10.15 a.m. 7.10 p.m.—Programme of Talks. 8.15 p.m.—Concert of Light Music from the "Dolina Szajcarska." 10.5 p.m.—News and Sports Notes. 10.30 p.m. (approx.)—Close Down.

WILNO (Poland) Polskie-Radio. WL 435 m. (680 kc); 0.5 kw. Transmits at intervals from 10.15 a.m. 6.15 p.m.—Light Open Air Concert. 7.5 p.m.—Programme for Children. 7.30 p.m.—Answers to Correspondents. 7.55 p.m.—News and Announcements. 8.15 p.m.—Programme from Warsaw. 10.30 p.m. (approx.)—Close Down.

ZURICH (Switzerland) Radio-Genossenschaft. WL 588.2 m. (510 kc); 1 kw. Transmits at intervals from 12.30 p.m. 4.0 p.m.—Concert by the Carletti Orchestra from the Carlton-Elite Hotel, Zurich. 5.20 p.m.—Gramophone Selections. 5.55 p.m.—Weather and Market Prices. 7.45 p.m.—Time and Weather. 7.47 p.m.—English Talk by F. Geschwind. 8.5 p.m.—Ten Minutes Esperanto. 8.15 p.m.—Concert for Swiss Abroad. 10.0 p.m.—Weather and News. 10.15 p.m. (approx.)—Close Down.



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PROGRAMMES FOR SATURDAY (June 30)

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. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Sextet Selections: 1. Per-fumes granadinos—March (Valls). 2. Selection from "La guardia amarilla" (Gimenez). 3. Gentillesse—Waltz—Serenade (Worsley). 4. Bolero (Giles). 5. Los faroles—Schottische (Guerrero). 6. Hungarian Czardas (Michiels). 8.30 p.m.—French Language Lesson. 9.0 p.m.—Exchange and News. 9.5 p.m.—Orchestral Selections: 1. "A Life for the Czar"—Overture (Gluka). 2. De matinet—Sardana (Lazar). 3. Selection from "La trampanca" (Gimenez). 4. Barcarolle (Mendelssohn). 5. Waltz Suite from "Eva" (Lehár). 10.0 p.m.—Chimes and Weather. 10.5 p.m.—Programme from Madrid (EAJ7).

BERGEN (Norway)

Kringkastingselskap. WL 369.9 m. (811 kc.); 1.5 kw. Transmits at intervals from 11.15 a.m. 8.0 p.m.—Concert. 1. "The Caliph of Bagdad"—Overture (Boieldieu). 2. Selection (Berger). 3. Women, Wine and Song (Strauss). 4. Wedding March (Werslander). 5. Selection from "The Little Dutch Girl" (Kalman). 6. Per Aspera ad Astra—March (Urbach). 9.0 p.m.—Talk, "The Upbringing of Boys," by Hans Sodal. 9.30 p.m.—Concertina Concert. 10.0 p.m.—Weather, News and Time. 10.15 p.m.—Dance Music Programme relayed 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 noon. 5.0 p.m.—Programme from Hamburg. 6.0 p.m.—Talk on Legal Problems. 6.30 p.m.—Spanish Lesson. 6.55 p.m.—Talk, "The Humour of Alice Behrends," by Dr. Simon. 7.20 p.m.—Talk "Walter Meckauer." 8.30 p.m.—Programme from Cologne. 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. 5.30 p.m.—Orchestral Concert. 6.45 p.m.—Talk, "Golf," by H. Samik. 7.10 p.m.—Talk, "Thought is Power." 7.35 p.m.—Talk, "The Life of Arthur Schopenhauer," by Dr. Max Apel. 8.0 p.m.—Talk, "Night Flights." 8.30 p.m.—Programme relayed from the Press Exhibition, Cologne, followed by News and Weather. 10.30 p.m.—Concert. 1. (a) Prosit! Ex!—Fox-trot (Rode). (b) Im fröhlichen Zecherkreise. 2. Songs to the Lute: (a) Ich weiss mir ein Liedlein hübsch und fein, (b) Im Krug zum grünen Kranze. 3. (a) Wenn man beim Wein sitzt (Abt), (b) Think' und schlies' die Augen zu (Erwin). 4. Songs to the Lute: (a) Bringt mir Blut der edlen Reben, (b) Wenn sich in der Rebe rührt, (c) Wer niemals einen Rausch gehabt. 5. Wine, Women and Song—Waltz (Joh. Strauss). 6. Songs to the Lute: (a) Keinen Tropfen im Becher mehr, (b) Grad' aus dem Wirtshaus—Folk Song of 1840.

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.—Concert of Choral, Tenor, Soprano and Baritone Music, Instrumental Quartet Selections, Readings and Talk. 10.0 p.m.—News and Weather. 10.15 p.m.—The Kursaal Orchestra. 10.35 p.m.—Dance Music Programme 12.0 midnight (approx.)—Close Down

BRESLAU (Germany)

Schlesische Funkstunde. WL 322.9 m. (929 kc.); 4 kw. Relayd by Gleiwitz, on 329.7 m. (910 kc). Transmits at intervals from 11.15 a.m. 6.15 p.m.—Lesson in Esperanto. 6.30 p.m.—See Königswusterhausen.

7.25 p.m.—Advanced English Lesson. 7.50 p.m.—Talk, "Germany and the other Nations," by Willy Koch. 8.30 p.m.—Variety Concert. 1. Orchestra—Hoch Heidecksburg—March (Herzer). 2. Entertainer. 3. Baritone Solos (Brull). 4. Orchestra—Kaiser Waltz (Strauss). 5. Entertainer. 6. Baritone Solos—Selections from "The Marriage of Figaro" (Mozart). 7. (a) Waldes-lauschen—Waltz (Walter), (b) Two Selections (Porschmann): (a) Die Flugpost—Galop, (b) Libelle—Valse caprice. 8. Entertainer. 9. Baritone Solos: (a) Die Wald-schenke (Simon), (b) Zwei Auglein braun (Gumpert), (c) Moderne Liebesgeschichten (Mokkaneis), (d) Wanderlied (Schumann). 10. Germanentreu—March (Blankenburg). 10.0 p.m.—News and Announcements 10.30 p.m.—Programme from Voxhaus. 12.0 midnight (approx.)—Close Down.

BRÜNN (Czecho-Slovakia)

Komarov. WL 441.2 m. (689 kc); 2.4 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—German Transmission. 6.25 p.m.—Programme of Talks. 7.0 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. Hérodiate (Massenet). 2. Entrée de la Reine—Pianoforte Solo (Widor). 3. Les noces de Jeannette (Masse). 4. La plainte et le passépied—Violin Solo (Rameau). 5. Madrigal (Silesu). 6. If your face (Barclay). 7. Rhythm Step (Fred and Mancel). 7.30 p.m.—"Le Radio-Chronique." 8.15 p.m.—Orchestral Concert. 1. Marche zingare (Guiraud). 2. Galantry (Ketelby). 3. Les noces de la rose (Jessel). 4. Demande et réponse (Coleridge Taylor). 5. Deuxième Valse (Godart). 6. Nocturne for Flute (Doppler). 7. Selection from "Cavalleria Rusticana" (Mascagni). 8.50 p.m.—Topical Events Talk. 9.0 p.m.—Concert. Relayd from the Kursaal, Ostend. News. 10.30 p.m. (approx.)—Close Down.

