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# 3! WORLD-RADIO

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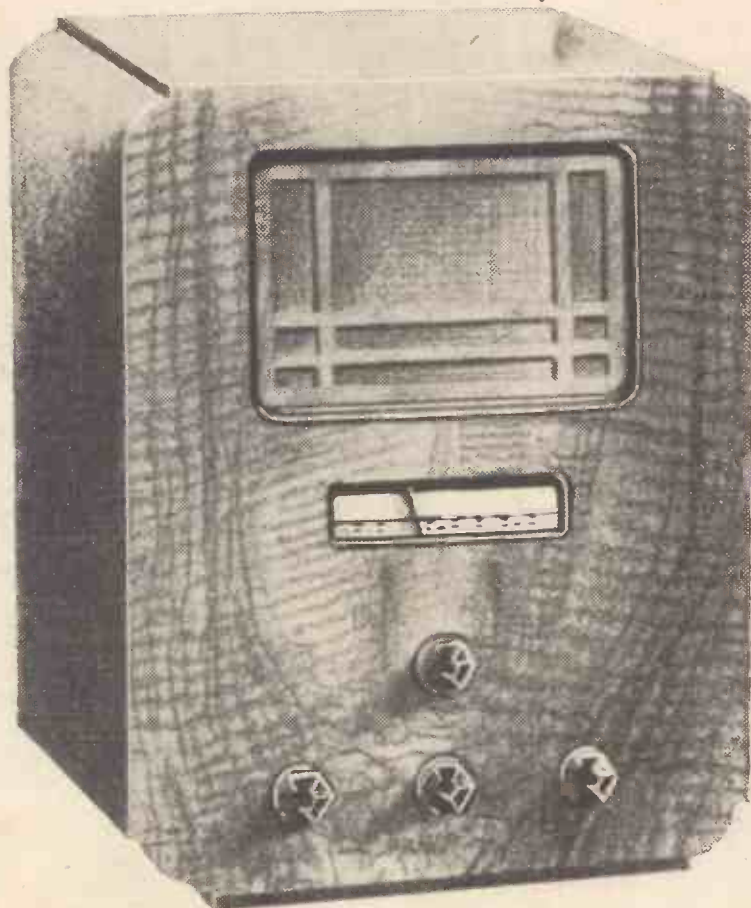
B.B.C. WORLD-RADIO



Melbourne to-day: the Manchester Unity Building. Special articles on the Melbourne Centenary appear in this issue

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# WORLD RADIO



VOLUME NINETEEN, NO. 481, FRIDAY, OCTOBER 12, 1934

## Broadcasting and the Spanish Crisis

BROADCASTING is at the point of making considerable headway in Spain; and those responsible have shown, by the decree published last July—an outline of which has appeared in *WORLD-RADIO*—that the rather poor showing of licence figures is to be remedied as soon as possible. By the terms of the decree a national network of nine regional stations is to be created—a scheme which, however, will not be completed for some time to come.

A striking and interesting fact of the recent crisis was that although only a relatively small proportion of the Spanish population had receiving sets, both the established and the provisional Governments appeared to assume that every householder was a potential listener or that every house which harboured a receiving set would act as a distributing centre of information for all within the area of reception.

It is impossible to assess the entire part played by broadcasting in the crisis, but it was certainly a striking one. Probably the most remarkable wireless duel in history took place between Barcelona and Madrid. There was first of all an exchange of points of view. It is reported that the Madrid station, representing Señor Lerroix, said that the Catalan Government had separated and turned against Spain. This was emphatically denied by Don Companys, who retorted that Catalonia was only one of the States which were to constitute the new Spanish Federal Republic.

From the exchange of opinion the stations proceeded to an exchange of what they believed to be facts. The Barcelona Government transmitted the news that certain sections of the Army and Navy were on their side, and they tried to keep up the spirits of listeners by broadcasting patriotic Catalonian songs. The Madrid Government promptly countered with the real facts of the situation, which doubtless had a calming effect on the populace. Gradually the bulletins from Barcelona became less hopeful; and when Don Companys broadcast an appeal to the peasants and smallholders to come to his rescue, everyone in Catalonia knew that the end of the short-lived Government was at hand. The final broadcast from Don Companys was to the effect that he was surrendering because all the means of resistance were exhausted and he desired to avoid new sacrifices. The wireless aerials, we are told, were bombed by General Batet, the Military Governor of Barcelona, thus bringing to an end this source of public information in that city. Within a few minutes of the surrender the Madrid station had broadcast the news.

The events of the last week in Spain are a further proof that no country can afford to neglect broadcasting as an ordinary adjunct of

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## Viâ Ether

### Next Week's Operas

OPERATIC broadcasts in general and relays from opera-houses in particular are certainly on the increase. Thus on SUNDAY next, for instance, two Wagner operas—*Lohengrin* and *The Flying Dutchman*—are to be heard from Germany, and Rossini's *Barber of Seville* is to be broadcast by the Rome group of Italian stations. The latter opera will again be transmitted on THURSDAY, this time by the Turin group of stations. Moreover, this broadcast will also be taken by Prague, Vienna, Warsaw, and their associated transmitters.