BUDAPEST (Hungary)

Magyar Telephon Hirmonde es Radio R.T. WL 557.1 m. (538 kc); 25 kw. Transmits at intervals from 12.5 p.m. 5.0 p.m.—Pianoforte Recital—Hungarian Songs. 6.0 p.m.—Reading and Letter Box. 7.30 p.m.—Variety Concert. 8.45 p.m.—Orchestral Concert. 10.20 p.m.—Time, News, and Tzi-geuner Music, relayed from the Café Emke.

COLOGNE (Germany)

Westdeutscher Rundfunk. WL 283.2 m. (1050 kc); 4 kw. 1.5 p.m.—See Langenberg Station. 2.40 p.m.—Haspe Fair. Relayd from the Town of Haspe. 3.40 p.m.—Talk on "Wireless." 4.0 p.m.—"A Theatre Talk"—Reading. 4.30 p.m.—See Königswusterhausen. 5.0 p.m.—Psychology Talk for Women 5.30 p.m.—See Langenberg Station. 6.0 p.m.—Mozart Concert: 1. "Il re Pastore"—Overture. 2. Concerto for Pianoforte and Orchestra in A Major. 3. Aria from "Idomeneus." 4. Divertissement in D Major for Strings and Horn. 7.20 p.m.—Talk given for Workers. 7.45 p.m.—See Langenberg Station. 8.15 p.m.—"With Willy Ostermann." Programme relayed from the Pleasure Park and Music Pavilion, followed by News, Sports Notes, Music, and Dance Music Programme. 1.0 a.m. (Sunday, approx.)—Close Down.

COPENHAGEN (Denmark)

Copenhagen Radio. WL 337.4 m. (880 kc); 1 kw. Relayd by Kalundborg, on 1,153.8 m. (260 kc). Transmits at intervals from 7.30 a.m. 6.50 p.m.—Weather Report. 7.0 p.m.—News; Exchange; Time. 7.20 p.m.—Programme Announcements. 7.30 p.m.—Talk, "Cholera in Denmark in 1853," by Captain O. Smith. 8.0 p.m.—Old-time Dance Music.

9.15 p.m.—Cabaret Show Concert. 10.45 p.m.—Dance Music Programme 12.0 midnight.—Chimes and 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 Music. 7.20 p.m.—Programme from Dublin

CRACOW (Poland)

Polskie-Radio. WL 567 m. (529 kc.); 1.5 kw. Transmits at intervals from 12.0 noon. 7.5 p.m.—Agricultural Report followed by Variety Item Programme. 7.35 p.m.—Talk on Foreign Politics. 8.0 p.m.—Fanfare from Notre Dame. 8.15 p.m.—Programme from Warsaw. 10.30 p.m.—Relay from a Restaurant. 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. 7.20 p.m.—News, followed by Reading from Goldsmith, by F. Fay. 7.45 p.m.—Talk in Irish. 8.0 p.m.—Joseph Schofield (Cello) and Mary Maguire (Mezzo-Soprano). 8.30 p.m.—"The Ghost of Canterbury Tunnell," Sketch by J. J. Henry. 9.0 p.m.—"Rigoletto"—Opera (Verdi). 10.30 p.m.—News and Close Down.

FRANKFURT-am-MAIN (Germany)

Stüdwestdeutscher Rundfunk. WL 429 m. (600 kc); 4 kw. Relayd by Cassel on 252.1 m. (1,190 kc). Transmits at intervals from 1.0 p.m. 6.15 p.m.—Wireless Announcements. 6.30 p.m.—Wireless Correspondence. 7.0 p.m.—Talk, "The 150th Anniversary of the death of Jean Jacques Rousseau." 7.30 p.m.—Two Operas (Kurt Weill): (a) "Der Protagonist," (b) "Der Zar lässt sich fotografieren," followed by Programme from Voxhaus.

HAMBURG (Germany)

Norag (ha, in Morse). WL 396 m. (757 kc); 4 kw. Relayd by Bremen, on 272.7 m. (1,100 kc); Hanover, 297.9 m. (1,007 kc); and Kiel, 256 m. (1,176 kc). Transmits at intervals from 5.45 a.m. 5.0 p.m.—Herder's Folk Songs, in old and new settings, sung by Käthe Borchling, with introductory words by Prof. C. Borchling. 1. Das Lied von Herrn v. Falkenstein (abbreviated). 2. Ich hort ein Sichelein rauschen. 3. Dursil und Babeli. 4. Lithuanian Songs: (a) A Maiden's Farewell Song: (b) The Morning Walk. 5. (a) Fabelled, (b) The Nutbrown Maid (Löwe). 6. Wenn ich ein Vöglein wär (Schumann). 7. (a) Weg der Liebe, (b) Vom verwundeten Kudben, (c) Murray's Assination (Brahms). 8. Bettlerlied (Mendelssohn). 6.0 p.m. (Hamburg and Kiel). —Norag Variety Programme. 6.55 p.m.—Talk, "Famous Masters of Handicraft," by Ludwig Bielert. 7.35 p.m.—Legal Letter Box. Weather. 8.0 p.m.—A Waltz Programme. 10.15 p.m. (approx.)—Weather, News and Sports Notes. 10.30 p.m. (Hamburg and Kiel).—Cabaret Concert Programme.

HILVERSUM (Holland)

Algemeene Vereeniging Radio-Omroep. WL 1069 m. (280 kc); 5 kw. 11.40 a.m.—Police Information. 12.10 p.m.—Concert of Trio Music. 1.40 p.m.—Concert from the Tuschinsky Theatre, Amsterdam: 1. "Der Opernball"—Overture (Heuberger). 2. Dream Waltz (Müllöcker). 3. Minuet and Barcarolle from "The Tales of Hoffman" (Offenbach). 4. Selection from "Les Cloches de Corneville" (Planquette). 5. Glow-worm Idyll from "Lysistrata" (Lincke). 6. Totem Tom Tom (Friml). 7. Lehariana (Geiger). 8. Selection from "The Dollar Princess" (Leo Fall). 9. Waltz from "Der Zigeunerprimas" (Kalman). 10. From Heidelberg to Barcelona (Borchert). 7.25 p.m.—Police Information. 7.40 p.m.—Programme arranged by The Workers' Radio Society. 10.10 p.m.—Concert from the Royal Picture House, Amsterdam. 11.15 p.m. (approx.)—Close Down.

HUIZEN (Holland)

WL 341.6 m. (878 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 by the "Trio Winkels." Relayd from Amsterdam. 6.10 p.m.—Evening Concert. 7.40 p.m.—Dutch Language Lesson. 8.10 p.m.—Talk on Gardening. 8.40 p.m.—Talk by M. Bongaerts. 9.10 p.m.—Vocal and Instrumental Concert and Talks from Bois-le-Duc

JUAN-LES-PINS (France)

Radio L. L. WL 230 m. (1,304 kc); 0.25 kw. Transmits at intervals from 1.0 p.m. 9.0 p.m.—News, and Concert. 10.0 p.m.—Dance Music Programme. 10.30 p.m. (approx.)—Close Down.