\* \* \*

### Many Artists of International Repute

BRUNO WÄLTER, it would appear, is conducting the Concertgebouw Orchestra fairly regularly this winter. His next appearance there is announced for SUNDAY afternoon. Dusolina Giannini is to sing operatic arias on the same occasion. But quite a number of artists of international repute will be heard over the microphone in the course of next week; indeed, one of them, Josef Hofmann, is due to appear twice. He is the soloist in the Budapest Philharmonic Concert on MONDAY, and again in the Vienna Symphony Orchestra's concert on WEDNESDAY. At the Copenhagen THURSDAY concert Horowitz is to play Tchaikovsky's Pianoforte Concerto No. 1 at the same hour as the golden-voiced tenor Tito Schipa will sing operatic arias at the Concertgebouw. He will be heard *viâ* Hilversum. Enrico Mainardi, the Italian 'cellist, is the soloist in FRIDAY's concert of the Warsaw Philharmonic, and from 8.30 to 10 p.m. on the same evening Lotte Lehmann is to give a recital before the Strasbourg microphone.

\* \* \*

### Italian Relay from Buenos Aires

ALTHOUGH I did not hear it myself, I understand that an interesting relay was carried out at 5 p.m. (B.S.T.) on SUNDAY, September 30, by the Italian stations, when a rendering of Bach's *St. Matthew Passion* was given at the Colon Theatre, Buenos Aires. World-famed singers were the soloists, and Willy Busch the conductor. Relayed by the local and by a number of short-wave and medium-wave U.S.A. stations, the broadcast was also taken by the Italian State station at Coltano. After amplifying the relay, the complete oratorio was reproduced by the E.I.A.R. stations, *i.e.*, by Turin, etc., at 9.25 p.m., and by the Rome group a little later. The relay was a complete success and it augurs well for next SUNDAY's relay from Buenos Aires to Vatican City, where the Pope will broadcast a message on the occasion of the International Eucharistic Congress. So excellent was the reproduction, that on occasions, I am told, the singing might have come from a local theatre. **ETHERVIATOR.**

its life. When a time of crisis comes, there is no means more potent than broadcasting—in responsible hands, of course—for keeping the public regularly informed of the true facts of the situation, and for killing evil rumours before they have time to spread with devastating effect.



# The working of THE LUCERNE PLAN

By "THE SEARCHER"



Is the Lucerne Plan a success?

If you put that question to half-a-dozen long-distance enthusiasts, they will agree that the Lucerne Plan has effected a considerable improvement—on the medium waves, at any rate; but should you press them to be more precise, it is probable that none of them will be able to say just how great is the improvement that has come about in listening conditions. The only way of finding out definitely what we have gained by the Lucerne Plan is to compare carefully-kept long-distance logs for the present time with those of the corresponding weeks of last year. It then becomes possible to strike a balance and to see just how matters stand.

The Lucerne Plan came into operation on January 15, 1934, and during the first few days of its history it almost looked like justifying the prophecies of the croakers who had foretold that, if there had been chaos previously in the ether, the new plan would mean confusion worse confounded.

No sensible person who was in favour of the Plan believed for a moment that it could possibly work to perfection from the word "Go." It was obvious that stations must take some little time to settle down to their new wavelengths, and certain unforeseen problems were certain to arise.

Actually, it took just about a month for the Plan to get properly into its stride on the medium waveband. At first, heterodynes were here, there, and everywhere, but as evening followed evening it was plain that a gradual clearing up was in progress. By February 17, fifteen or sixteen medium-wave stations were coming in without interference, and from that time onwards the number has steadily increased.

## Conditions on the Long Waveband

It must have been a great disappointment to the originators of the Plan that certain countries declined to sign the agreement, though most of these came into line, so far as medium-wave stations were concerned, by adopting their allotted wavelengths and sticking faithfully to them. On the long waves, the position appeared to be almost hopeless for a time, since far more stations insisted upon transmitting than could possibly be fitted in without mutual interference.

The long-wave position is still none too satisfactory, though that is not the fault of those who drew up the Lucerne Plan. Still, in October, 1934, we have more reliable transmissions on the long waves than we had at the same time in 1933. Last year Huizen usually suffered back-

ground interference from Brasov and a Russian station; the Eiffel Tower, Warsaw, and Motala were even then causing mutual interference, and both Kalundborg and Oslo were liable to heterodyne troubles. Now, Huizen is usually well heard, though interference from Brasov is sometimes in evidence, while Radio-Paris, Luxembourg, Kalundborg, and Oslo come through strongly and seldom suffer from interference.

The medium waveband is the only fair test of the Lucerne Plan, for here the great majority of stations are working actually or nominally in accordance with the Plan. On the medium waveband certain complications, some of them quite unforeseen, have cropped up. In theory there are 109 available channels between 200 and 570 metres, but in practice the number is somewhat reduced by harmonics, by sideband splash, and by "ghost" signals.

## Harmonics and "Ghost" Signals

The problem of harmonics is one that is in urgent need of solution. As matters stand, a long-wave station may occupy, besides its own channel, three or four others on the intermediate and shorter wavebands. Sideband splash between pairs of stations is less serious, for it is experienced only on the weaker transmission when the stronger is transmitting speech. It does not, therefore, interfere with the reception of stations in their own service areas.

The existence of "ghost" signals has only recently been accepted as an established fact, though for some time readers of WORLD-RADIO have been reporting that Luxembourg appeared as a background to Beromünster, Vienna, and other stations. At first these reports were received with a certain amount of incredulity, for it seemed that no set with any claim to selectivity could possibly bring in a medley of Luxembourg and Beromünster. Dr. van der Pol, the famous Dutch wireless authority, was the first to take "ghost" signals seriously, and he has shown that, owing to an unsuspected property of the Heaviside Layer, transmissions from a high-power station with a wavelength above about 470 metres can appear as a back-

ground to one of shorter wavelength, provided that the two are more or less in a straight line with the receiving aerial.

Other difficulties have arisen through the inability or unwillingness of stations to keep to their proper wavelengths and through the use of modulation a good deal deeper than is desirable.

I mention these things to enable readers to realise the extraordinary difficulty of the tasks, first of the compilers of the Lucerne Plan, and then of the International Broadcasting Union, which is sparing no pains to ensure the proper carrying out of the Plan.

## Gains and Losses in the Listener's Log

Some stations that were good in 1933 are still with us; others have been relegated to group wavelengths and are, therefore, among the long-distance listener's losses; still others that were not previously heard now provide good reception.

The stations that we heard well last year and still receive are: Budapest, Munich, Vienna, Brussels No. 1 and No. 2, Langenberg (Cologne), Rome, Stockholm, Athlone, Leipzig, Strasbourg, and Hilversum—twelve in all.

The chief stations that have disappeared from our logs since last year are: Katowice (which has a separate channel, but is not usually well received), Barcelona, Lwów, Toulouse, Göteborg, and Hörby—a total of six.

When we come to the list of stations that previously suffered frequently from interference and are now usually quite clear we begin to see what the Plan has done for us. The list includes: Stuttgart, Florence, Prague, Lyons PTT, Sottens, Beromünster, Paris PTT, Hamburg, Berlin, Milan, Poste Parisien, Breslau, Frankfurt, Bordeaux, and Heilsberg (Königsberg)—fifteen gains.

The account, therefore, stands:—

Stations gained	15
Stations lost	6
Net gain	9

This, however, is not the whole story, for there are a good many [stations not included in any of these lists. The greater part of them gave only occasional clear reception last year. They still suffer from intermittent heterodynes, but they are now far more often receivable without interference than was the case twelve months ago.

Towards the end of 1933, fifteen medium-wave stations clear of interference was a good bag. At the present time the number averages between twenty-five and thirty.

## A Success

From the long-distance man's point of view, then, there can be no doubt that the Lucerne Plan is a success. He does not regard it as perfect, for, as a true DX-er, he would like to be able to receive every station in Europe! Still, he must admit that he now has a far wider choice of transmissions receivable with genuine entertainment value.

The Lucerne Plan, however, was not devised for the long-distance listener. Its chief aim was to enable perfect reception to take place in the service areas of stations. With a very few exceptions it has accomplished this, and there would probably be no exceptions at all if Governments would see that unauthorised stations were closed down and that the rest strictly maintained the wavelengths allotted to them.



Budapest broadcasting station



# At a German Bierfest

In previous years, during the month of October the Munich studio has been in the habit of relaying entertainments from the *Ratskeller*, or from other popular *Bierkeller* in that city. These broadcasts have also been taken by other German stations, which have thus joined in observing the *Oktober Bierfest*. This festival is celebrated everywhere in Germany, and if you visit at this period such cities as Munich or Dortmund, or, for the matter of that, any town rejoicing in a *Bräuerei*, you will find the *Bierkeller* the centre of all attraction.

I can recall one on a similar occasion in Berlin, one of the *Pschorr*, *Spaten*, or *Löwenbräuereien*, a huge hall filled with rows of oaken tables, with four equally massive chairs to each, gaudily decorated with banners, paper streamers, and garlands of artificial flowers, the whole generously illuminated. The walls were covered with frescoes or tableaux representing incidents in stag-hunting, or bore panoplies of arms and oil paintings of still life, such as fruit, fish, and vegetables. It was a cold October evening. As we entered the glass swing doors, I was struck by the atmosphere of the place, which included the smells of cigar, pipe, cigarette tobaccos, and beer, and a peculiar odour associated with cabbage, boiled ham, and a particularly busy laundry.

The clatter of cutlery, plates, trays, and other articles, the persistent hum of conversation interspersed with shouts of laughter, snatches of choruses or student songs—all did their best to drown the strains of a Bavarian orchestra performing on a platform on one side of the premises. The musicians were in their national garb, the men in shorts, velvet jackets, and hats, with the usual shaving brush ornament, the women in gaudily-stitched corselets, white stockings, and voluminous skirts. They sing solos, duets, or in chorus, folk songs or comic dialect ditties; they dance very heavily, and excel in yodelling.

In a large *Bierkeller* there may be a dozen instrumentalists and vocalists, string and wood-wind instruments, pipes and accordion. Between items they are well supplied with mugs of lager, and if the interval is a fairly long one—there are not many breaks as the *Stimmung* must be kept up—the men light their long-stemmed porcelain-headed pipes.

## "Der Esel"

We seem to take all this in at a glance, from the threshold of the swing doors, as it were. We

look around for a seat; there are not many vacant, as it is already mealtime; and down the alleyways between the tables we see other people on the look-out for seats. As we follow, without warning somebody jams a heavy cardboard object over my head. Sounds are immediately muffled—it has been pushed down over my ears—and as I struggle to release myself from its clutches I hear yells of laughter, and repeatedly the words: *Der Esel*. It is a great joke, for which I have been prepared. No offence should be taken; it is a time-honoured custom. The right thing to do, according to instructions received, is to take off the cardboard head of the donkey, with which I have been crowned, and, passing along the tables, in my turn jam it down unconcernedly on the poll of another unsuspecting visitor. And so Neddy during the evening passes from head to head, to the accompaniment of loud guffaws and applause. It is, admittedly, a childish pastime, but "do in Berlin as the Berliners do" is the correct maxim to adopt in the circumstances.