KÖNIGSBERG (Germany)

Ostmarken Rundfunk. WL 303.6 m. (960 kc); 4 kw. Relayd by Danzig, on 272.7 m. (1,100 kc). Transmits at intervals from 9.0 a.m. 6.30 p.m.—Talk on "Thinking." 6.55 p.m.—Programme Announcements given in Esperanto. 7.0 p.m.—Topical Events Talk. 7.30 p.m.—Talk on "Dance and Costume in East Prussia." 8.10 p.m.—Light Variety Programme. 10.10 p.m. (approx.)—Weather and News and Sports Notes, followed by Orchestral Concert. 1. "Bandit-trenschreie"—Overture (Suppé). 2. Der letzte Tropfen—Waltz (Kratski). 3. Was gibst' denn Neuet-pourri (Drescher). 4. Melanie—Gavotte (Lincke). 5. "Der Wildschütz"—Selection (Lortzing). 6. Rheinlandklänge-pot-pourri (Frantchen). 7. (a) Necketföfchen and (b) Im Dämmer-schein (Weide). 8. "The Getsha"—Selection (Jones). 9. Wiener Bürger (Ziehrer). 10. Tango-Fantasia (Rust). 11. River Song—Symphonic Foxtrot (Rust).

KOVNO (Lithuania)

Radio-Kaunas. WL 2,000 m. (150 kc); 15 kw. 7.0 p.m.—Gramophone Selections. 9.0 p.m.—Wind-Instrument Concert.

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. 5.57 p.m.—Time, Weather and News. 6.15 p.m.—Concert of Popular Music. 7.0 p.m.—Accordion and Vocal Music. 7.30 p.m.—Orchestral Concert. 1. Military March. 2. Finnish Melodies (Jäger). 3. Chanson finnoise (arr. Ekman). 4. Sommernatt—Waltz (Merikanto). 5. Finnish Dances (arr. Kauppi). 6. Chansons (Simila). 7. Songs (Dahlman). 8. Gesang der Athenen (Sibelius). 8.45 p.m.—News given in Finnish and Swedish, followed by Programme 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, 283.2 m. (1,059 kc); and Münster, 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. 1.5 p.m.—Concert from Düsseldorf. 2.40 p.m.—Relay of Haspe Fair. 3.40 p.m.—Programme from Cologne. 4.30 p.m.—See Königswusterhausen. 5.0 p.m.—Programme from Cologne. 5.30 p.m.—English Language Lesson. Relayd from Münster. 6.0 p.m.—Programme from Cologne. 7.45 p.m.—Reading from Münster. 8.15 p.m.—1.0 a.m. (Sunday).—Programme relayed from Cologne.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. WL 366 m. (818 kc); 4 kw. Relayd by Dresden on 275.2 m. (1,090 kc). Transmits at intervals from 10.0 a.m. 4.30 p.m.—Orchestral Concert. 6.0 p.m.—See Königswusterhausen. 6.30 p.m.—Wireless Announcements. 6.45 p.m.—Talk on Legal Problems. 7.30 p.m.—Talk, "Animal Life in the Sea," by Dr. Richard Wolterreck. 8.0 p.m.—Weather and Time. 8.15 p.m.—Musical Request Programme. 10.0 p.m.—News and Sports Notes. 10.15 p.m.—Cabaret Show Concert.

LILLE (France)

PIT. WL 267 m. (1,122 kc); 0.5 kw. 12.30 p.m.—Concert. 1. "Joseph"—Overture (Méhul). 2. Violette (Waldeufel). 3. "Le Caid" (Thomas). 4. Appassionato (Four-drain). 5. Candango d'Ainko (Razigade). 6. Le Petit Choc (Suzle). 1.35 p.m.—Agricultural Report and Shipping Forecast. 3.0 p.m.—Talk "Digestive Hygiene." 7.0 p.m.—Market Quotations. 7.10 p.m.—Orchestral Concert. 8.15 p.m.—Talk, organised by the Radio Club de Lille. 8.45 p.m.—Dramatic Programme, followed by News.

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. "La tuna de Alcalá"—Selection (Rivas and Redondo). 2. "Toreador"—Selection (Adam). 3. La tadjadera—Selection (Barrera). Interlude by Luis Medina. 9.45 p.m.—Market Prices. News. Programme relayed by San Sebastian, 335 m. (895 kc), and Barcelona (EAJ1), 344.8 m. (870 kc). 10.10 p.m.—Symphony Concert. 1. "Der Freischütz"—Overture (Weber). 2. Pastoral (Honegger). 3. Ce qu'on entend dans le montagne (Liszt). 4. Pastoral Symphony (Beethoven). 5. L'Après-midi d'un faune (Debussy). 6. Forest Murnurs from "Siegfried" (Wagner). 7. "Fire Incantation," from "The Valkyrie" (Wagner). 11.50 p.m.—News. Dance Music. 12.30 a.m. (Sunday).—Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. WL 549.3 m. (546 kc); 7 kw. Transmits at intervals from 12.15 p.m. 7.47 p.m.—French Language Lesson. 8.35 p.m.—Time, followed by Talk on Verdi, with Pianoforte Music. 8.45 p.m.—Variety Concert. 1. (a) "Libussa"—Overture (Smetana); (b) Second Suite (Massenet). 2. (a) "La Gioconda"—Aria (Ponchielli), (b) Song (Tosti). 3. Selections (Bossi). (a) Ave Maria, (b) Pace Vespertina. 4. Trio Selections. 5. Reading. 6. (a) "Strange Harmony" from "La Tosca" (Puccini). (b) "Rigoletto"—Tenor Solo (Verdi). 7. (a) "Addio" (Parelli), (b) Finestra su corte (Bettinelli). 8. "Mephistopheles"—Tenor Solo (Boito). 9. "Luisa Miller"—Symphony (Verdi). 10.55 p.m.—News, followed by Dance Music. Relayd from the Restaurant Cova, Milan. 11.30 p.m. (approx.)—Close Down.

MUNICH (Germany)

Deutsche Stunde in Bayern. WL 536 m. (559 kc); 4 kw. Relayd by Augsburg in 566 m. (530 kc.); Kaiserlautern on 204.1 m. (1,470 kc.); and Nürnberg on 241.9 m. (1,240 kc). Transmits at intervals from 2.30 p.m. 6.15 p.m.—Labour Exchange Report. 6.30 p.m.—Talk, "Loud Speakers." 7.0 p.m.—Notes on Wireless. 7.30 p.m.—Talk, "The Reminiscences of a German Colonial Officer." 8.0 p.m.—Recital of Songs, followed by News and Dance Music from the Hotel Reichsadler.

NAPLES (Italy)

Unione Radiofonica Italiana (INA). WL 333.3 m. (900 kc); 1.5 kw. Transmits at intervals from 2.0 p.m. 8.40 p.m.—Time and Harbour Notes. 8.50 p.m.—Neapolitan Programme. 1. Selections of Music and Songs, Act 2 of "Il Capitano Fracassa" (Costa). "Signorine"—Comedy (Murolo), and Neapolitan Songs. 10.55 p.m.—Calendar and Announcements. 11.0 p.m. (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. WL 411.5 m. (650 kc); 1.5 kw. Relayd by Hamar on 555.8 m. (540 kc); Fredrikstad, 435 m. (680 kc); Pöbgrund, 500 m. (600 kc); Notodden, 412 m. (728 kc); and Rjukan, 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 Time. 8.0 p.m.—Concert. 1. Wedding March (Södermann). 2. Selection from "Polenblut" (Nedbal). 3. Selection from "Shepherd and Shep-

Programmes for Saturday.—(Cont.)

herdess" (Rubinstein). 4. Poem (Drdla). 5. Stephanie Gavotte (Czibulka). 6. Hesperusklänge (Gung'l). 7. Corona (Barnau).
 9.0 p.m.—Cabaret Concert Programme
 10.0 p.m.—Weather and News.
 10.15 p.m.—Talk on Topical Events, 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. (113 kc). "Le Journal Parlé."
 8.45 p.m.—Weather Forecast.
 8.10 p.m.—Weather Forecast.
 8.30 p.m.—Concert. 1. Prelude and Fugue (Bach). 2. Songs: (a) Le papillon, (b) En bateau, (c) Illusion (Challine). 3. Works of Mlle. Fontbelle. 4. Pianoforte Solo, "The Moonlight Sonata" (Beethoven). At 8.56 p.m.: Time Signal on 32.5 m. (9,231 kc).
 9.30 p.m.—Educational Programme. Talks on "Sociology," "L'Abbe Lemire," "The Origin of Religions."
 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 Records, Selections, Talk and News.
 9.0 p.m.—Concert. 1. "L'Ouragan" (Prelude (Bruneau)). 2. Peer Gynt—First Suite (Grieg). 3. "Don Juan" Overture (Mozart). 4. Rondo from the Concerto in C minor, for Pianoforte and Orchestra (Beethoven). 5. Selections from "Orpheus in the Underworld" (Offenbach). 6. Gaiety (Schmitt). 7. March of the Highlanders (Goddard). News during the intervals.