On these occasions we need not make a lengthy search of the menu; there is, so to speak, only one item of importance, the *Plat du Jour*, *Eisbein mit Bohnen und Sauerkraut*. Let me explain that the solid part of the dish—and, believe me, it is solid!—is a knuckle of ham, hidden partially beneath a mound of boiled sauerkraut and surrounded by a heap of yellow haricot beans. This hefty portion is served up in a deep soup plate, almost a dish in size. The quantity I judge to be sufficient to feed adequately three fully-developed navvies, but I notice that almost every occupant of the *Bierkeller* is tackling a similar dish without outside assistance.

As to the choice of liquid refreshment, it is either *dunkel* or *hell*—in fact, plain dark Munich or light Pilsen. According to your selection, the *Ober* brings you a quart (litre) blue or fawn earthenware mug, frothing to the brim. Note that the *Eisbein*, although comprising a large bone and weighing anything between one and two pounds, has clinging to it a huge slab of gammon, which in itself would be deemed sufficient for an outside meal. Add to this the beans and sauerkraut, if you wish to visualise the weight of the course selected.

When on this occasion, I suggested that my friend and I should go fifty-fifty in one portion, the waiter shrugged his shoulders: "These English have no appetites," he seemed to say, and he left us to the job.

## Leaving the Platter Clean

Looking around, I observed that all within my view were steadily getting through their allotments, washing down almost every mouthful with big draughts from their respective mugs. The waiters were busy replacing them, the words *dunkel* and *hell* being the only intelligible sounds heard. I marvelled at the appetite of these people, women especially, who could clear such enormous platters, and then I re-



[E.N.A.]

Getting ready for a "Bierfest"

called a German proverb to which I had been introduced previously: *Besser Magenweh als dem Wirt etwas schenken*. Literally translated, it means: Rather a stomach-ache than make a present to the innkeeper. It is not customary to leave anything, either on your plate or in the dish. Every scrap must be disposed of; if necessary the dishes are wiped out with a piece of bread.

During this time, the Bavarian band was playing lively melodies, and doing its utmost to create *Stimmung*. It is a difficult word to translate; it has no equivalent in our language. Not exactly humour or disposition, in reality it means tuning up to a particular mood suited to the occasion. Apparently, it is a necessary artificial stimulation to every kind of gathering in the Fatherland.

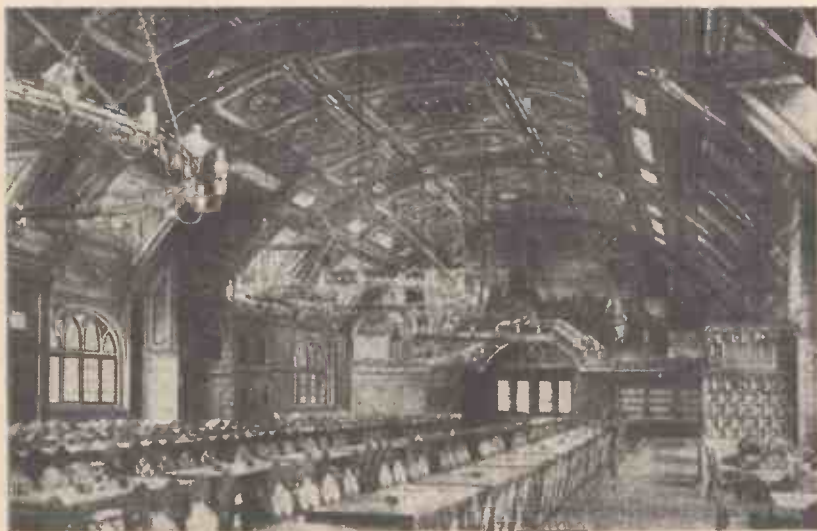
As this exhilaration has a cumulative effect, so the *Bierkeller* gradually becomes noisier. The clatter of the cutlery on the plates dies down little by little, and is replaced by the sounds of the waiters clearing the tables. The visitors, comfortably or uncomfortably *satt* (sated) as the case may be, settle down to enjoy the rest of the entertainment. The *Oktober Bierfest* is now in full swing; the musicians strike up drinking songs or Bavarian folk melodies, of which the audience thunders out the chorus, more or less in unison, punctuating the *tempo* by stamping their feet or clapping their hands.

The donkey's head still circulates around the room; visitors leave their seats to weave their way through the alleyways to other tables, taking their earthenware mugs with them. Mugs clink against mugs, to the shout of "*Prosit!*" Beer slops over the tables and the floor.

As we leave, the entire hall resounds to such songs as the *Wacht am Rhein*, and other melodies so dear to the heart of the German. The air is stifling; the whole restaurant is overheated, its atmosphere reeking still with the smells of tobacco smoke, boiled ham, and sauerkraut.

We stagger to the door, seeking the comparatively fresh air of the *Kurfürstendamm*. We have done our share in observing the *Oktober Bierfest*, which is being celebrated throughout the Fatherland and perhaps simultaneously in German communities overseas.

J. G. A.



[E.N.A.]

The banqueting hall of the Hofbräuhaus, the most famous beer cellar in Munich



# The B.B.C. Concerts, 1934-1935

By HERBERT ANTCLIFFE

"SYMPHONY CONCERT" is a very wide term, and is often used in a lax way in reference to programmes that have little or no symphonic character except that they are executed by a large orchestra. It is, therefore, with a rare pleasure that one reads the programmes of the new B.B.C. series, which starts at Queen's Hall, London, on October 24, for never, in an experience spread over the whole history of Queen's Hall and in many other countries in addition, have I come across a series that so thoroughly justifies the title. And lest anyone should think, because of this, that the programmes are necessarily heavy, let me hasten to add that a tremendous amount of the music performed will be a sheer joy, and some of it has more than a touch of lightness.