PARIS (France)

Radio-Paris (CFR). WL. 1765 m. (170 kc); 3 kw.
 Transmits at intervals from 7.30 a.m.
 12.30 p.m.—Concert of Gramophone Music.
 1.50 p.m.—Exchange Quotations.
 3.45 p.m.—Les Rosati Concert. News.
 7.30 p.m.—Lesson in Pianoforte.

8.0 p.m.—Agricultural Report, followed by Talk on "The Prevention of Diphtheria." Market Prices.
 8.30 p.m.—Concert: 1. Le Fiancé de Margot (Planquette). 2. La Femme (Dancour). 3. Melodies. 4. Accordion Selections. 5. Breton Songs. 6. Symphony Selections. News during 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.—Orchestral Programme 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 Library Gems.
 1.0 a.m.—United States Navy Band Concert from WJZ, New York.
 2.0 a.m.—Mediterranean Dance Band.
 4.0 a.m. (approx.).—Weather, Time, 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.
 7.15 p.m.—French Language Lesson.
 7.35 p.m.—Talk and Finance Notes.
 8.30 p.m.—Evening Concert.
 10.0 p.m.—Time, News, Weather and Variety Item Selections.
 10.50 p.m.—Dance Music Programme from the Carlton Restaurant.
 12.0 midnight.—Maison Philips Concert.
 2.0 a.m. (Sun., approx.).—Close Down.

PRAGUE (Czechoslovakia)

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.—Talk for Workers.
 7.0 p.m.—"The Marriage of Figaro"—Opera (Mozart), from the National Theatre.
 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.—German Language Lesson.
 8.58 p.m.—Time, News, Exchange.
 9.15 p.m.—"Le Villi"—Opera (Puccini). In the Interval, Art and Literature 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) from 11.25 p.m.
 Transmits at intervals from 11.45 a.m.
 11.25 p.m.—Baseball Announcements.
 11.30 p.m.—Orchestral Concert.
 12.30 a.m. (Sunday).—"Statler's Pennsylvanians," from New York.
 1.0 a.m.—"Bonnie Laddies."
 1.30 a.m.—Goldman Band Concert.
 3.15 a.m.—Organ Recital (Rochester).
 4.0 a.m.—Dance Music from the Hotel de Witt Clinton, Albany.
 5.0 a.m. (approx.).—Close Down.

STAMBOUL (Turkey)

Radio Stamboul. Societe Anonyme Turque de Telephonie sans fil. WL. 1,180 m. (254 kc); 5 kw.
 Transmits at intervals from 4.30 p.m.
 6.15 p.m.—Concert of Turkish Music.
 8.30 p.m.—Weather and Time.
 8.40 p.m.—Concert. 1. Symphony No. 4 (Schubert). 2. Song. 3. Good Friday Spell from "Parsifal" (Wagner).
 10.0 p.m.—News and Close Down.

STOCKHOLM (Sweden)

Radiojäst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Relayed by Motiala, on 1,380 m. (217 kc); Göteborg, 416 m. (271 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.8 m. (550 kc).
 Transmits at intervals from 12.35 p.m.
 5.30 p.m.—The Station Orchestra.
 6.30 p.m.—Children's Programme.
 7.0 p.m.—"The Last Masquerade"—Play (Schnitzler).
 7.45 p.m.—Talk, "The Railway Porter."
 8.0 p.m.—"A Bunch of Summer Flowers"—a Cabaret Posy by Jean Ernst. Music by Rolf Degermann: 1. Selection for Two Pianofortes. 2. Congratulations. 3. The Sailor Girl. 4. One Should

Choose a Happy Medium. 5. Imitations by Herr Eriksson. 6. I Am the Same To-day. 7. The Cat and the Parrot. 8. My Little Midsummer Lass. 9. Is it all Over? 10. White and Black. 11. Seaman's Waltz. 12. Telegram Waltz. 13. Variations on "Are you Cross with Me?" 14. Are You Thinking of Me? 15. Finale.
 9.45 p.m.—Topical Events Talk.
 10.0 p.m.—Old Dance Music.
 10.45 p.m.—Dance Music Programme from the Restaurant Sphinx.
 11.30 p.m.—Rolf's Dance Orchestra.
 1 a.m. (Sun. 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.
 6.15 p.m.—Talk, "How Can We Help Our Country Women?" from Freiburg, 574.7 m. (522 kc).
 6.45 p.m.—Talk on Legal Subject.
 7.15 p.m.—Talk, "The Fiftieth Birthday of Alice Behrend."
 7.45 p.m.—Report of the South-West German Labour Centre. Time, Weather and Sports Notes.
 8.15 p.m.—"The Hunt for Happiness"—A Journey round the World in Twelve Transmissions—Berlin. Followed by Swabian Programme. 1. Swabian Folksongs. 2. Selection from "Schwäbische Dorfpredigta" (Dreizler). 3. Swabian Folksongs. 4. From "Rekrutenleben" (Breitling). 5. (a) Folksong, (b) Kennt ihr das Land? (Kromer), (c) Ein Liebestern und sein Mädle (Wallbach), (d) Am Brünnele im Walde (Kromer). 6. From "Rekrutenleben" (Breitling). 7. Swabian Marches. 8. (a) Grüss di Gott, mei Lieber Schatz! (Wengert), (b) So muass mei Schätzle sei (Nagel), (c) Muss i denn zum Städtele naus (Silcher). 9. D'r schwäbische Bauer er d'r Oper "Do Schua" (Weitzmann). 10. Swabian Dances. News, followed by Dance Music from Café-Restaurant Wilhelmsbau.

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. Petit Minuet

(Paderzewski). 2. Serenade (Moszkowsky). 3. Geschichten aus dem Wienerwald (Strauss). 4. Sur la route de Vienne. 5. Selection from "The Bird Fancier" (Zeller).
 9.0 p.m.—Vocal and Choral Concert.
 10.15 p.m.—"North African Journal."

VIENNA (Austria)

Radio-Wien. WL. 577 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Relayed by Innsbrück on 294.1 m. (1,020 kc); Klagenfurt, 272.7 m. (1,100 kc); and Linz, 254.2 m. (1,180 kc).
 Transmits at intervals from 11.0 a.m.
 7.5 p.m.—Chamber Music Concert. 1. String Quartet in B flat major. Op. 130 (Beethoven). 2. Old English Arias and Songs.
 8.15 p.m.—"Das Fürstkind"—Operetta (Lehár). Followed by Dance Music Programme.

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.
 8.35 p.m.—"Le Radio-Chronique."
 8.15 p.m.—Concert of Popular Music. Relayed from the "Dolina Szwajcarska." In the interval: News given in the French Language.
 10.0 p.m.—Time, Weather and News.
 10.30 p.m.—Dance Music Programme. Relayed from the "Oaza" Restaurant.
 11.30 p.m. (approx.).—Close Down.

WILNO (Poland)

Polskie-Radio. WL. 435 m. (680 kc); 0.5 kw.
 Transmits at intervals from 12 noon.
 6.15 p.m.—Programme for Women.
 6.40 p.m.—Literary Talk, "The Works of the Novelist, Elise Orzeskova."
 7.35 p.m.—Programme from Warsaw.
 11.30 p.m. (approx.).—Close Down.

ZURICH (Switzerland)

Radio-Genossenschaft. WL. 588.2 m. (510 kc); 1 kw.
 Transmits at intervals from 12.30 p.m.
 8.15 p.m.—Variety Concert.
 10.0 p.m.—Weather and News.
 10.10 p.m.—Dance Music (Gramophone).

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STATIONS IN ORDER OF WAVELENGTHS AND FREQUENCIES.

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

EUROPEAN

M.	Kc.	Station
4000	75	Berlin (Königswusterhausen) AFP, 8 kw.
2900	103	Berlin (Wolff's Bureau). Intermittent News during the day.
2650	113	Paris (Eiffel Tower), FL, 5 kw.
2525	119	Berlin (Wolff's Bureau). Intermittent News during the day.
2000	150	Kovno (Lithuania), 15 kw.
1950	154	Scheveningen Haven (Holland), 2.5 kw.
1870	160	Huizen (from 5.40 p.m. till closing down).
1870	160	Kosice (Czechoslovakia) 2.5 kw. DAILY—7.30—10.0 p.m.
1629	164	Norddeich (Germany). WEEKDAYS—11.0 p.m. Weather Report.
1800	167	Angora (Turkey), 6 kw.
1765	170	Paris (Radio-Paris) CFR, 3 kw. (Aer.)
1680	177	Kharkov Narkomposhtel (Russia), 1.5 kw.
1604.8	187	Daventry (5XX), 25 kw. (Aer.)
1522.8	197	Lahti (Finland), 25 kw.
1450	207	Moscow (Old Komintern), RAI, 20 kw. DAILY—3.0 p.m.
1380	217	Motala (Sweden), 20 kw. (Aer.) Relays Stockholm.
1250	240	Königswusterhausen (Zeeseen), 35 kw. in Aerial
1190	252	Boden (Sweden), 2 kw.
1180	254	Stamboul (Turkey), 5 kw.
1153.8	260	Kalundborg (Denmark), 7.5 kw. (Aer.)
1150	261	Ryvang (Denmark), 1 kw.
1117	269	Novosibirsk (Russia), RA 33, 4 kw. 6.0 p.m.
1111.1	270	Warsaw (Poland), 10 kw. (Aer.)
1100	273	De Bilt (Holland). WEEKDAYS—9.15 p.m. Weather.
1074	280	Hilversum (Holland) ANRO, 5 kw. (Aer.)
1000	300	Basle (Switzerland), 0.25 kw. SUNDAYS—7.30 p.m.; WEEKDAYS, 8 p.m.
995.5	301	Leningrad (Russia), 10 kw. WEEKDAYS—8.0 p.m., Lecture: 7.0 p.m.; News: 7.30 p.m., Concert or Opera. SUNDAY—6.0 p.m., Lecture, 7.0 p.m., News. 7.30 p.m., Concert.
870	345	Tiflis (Russia), 4 kw.
860	349	Nijni Novgorod (Russia), 1.2 kw.
850	353	Rostov/Don (Russia), 4 kw. 4.10 p.m.
820	366	Kiev (Russia), 1 kw.
760	398	Geneva (Radio-Genève), 0.5 kw. WEEKDAYS—8.40 p.m., Concert and News.
720	411	Östersund (Sweden), 2 kw. Relays Sundsvall.
680	446	Lausanne (Switzerland), HB2, 1.5 kw. DAILY—9.0 p.m., Concert. Talk.
675	424	Moscow (Popoff).
588.2	510	Zürich (Switzerland), 1 kw.
577	520	Vienna (Stubenring) (Austria), 0.75 kw.
574.7	522	Freiburg (Germany), 0.75 kw.
567	529	Cracow (Poland), 1.5 kw.
566	530	Augsburg (Germany), 1.5 kw. Relays Munich.
566	530	Bloemendaal (Holland), 0.05 kw. SUNDAYS—10.40 a.m. and 5.40 p.m., Church Service.
566	530	St. Michel (Finland).
557.1	538	Budapest (Hungary), 25 kw.
555.8	540	Hamar (Norway), 0.7 kw. Relays Oslo.
549.3	546	Milan, 7 kw.
545.8	550	Sundsvall (Sweden), 1 kw.
538	559	Munich (Germany), 4 kw.
526	570	Riga (Latvia), 2 kw. DAILY—11.35 a.m.—12.0 noon and 6.0—9.30 p.m., Concert, News, Weather.
517.2	580	Vienna, 5 kw.
512	585	Alesund (Norway).
508.5	590	Brussels, 1.5 kw.
504	595	Tromsø (Norway).
500	600	Aberdeen (2BD), 1.5 kw.
500	600	Uppsala (Sweden), 0.25 kw. Relays Stockholm.
500	600	Linköping (Sweden), 0.25 kw. Relays Stockholm.
500	600	Porsgründ (Norway), 1 kw. Relays Oslo.
491.8	610	Daventry Experimental (5GB), 25 kw. in Aerial.
487	616	Kharkov (Russia), 4 kw.
484.6	619	Berlin (Witzleben), 4 kw.
477.7	626	Lyons (France) (La Doua), PTT, 1 kw. MON., WED., & FRI.—9.45 p.m., Concert. SUN., TUES., THURS., & SAT.—Relays Ecole Supérieure.
470.9	637	Langenberg (Germany), 25 kw.
462	649	Barcelona (Spain) (Radio Catalana), EAJ13, 1 kw.
461.5	650	Oslo (Norway), 1.5 kw.
460	652	Belgrade (Yugo-Slavia), 2 kw. (Testing each SUNDAY at 1.0 p.m.)
453.8	661	Stockholm (Sweden), 1.5 kw.
450	666	Rome (IRO) (Italy), 3 kw.
450	666	Moscow (Trades Union), RA2, 4 kw. 4.0 a.m.—9.0 p.m.
448	670	Rjukan (Norway), 0.1 kw. Relays Oslo.
447	671	Paris (Ecole Supérieure), FPIT, 0.5 kw.
446	672	Malmberget. Relays Boden.
441.2	680	Brünn (Czechoslovakia), 2.4 kw. DAILY—7.0 p.m., Concert and News. TUES. & THURS.—3 p.m. Talk for Women. SUN. 9 a.m. Religious Music.—11.0 a.m., Concert.
435	689	Wilno (Poland), 0.5 kw.
435	689	Fredrikstad (Norway), 0.7 kw. Relays Oslo.
434.8	690	Seville (Spain) (Union Radio), EAJ5, 2 kw.
429	699	Frankfurt-on-Main (Germany), 4 kw.
422	710	Kattowitz (Poland), 12 kw.
416	721	Göteborg (Sweden), 1 kw.
415	722	Grenoble (France), 1 kw. WED. and SAT. only.
412	728	Notodden (Norway), 0.7 kw. Relays Oslo.
411	730	Berne (Switzerland), 1.5 kw.
408	735	Tallinn (Reval), Estonia, 2.2 kw.
405.4	740	Glasgow (5SC), 1.5 kw.
405	741	Salamanca (Spain), EAJ22, 1 kw. DAILY—10.30 p.m., Concert. 11.30 p.m., Dance Music.
401	748	Aix-la-Chapelle (Germany), 0.75 kw.
400	750	Cadiz (Spain), EAJ3, 0.5 kw.
400	750	Mont de Marsan (France), 4 kw.
400	780	Madrid (Radio España) (EAJ2), 0.5 kw.
400	780	Cork (Irish Free State), 6CK, 1.5 kw.
400	780	Plymouth (5PY), 0.2 kw.
398	787	Hamburg (Germany), 4 kw.
390	769	Tammerfors (Finland). Relays Helsingfors, 1.5 kw.
389.6	770	Toulouse (France) (Rad. du Midi), 3 kw. DAILY—1.40 p.m., Concert. 9.50 p.m., Concert.
384.6	780	Manchester (2ZY), 1.5 kw.
379.7	790	Stuttgart (Germany), 4 kw.
375.9	798	Helsingfors (Finland), 1.2 kw. 9.0 a.m., Exchange Quotations. DAILY—5.0—8.0 p.m., Concert.
374	802	Madrid (Union Radio) EAJ7, 1.5 kw.