## "Typically English"

What strikes the musician who lives (as I do) on the other side of the North Sea is that it is so typically English, in the best sense of the term. Is there anywhere in the world—I am sure there is nowhere else in Europe—where one could get the "delight" of the music of Handel, which will be afforded by the programme of February 20, starting with the most perfect example of light music that has ever been written? And no one who is not fatally prejudiced against the music because the same composers have written serious, edifying works will maintain that the third programme of the series (November 14) is anything but of perfect lightness, except for the last item. The perfect buffoonery of parts of Strauss's *Don Quixote*, balanced by the expression of the pathos of the character himself, will only be equalled five months later, when Elgar's marvellous psychological study of the greatest "tragic clown" of all literature and history will be performed. One of the few criticisms of the programmes that one could make is that there is not more Elgar, but *Falstaff* makes up for the lack of much else.

## New and Old

Another feature of the series is the happy blend of familiar and unfamiliar. Of course, familiar is also a comparative term, for what is familiar to one group of listeners is not so to another. A few years ago this remark would have had little significance with regard to the programmes at Queen's Hall, but broadcasting has changed that, and while a considerable number of those who attend the concerts will be familiar with a large proportion of the programmes, many broadcast listeners will hear for the first time works which regular subscribers to these series have heard frequently. Scriabin and his *Prometheus*, for instance, are household words in London and some of the great cities of England, even though they are still matters of heated discussion. Many Continental countries, however, scarcely know them at all, so that when their sets are tuned to the English programmes they will be experiencing something new. The same thing applies to Sibelius and his Fifth Symphony, and even to Handel, while Liszt's "Dante" Symphony is a work that is better known to students than to the general public, no matter in which country they live or how they hear their music.

Of the actual novelties, the Stravinsky *Perséphone*, the *Symphony in C Minor for Chorus and Orchestra* of Yuri Shaporin, the *Scherzo* of Holst, the two Malipiero works (one an arrangement of Frescobaldi's *Toccata*), the excerpts from Alban Berg's *Lulu*, and the new symphony of Vaughan Williams, the Continent is as ignorant as is England, except in one or two

places where *Perséphone* or the Malipiero works have been heard.

And alongside the programmes is the interest in the artists. Chief among these are the conductors, all of whom are world-famous, the orchestra, and the B.B.C. Chorus. The frequent inclusion of the chorus in the programmes is a feature which, for direct listeners and radio listeners alike, is particularly welcome, since it carries at home and abroad the tradition that has made British music famous in its own line as something that can be excelled by no other country and equalled by very few. Even the month one has to wait for the *Mass of Life* will pass all too slowly.

## British Music

And, finally, just a note as to the British composers and artists. Elgar is familiar the world over for some of his works, of which the *Allegro for Strings* is one, just as is Holst for his *Planets*, and Delius for his *Mass*. *Falstaff* is not known outside England and, no doubt, will arouse anew the debates as to whether English composers can deal with big subjects in the same way as the great Continental composers. This and the Holst *Scherzo* will, however, be listened to with respect and a large degree of appreciation. Vaughan Williams is not well known, and still less understood, by European music-lovers, so that his new symphony will probably receive a mixture of admiration for its artistic control and of puzzled criticism for its idiom.

## B.B.C. Orchestra's Tour

TILL now it has been possible only for London audiences to hear the orchestra in the flesh, at its full strength in the winter series of Symphony Concerts, and in slightly smaller numbers at Sir Henry Wood's Promenades. In the coming winter, for the first time, the orchestra and its conductor, Dr. Adrian Boult, are to pay a series of four visits, to the B.B.C.'s Northern, West, Midland, and Scottish Regions respectively.

The first of those visits is to Manchester, where the Orchestra will give a concert in the Free Trade Hall on Wednesday, December 5, at 7.30 p.m. The full orchestra of 119 players, with Arthur Catterall as leader, will travel to Manchester, and the programme has been laid out so as to take the fullest advantage of that large body of players. Pieces have been chosen which cannot well be presented in accordance with their composers' wishes unless a big team is engaged in their performance.

## From Wagner to Ravel

The programme begins with Wagner's Prelude to *The Mastersingers*, and Strauss's tone-poem *Ein Heldenleben* comes next, in which Arthur Catterall takes the solo violin part. His long association with Manchester is bound to make his appearance with the orchestra an event of special interest to his old friends there.

In the second part of the programme are John Ireland's *Symphonic Rhapsody Mai Dun*, one of the strongest and most vivid pieces of our time, and Paul Hindemith's *Philharmonic Concerto*, a theme and variations which take their name from their dedication to Wilhelm Furtwängler and the Berlin Philharmonic Orchestra. The programme concludes with the *Boléro* of Ravel, which has so quickly found a place for itself among the most popular orchestral music of our time.



One of the entrances to Rome's "Radio Palace"

## JEAN DE RESZKE

IN our issues of January 19 and 26 last, when we printed a previously unpublished record of an interview with Jean de Reszke, we had occasion to refer to the biography of the singer by Miss Clara Leiser, then recently published. A much cheaper edition of this book\* has now been placed on the market at a price that should recommend it to every student or music-lover. Miss Leiser, a young American holding an appointment in the Court of General Sessions, New York, has chosen to bring out her first book in England. Why she should have paid such a compliment to a nation that is notoriously lukewarm towards opera, the younger generation may fail to understand; yet the generation of music-lovers whose memory takes in the '90's knows well that in those days it was Jean de Reszke whose consummate art fanned the languishing flame of opera into a blaze again. The enthusiasm of Covent Garden audiences on a de Reszke night was almost indecently un-English: our uncles and our aunts fought for standing room in the galleries, and even the boxes and stalls forgot themselves in rapture. Jean, one bright star among other bright stars in the '80's, at an age when retirement might well have been expected, suddenly flamed across the sky as a brilliant comet, godlike in Wagnerian rôles, no longer a "stagy," Latin Siegfried, but a living, masterful hero.

How it was possible for the great tenor to achieve this triumph becomes perfectly intelligible to the reader of Miss Leiser's biography. To the end of his life Jean remained a humble student of his art. He was ceaselessly experimenting to improve himself in everything that goes to make a perfect opera-singer, and being a man of fine intellect and initiative he succeeded in creating out of the de Reszke of his Italian teachers a figure such as opera had never before seen or has seen since. Miss Leiser's enthusiasm has made the de Reszkes and their times live again for us. Her book is founded on thorough research in every corner where the tradition of these great singers remains, and its value is enhanced by a foreword by Amherst Webber, Jean's friend and associate, appendices, describing the master's principles of singing, written by two of his pupils, and a bibliography.

\* *Jean de Reszke and the Great Days of Opera*. By Clara Leiser. 384 pp., with 31 illustrations. (London: Gerald Howe, Ltd., 8s. 6d. net.)



# LETTERS TO THE EDITOR

"6 p.m.—Concert!"

SIR,—Yesterday afternoon, at about 5.45 p.m., in travelling round the dial of my set I passed Radio-Paris, and hearing the tuning of an orchestra and a great outburst of cheering, I waited to hear what would follow. I turned up my WORLD-RADIO, and all I could discover there was the cryptic announcement "6 p.m.—Concert." The broadcast proved for me, at any rate, one of the most enjoyable transmissions that I have listened to. The concert was relayed from the Salle Rameau. Pierre Monteux conducted the National Symphony Orchestra, and Toti dal Monte was the soloist. She sang the Bell song from *Lakmé*, and the Mad Scene from *Lucia di Lammermoor* with great artistry, and the Venetian folk-song, which she gave as an encore, was a perfect gem. The orchestra gave, among others, a splendid rendering of Beethoven's *Eroica* Symphony. It was annoying that the programme as printed in WORLD-RADIO gave no indication of so splendid a broadcast. I have no doubt that many readers must have felt the same regret and annoyance.

Yours faithfully,  
MUSIC-LOVER.

Bedford Park, London, W.4.

[We sympathise with our correspondent. Unfortunately, the official programme of Radio-Paris indicated nothing more than "a concert."—Ed.]

## An Unidentified Transmitter

SIR,—On two occasions recently when listening to North Regional, 449.1 m., reception has been interfered with by what sounds like a station transmitting on a wavelength impinging upon that of North Regional, neither Sottens, 443.1 m., nor Cologne, 455.9 m., both of which I can obtain easily and clearly separated from North Regional. The time in both instances was between 7.30 and 7.45 p.m., the last occasion being on Thursday, October 4 (last night).

I was not listening to the programme from the amusement point of view, but with the object of studying the behaviour of reception in relation to barometric pressure, so that I did not at first quite grasp that the sounds I heard were not normal. The intruding transmission was bells (sounding like a carillon) the first time, last week; last night speech, language not known to me, possibly Erse.

I should like to hear if other listeners have heard a transmission impinging in this way upon North Regional.

Yours faithfully,  
MARY C. FAIR.

Holmrook, Cumberland, October 5, 1934.

## Harmonics

SIR,—In the August, 1934, chart of Frequencies of European Broadcasting Stations, I notice several instances of harmonics.

This seems to throw some light on a thing that has puzzled me for some time, and perhaps

other readers have had this experience. I have observed very frequently a distinct and clear transmission behind the medium-wave stations on Band 3, but only on the upper part of this band, ranging from Budapest (549 m., 546 kc/s) down to North Regional (449 m., 668 kc/s). Below this I have not been able to locate this transmission. The chart indicates harmonics in the lower part of this waveband.

This interference is absolutely dead on the wavelength of each station in the group referred to above, and is not an overlap from a neighbouring station, as I have very conclusively proved. In every case I discovered the interloper to be Luxembourg on the long waveband No. 1 (wavelength 1,304 m., 230 kc/s). Evidently a harmonic.

Listening to the opera *Aida* from Prague recently, the whole programme was affected by this annoying background.

I should be interested to hear if any other readers who have experienced this have been able to prevent this interference.

Yours faithfully,  
J. A. DALLOSSO.

Sanderstead, Surrey, September 30, 1934.