M.	Kc.	Station
370	811	Paris (Radio LL), 0.5 kw. MONDAY, WEDNESDAY and FRIDAY—10.0 p.m., Concert.
369.9	811	Bergen (Norway), 1.5 kw.
368	818	Leipzig (Germany), 4 kw.
361.4	830	London (2LO), 3 kw.
357	840	Falun (Sweden), 2 kw.
355	845	Graz (Austria), 0.5 kw. Usually relays Vienna.
353	850	Cardiff (5WA), 1.5 kw.
348.9	860	Prague (Czechoslovakia), 5 kw. DAILY—8.0 p.m., Concert.
344.8	870	Barcelona (Spain) Radio Barcelona, EAJ1, 1.5 kw.
343	874	Posen (Poland), 1.5 kw.
341.6	878	Huizen (Holland), 4 kw. (till 5.40 p.m.)
340.9	880	Paris (Petit Parisien), 0.5 kw.
337.4	889	Copenhagen, 1 kw.
335	895	San Sebastian (Spain), EAJ8, 0.5 kw.
335	895	Cartagena EAJ16 (Spain), 1 kw.
333.3	900	Reykjavik (Iceland), 1 kw.
333.3	900	Naples (INA), 1.5 kw.
329.7	910	Gleiwitz (Germany), 10 kw. Relays Breslau.
327	918	Almeria (Spain) EAJ18, 1 kw.
326.1	920	Bournemouth (6BM), 1.5 kw.
322.9	929	Breslau (Germany), 4 kw.
319.1	940	Dublin (2RN), 1.5 kw.
315.7	947	Marseilles (PTT), 0.5 kw. WEEKDAYS—9.0 p.m., Concert.
312.5	960	Newcastle (5NO), 1.5 kw.
309	970	Zagreb (Yugoslavia), 0.35 kw. DAILY—7.0 p.m.
309	970	Oviedo (Spain), 0.1 kw.
306.1	980	Belfast (2 BE), 1.5 kw.
304	986	Björneborg (Finland). Relays Helsingfors.
303.6	988	Königsberg (Germany), 4 kw. DAILY—8.10 p.m., Concert.
302	993	Paris (Radio Vitus), 1 kw. WEDNESDAYS, FRIDAYS, and SUNDAYS. From 9.0 p.m.—10.45 a.m., Concert.
300	1000	Bratislava (Czechoslovakia), 0.5 kw.
297.9	1007	Hanover (Germany), 0.7 kw. Relays Hamburg.
297	1010	Agen (France), 0.25 kw. TUES. and FRI.—10.30 p.m., Concert.
297	1010	Liverpool (6 LV), 0.2 kw.
297	1010	Varberg, 0.2 kw. Relays Göteborg.
297	1010	Jyväskylä (Finland), 0.2 kw. Relays Helsingfors.
295	1016	Rennes (France), 0.5 kw.
294.1	1020	Hull (6KH), 0.2 kw.
294.1	1020	Dundee (2DE), 0.2 kw.
294.1	1020	Stoke (6ST), 0.2 kw.
294.1	1020	Swansea (5SX), 0.2 kw.
294.1	1020	Uddevalla (Sweden), 0.25 kw. Relays Göteborg.
294.1	1020	Innsbruck (Austria), 0.5 kw. Relays Vienna.
291	1030	Lyons (Radio-Lyon), 1.5 kw. WEEKDAYS—7.15 p.m., News. WEEKDAYS (except MON.) 7.45 p.m., Concert.
291	1030	Liege (Belgium), 2 kw.
288.5	1040	Edinburgh (2EH), 0.2 kw.
283.2	1059	Cologne (Germany), 4 kw.
279	1075	Trollhattan (Sweden), 1 kw. Relays Göteborg.
277.8	1080	Leeds (2LS), 0.2 kw.
275.2	1090	Dresden (Germany), 0.7 kw. Relays Leipzig.
275.2	1090	Jacobstad (Finland).
275.2	1090	Nottingham (England), 5NG, 0.2 kw.
275.2	1090	Norrköping (Sweden), 0.25 kw. Relays Stockholm.
275	1090	Ghent (Belgium). SUN.—11.30 a.m.—12.30 p.m. THUR.—6-7.30 p.m. SAT.—6-7.30 p.m.
273	1098	Limoges (France), 0.5 kw.
272.7	1100	Sheffield (6FL), 0.2 kw.
272.7	1100	Bremen (Germany), 0.75 kw. Relays Hamburg.
272.7	1100	Danzig, 0.75 kw. DAILY—11.0 a.m., Weather. 11.30 a.m., Concert. 2.15 p.m., Exchange Quotations. 4.0 p.m., Relays Königsberg.
272.7	1100	Huddisvall, 0.25 kw. Relays Stockholm.
272.7	1100	Klagenfurt (Austria), 1.5 kw. Relays Vienna.
272.4	1101	Bordeaux (Lafayette), PTT, 1 kw.
268	1119	Strasbourg (France), 0.1 kw. TUESDAY and THURSDAY—10.0 p.m., Concert, Talk and News.
267	1122	Lille (PTT), 0.5 kw.
260.9	1150	Malmö (Sweden), 1 kw.
259	1160	Toulouse (France), PTT, 0.5 kw.
255	1178	Kiel (Germany), 0.7 kw. Relays Hamburg.
254.2	1180	Linz (Austria) 0.5 kw. Relays Vienna from 3.45 p.m.
254.2	1180	Kalmar (Sweden), 0.25 kw. Relays Stockholm.
252.1	1190	Cassel (Germany), 0.7 kw. Relays Frankfurt.
252.1	1190	Bradford (2LS), 0.2 kw. Transmits Leeds programmes.
252.1	1190	Montpellier (France), 0.25 kw. WEEKDAYS—8.45 p.m., News. 9.0 p.m., Concert or Talk.
252.1	1190	Säffe (Sweden), 0.5 kw. Relays Stockholm.
250	1200	Eskilstuna (Sweden), 0.25 kw. Relays Stockholm.
250	1200	Münster (Germany) m.s. in Morse, 1.5 kw.
250	1200	Uleaborg (Finland). Relays Helsingfors, 0.2 kw.
243.9	1230	Tromsø (Norway).
241.9	1240	Nürnberg (Germany), 4 kw. Relays Munich.
240	1250	Viborg (Finland), 0.7 kw.
240	1250	Nimes (France). DAILY from 8.45 p.m.
238.1	1260	Kiruna (Sweden), 0.25 kw. Relays Boden.
237	1285	Bordeaux (France), 1.5 kw.
236.7	1287	Stettin (Germany). Relays Berlin, 0.75 kw.
236.2	1270	Örebro, 0.25 kw. Relays Stockholm.
230.2	1303	Boras (Sweden), 1 kw. Relays Göteborg.
230	1304	Nice Juan les Pins (France), 0.25 kw.
230	1304	Radio Schaarbeek, from 8.30 p.m.
229.3	1308	Hälsingborg (Sweden), 0.25 kw. Relays Malmö.
229	1310	Umea, 0.25 kw. Relays Stockholm.
220.6	1360	Karlstad (Sweden), 0.25 kw. Relays Stockholm.
217.4	1380	Luxembourg, 0.25 kw.
215.8	1390	Halmstad (Sweden), 0.25 kw. Relays Malmö.
204.1	1470	Cayle (Sweden), 0.25 kw. Relays Stockholm.
204.1	1470	Kaiserslautern (Bavaria), 2 kw.
202.7	1480	Kristinehamn (Sweden), 0.1 kw. Relays Stockholm.
201.3	1490	Jönköping (Sweden), 0.5 kw. Relays Stockholm.
200	1500	Pécamp (Radio) — Thursday 10.30 p.m. to midnight.
198	1515	Biarritz (Côte d'Argent, France), 0.25 kw.
196	1530	Karlskrona (Sweden), 0.25 kw. Relays Stockholm.
187.5	1600	Ornsköldsvisk, 0.25 kw. Relays Sundsvall.
158	1899	Beziers (France), 0.5 kw.