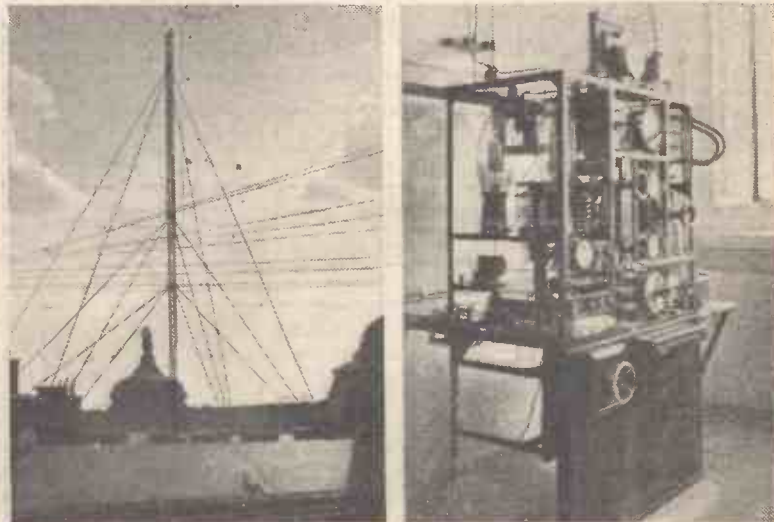
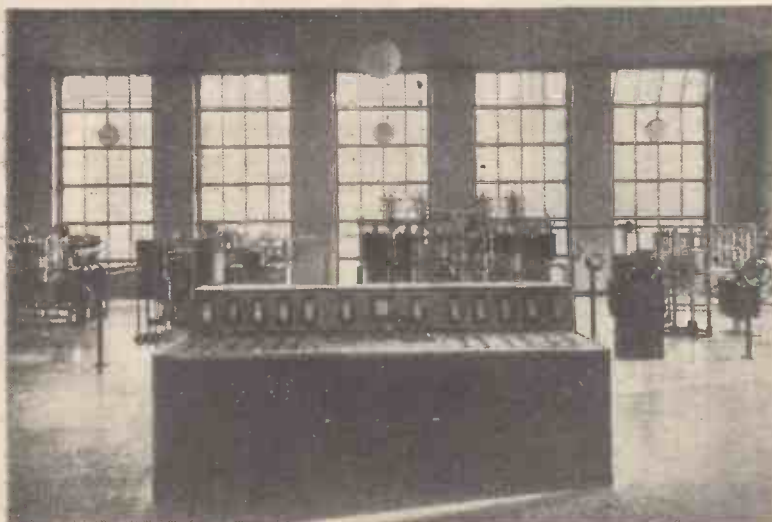
## Davertry with Background of S.-W. Stations

SIR,—I have lately read with interest in WORLD-RADIO of the interference caused by Luxembourg and DJA on the medium waves.

The following experience of mine might prove interesting to some of your readers.

While listening to the First News three or four evenings ago, I heard in the background

(Continued on page 484)



RAVAG TO-DAY AND YESTERDAY.—(Left) Exterior and interior views of the Bisamberg transmitter of the Austrian broadcasting service, which has just celebrated its tenth anniversary; (right) the first studio, the first aerial, and part of the first transmitter of the same service at the Vienna War Office in 1924.



LETTERS TO THE EDITOR

(Continued from page 483)

of Daventry National faint morse, after which was heard a lady's voice calling up s.s. *Majestic*. This puzzled me for a moment, until I switched over to the short waves, when I found that the interfering station was GBC, on, roughly, 60 metres. Looking back in my log-book, I noticed that I had heard GBC in the background of Daventry National before—that time calling s.s. *Bremen*. I have never heard a short-wave station in the background of any long or medium-wave station before, but have heard Luxembourg interfering with Athlone and Vienna. Would the above case be a "break through" on the long-wave coil? My receiver is an all-wave detector and 2 L.F., with switched coils.

Yours faithfully,  
D. R. WHITE.

Haywards Heath, Sussex.

A Strange Interference

SIR,—I am interested in your correspondent's, A. Lowe's, letter in the issue of WORLD-RADIO of September 21, recounting an unusual interruption that occurred on Monday evening last. I was tuning in a superheterodyne set at the time, and, as I was passing slowly through the stations, heard this extraordinary sound of a locomotive, exactly as your correspondent describes. I merely concluded that it was some studio effect, emanating from Brussels No. 2—the station nearest when it was heard—and the moving of the tune was arrested, and I thought how well the imitation resembled the reality. Another listener in the room, who heard it, asked what the engine was doing and in what connexion its sounds were being broadcast. I am writing in the hope that if others have had the same experience an explanation may be forthcoming.

Yours faithfully,  
R. S.

Bath.

Listeners' Verdicts

National Music from Hamburg

THERE was broadcast from Hamburg, on Wednesday night, October 3, a programme of the type which should be selected for European relays. It consisted of German national music, of which the first piece was the famous Festival Overture, by the beloved composer of comic opera, Lortzing. This was followed by the Prelude (Herr Hitler's favourite piece), and the Dance of the Apprentices from *Die Meistersinger*. It is interesting to note that this wonderful opera was produced by Wagner in 1868, just before the task of creating *The Ring* called forth all the ability of the great composer. The soothing rhythm of the Dance of the Apprentices is one which I always point out to those unfortunates who have been brought up with the delusion that Wagner is nothing but a noise. After this came a selection from d'Albert's *Die toten Augen*, and a delightful little piece—*Schmittertanz* (Dance of the Reapers)—by Humperdinck. Both these composers, in spite of their names, are German. The concert concluded with the *Rosenkavalier* Waltz by Richard Strauss. The orchestra of the "Braune Messe," in Kiel, was admirably conducted by Herr Döring.

J. B. S.

Next Week's Station

The station to which we invite readers to listen during the week Oct. 14 to Oct. 20 is BUDAPEST. A description of the programme item broadcast by this station which the individual listener considers to be the most interesting of the week should reach us by the first post on Monday morning, October 22. The best of the descriptions received (which should be limited to 250 words each) will be published, and £1 is. will be paid for each such contribution.

Talking Balloons

(From our Cologne Correspondent)

It was on October 6 that the Deutschlandsender attempted the experiment of broadcasting from an airplane flying from Cologne to Berlin, and a conversation between the airplane and four short-wave stations situated on the route was maintained during the flight. It is now the turn of the Cologne Reichssender, which is planning an equally interesting and novel experiment for Sunday, October 14.

On this occasion it is to be in the nature of a conversation between two balloons and the broadcasting station. One of the balloons will start from Cologne, the other from Düsseldorf, and both aeronauts will have a short-wave microphone. The third speaker will be in the gramophone studio at the Cologne broadcasting station, and he will be able to interrupt his conversation with the two balloonists and play gramophone records.