M.	Kc.	Station
508.2	590	Omaha, Neb. (WOW), 1 kw.
499.7	600	San Antonio, Tex. (WOAI), 5 kw.
499.7	600	Fort Worth, Tex. (WBAP), 5 kw.
491.5	610	New York, (WEAF), 50 kw.
491.5	610	Portland, Ore. (KGW), 1 kw.
488.5	640	Los Angeles, Cal. (KFI), 5 kw.
461.3	650	Shenandoah, Ia. (KFNF), 2 kw.
454.3	660	Bound Brook, N.J. (WJZ), 30 kw.
440.9	680	Detroit, Mich. (WJR), 5 kw.
428.3	700	Cincinnati, O. (WLW), 5 kw.
422.7	710	Newark N.J. (WOR), 3.5 kw.
416.4	720	Chicago, Ill. (WGN), 15 kw.
405.2	740	Minneapolis, Min. (WCCO), 5 kw.
399.8	750	Cleveland, O. (WTAM), 3.5 kw.
394.5	760	St. Col. N.M. (KOB), 5 kw.
389.4	770	Chicago, Ill. (WBBM), 5 kw.
384.4	780	Oakland, Cal. (KGO), 5 kw.
379.5	790	Schenectady, N.Y. (WGY), 50 kw.
374.8	800	Davenport, Ia. (WOC), 5 kw.
370.2	810	New York (WLWL), 5 kw.
361.2	830	Cincinnati, O. (WSAI), 5 kw.
348.6	860	Seattle, Wash. (KJR), 2.5 kw.
344.6	870	Chicago, Ill. (WLS), 5 kw.
344.6	870	Zion, Ill. (WCBD), 5 kw.
336.9	890	Nashville, Tenn. (WSM), 5 kw.
333.1	900	Springfield, Mass. (WBZ), 15 kw.
325.9	920	Denver, Colo. (KO), 2.5 kw.
319	940	Council Bluffs, Ia. (KOIL), 5 kw.
319	940	Lincoln, Neb. (KFAB), 5 kw.
315.6	950	Pittsburgh, Pa. (KDKA), 50 kw.
305.9	980	Chicago, Ill. (WHT), 5 kw.
299.8	1000	St. Louis, Mo. (KMOX), 5 kw.
285.5	1050	Baltimore, Md. (WBAL), 5 kw.
282.8	1060	Columbus, O. (WAU), 5 kw.
280.2	1070	Rochester, N.Y. (WHAM), 5 kw.
275.1	1090	Chicago, Ill. (WTAS), 3.5 kw.
272.6	1100	Atlantic City, N.J. (WPG), 5 kw.
265.3	1130	San Antonio, Tex. (KTSA), 2 kw.
263	1140	Mt. Prospect, Ill. (WJAZ), 5 kw.
260.7	1150	Spokane, Wash. (KGA), 2 kw.
256.3	1170	Muscataine, Ia. (KTNT), 2 kw.
252	1190	Batavia, Ill. (WORD), 5 kw.
252	1190	Chicago, Ill. (WOK), 5 kw.
252	1190	Homewood, Ill. (WMBB), 5 kw.
247.8	1210	Miami Beach, Fla. (WIOD), 1 kw.
239.9	1250	Portland, Ore. (KEX), 2.5 kw.
228.9	1310	Fort Wayne, Ind. (WOWO), 2 kw.
220.4	1360	St. Paul, Minneapolis (WAMD), 10 kw.
202.6	1480	Mt. Vn. Hills, Wa. (WTFM), 10 kw.

CANADA

516.9	580	Toronto (CKSM), 1 kw.
516.9	580	Toronto (CFRB), 1 kw.
516.9	580	Toronto (CJYC), 0.5 kw.
516.9	580	Edmonton (CNRE), 0.5 kw.
434.5	690	Ottawa (CNR), 0.5 kw.
434.5	690	Calgary (CFCN), 1.8 kw.
434.3	690	Calgary (CNR), 0.5 kw.
411	730	Montreal (CKAC), 1.2 kw.
411	730	Montreal (CNRM), 1 kw.
410.7	730	Montreal (CFCE), 1.6 kw.
410.7	730	Vancouver (CHPC), 1 kw.
410.7	730	Vancouver (CKDC), 1 kw.
384.4	781	Winnipeg (CNRW), 0.5 kw.
384.4	781	Winnipeg (CKY), 0.5 kw.
357	840	Toronto (CFA), 0.5 kw.
356.9	841	Red Deer (CKLC), 1 kw.
356.9	841	Toronto (CKL), 0.5 kw.
356.9	841	Toronto (CNR), 0.5 kw.
340.7	880	Quebec (CNRQ), 0.1 kw.
329.5	911	Saskatoon (CNR), 0.5 kw.
322.4	930	Moncton, N.B. (CNR), 0.5 kw.
312.3	960	Regina (CNR), 0.5 kw.
312.3	960	Toronto (CKGW), 5 kw.
296.9	1010	Moose Jaw (CJRM).
291	1030	Vancouver (CNRV), 0.5 kw.

NORTH AFRICA

1650	162	Radio Carthage (Tunis) TNV, 5 kw. News, 7.40—5.20 p.m.; Concert, 6.0—9.0 p.m.
416	721	Rabat (Morocco).
310	967	Algiers (PTT), 2 kw.—Concert, 6.10 p.m.
305	984	Radio Casa-Blanca (Morocco), 2.5 kw.—SUNDAY, 7.0—11.0 a.m.; 1.0—3.0 p.m. Dance Music, 7.0—11.0 p.m. WEEKDAYS, 6.0—9.0 p.m.

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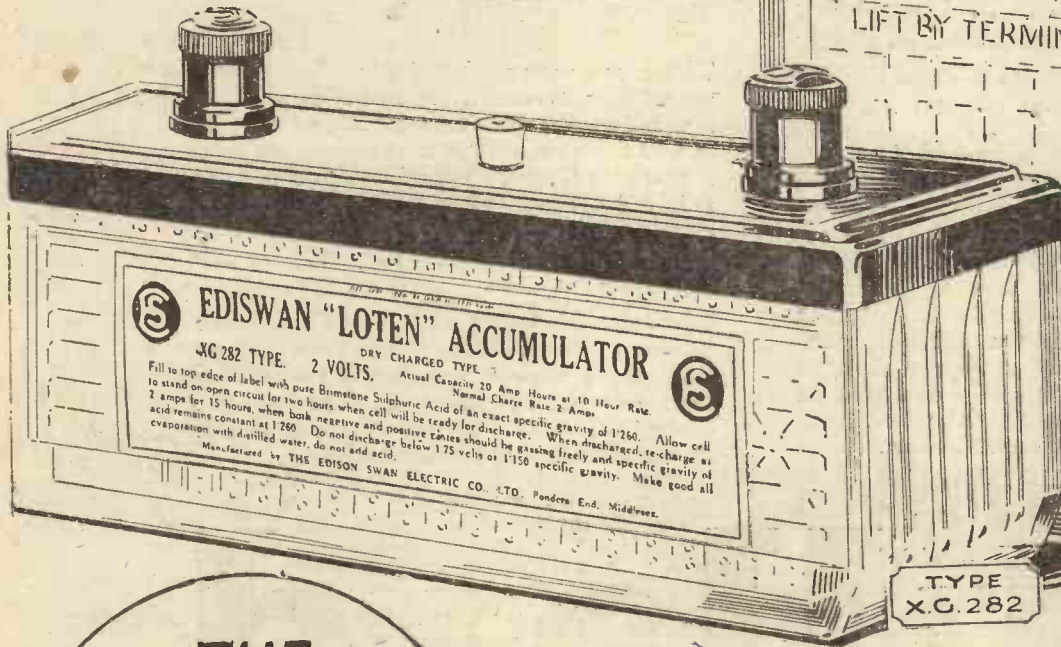
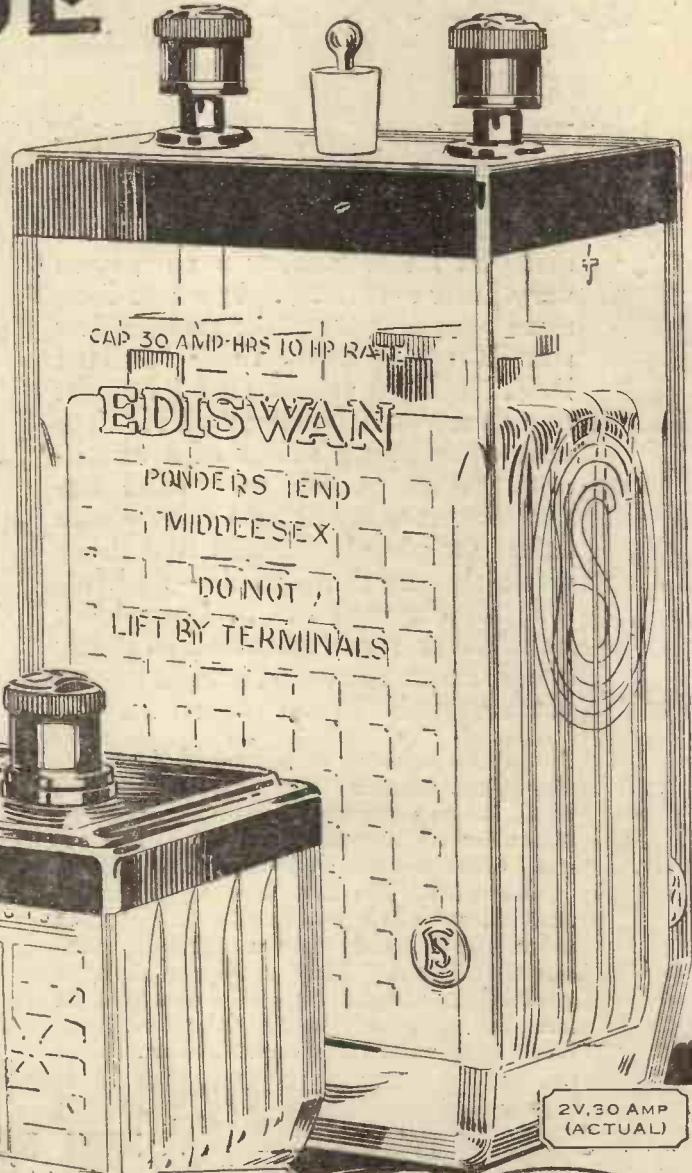
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LOTEN DRY-CHARGED ACCUMULATORS

The particular superiority of the Ediswan Accumulator lies in the absolute purity of all of the materials used; the special construction of the grids which makes shedding impossible under ordinary treatment, and in the special glass containers which render unnecessary the use of separators, often the means of inducing injurious foreign matter into the accumulator.

Loten accumulators are supplied dry-charged and only require filling with acid in accordance with the instructions on the glass boxes, when the accumulator is ready for service.

Prices of LOTEN Dry-charged 2-volt Accumulators.	
10 amps.	- 6/- each
20 "	- 8/6 "
30 "	- 10/6 "
45 "	- 13/6 "
Price of Type X G 282	
20 amps.	- 10/6 each
Prices of 4 and 6 volt pro rata.	



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THE EDISON SWAN ELECTRIC
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Manufacturers of all types of
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The
capacity of all
EDISWAN
ACCUMULATORS is
based on the
10 hour rate
of discharge

*I would not be
without them*



I'M talking of radio valves. Mullard P.M. Radio Valves with the wonderful P.M. Filament. The wife and the children think the same, and you know kids, as a rule, have very keen ears It was a long time ago, shortly after people first started talking about these Mullard P.M. Filament valves, that I bought one as a try-out, since all valves they said were pretty much of a muchness. Well, believe me! The improvement that Mullard valve made in my set plainly showed that there was only one thing to do—fit Mullard all through I wouldn't be without them now and so many others think the same, it kind of gets you interested in the reason why.

Anyway, the secret of the whole business lies in the Mullard P.M. Filament. First of all it has a greater emission surface, in other words *there's more of it*. The remarkable length and thickness of the Mullard P.M. Filament is really amazing, and it results in a greater flow of electrons from the filament to the specially constructed plate. This increased flow is perfectly controlled by a grid designed in keeping with the Mullard Matched Electrode System of valve construction.

There are many other interesting points about this filament. It operates at such low temperature that there is no question of the filament losing its original nature, it remains tough. Why! . . . You can tie it in a knot long after a thousand hours of life, and again its low current consumption (.075 amps) is very, very easy on the L.T. Accumulator.

I'd advise you to put a Mullard P.M. Valve in every valve holder on your set. However, try a couple and you'll realise the truth of what I've told you. They are the easiest valves to buy—every radio dealer in the country sells MULLARD.

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