The words of the two aeronauts will be received at the Cologne and Düsseldorf airports by means of short-wave receiving stations, and they will then be relayed to the Langenberg transmitter, so that each balloon will be able to hear what is said in the other balloon or in the broadcasting station. All three microphones—the two in the balloons and the one in the Cologne station—will remain effective during the whole of the transmission.

The Cologne authorities intend to make this transmission not merely a technical experiment, but, rather, by interwaving light gramophone records, an hour of jolly entertainment. Some time ago the Cologne Reichssender made a similar experiment, which proved highly successful. This "air" conversation is timed to take place from 12 noon to 1 p.m. on Sunday, and will be heard via Cologne and Deutschlandsender.

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## Without Distortion

### Microphone Warfare

THE unauthorised airing of public or private grievances before the microphone is not encouraged by broadcasting authorities, and any speaker or artist who offends in this way is usually "faded out" in a few seconds. The latest incident of this kind occurred quite recently at a Belgian private station. M. Jean Weber, a *sociétaire* of the Comédie-Française, was the protagonist, and the cause of his outburst was a newspaper article by M. Théo Fleischman, the Belgian radio dramatist, which adversely criticised the Comédie-Française. M. Weber, who had been invited to take part in a broadcast version of *Old Heidelberg*, thought that his presence in Belgium was a good opportunity for saying just what he thought of M. Fleischman, and he accordingly began to do so. He was not able to say very much, for, after a moment's hesitation, the engineers faded him out, an announcer apologised, and M. Weber, finding that his attempt to start a microphone war had failed, went on with the play. It is much to be hoped that other actors and actresses will not emulate M. Weber. Producers of radio plays have a hard enough life already, but their troubles will be vastly increased if artists try to use the microphone for replying to unkind critics.

### Fire Alarm

The use of wireless by the police is becoming almost commonplace, and I see that fifty police cars, equipped with loudspeakers for receiving messages from headquarters, are being brought into action in Paris; but the use of wireless by fire brigades is still a comparative novelty. A correspondent tells me that a new method of calling together the voluntary firemen is being tried at Asnières, in France. Previously the members of the fire brigade were summoned by the sound of a public alarm bell, but this signal also caused the general public to assemble, and the work of the firemen was made more difficult. The municipality of Asnières has now installed a short-wave transmitter of low power, which causes an electric bell to ring in the house of every fireman when an outbreak of fire is reported. This is certainly an up-to-date way of assembling a fire brigade, but it would be awkward if some practical joker began to broadcast on the same wavelength, and thus summoned the brigade when there was no fire. In that event a fireman's lot would be just as unhappy as a policeman's.

### Tears, Profitable Tears

One of the quaintest jobs in the world of broadcasting is that of Sally Belle Cox, who is heard in NBC programmes in the U.S.A. Miss Cox, who once worked in a Cleveland orphanage, is a specialist in the presentation of crying children, and her microphone appearances are always made in plays or programmes that demand a "cry-baby." According to the American *Radio News*, "she boasts that she can imitate the howls and yelps of any infant," and she does it so well that she gets frequent engagements. Miss Cox is a nice-looking girl of twenty-two, and it is sad to think that she should burst into tears whenever she faces a microphone. But at all events they are not "idle" tears.

### A New Invention

An American listener has invented a gadget for his set which cuts out the announcer's voice between the items of a musical programme. If it will also cut out the crooner's voice in a dance band programme it might have a big future.

RECTILINEAR.

## Youth and Age: a Norwegian Talk

(From our Oslo Correspondent)

THE evening talks, under the general title of "Seen and Heard," are a prominent and popular feature of the Oslo programme. People from all classes of the population, both men and women, are given the opportunity of expressing their opinions on a great variety of subjects. Originally the series was meant to consist of journalistic talks on the day's events by those who had "seen and heard" them; but it now covers a much wider range of topics. These talks are never censored, and, as a general rule, the name of the speaker is not published in advance. There is an unwritten law that nothing must be said which could offend people with different religious or political views.

Some extracts from a talk recently given by Rector Sverre Halse will give readers an idea of the way in which this programme feature is conducted. His subject was "The Fear of Old Age," and he suggested that those who were frightened of growing old were basing their fears on a misunderstanding.

"I have come to the conclusion," he said, "that people never grow old. It is a mistake to think that the years after sixty must necessarily mean a deep armchair, slippers, and idleness. If we look about us at home and abroad we shall find that people who have passed the age of sixty are those who 'pull the wires. . . .'"

"We human beings alter very little with the years—at any rate inside. We get a few less teeth and a little less hair on our head: that is about all. But we learn a little with every year that goes; we acquire valuable experience and knowledge that only the years can give us. The kernel itself, the personality, the heart, and the soul remain unchanged and continue to be young.

"The child always lives in our soul. It is the child living in us when we smile and laugh and are glad. It is the child in us that makes life worth living on earth.

"It is only for the young that old people exist," Rector Halse continued. "It is only so long as we are under twenty that we are so short-sighted as to imagine that there is any essential difference between a man of twenty and a man of sixty. Sometimes the man of sixty appears more dignified and dry, but when we ourselves advance in years we find to our astonishment that the man of sixty is still a youth. There are some people who are born old, but if we do not die young it is largely our own fault. . . ."

### An "Uncritical Worship"

Rector Halse then went on to speak of the "uncritical worship of youth" which is found everywhere in the world to-day.

"Young people," he observed, "are frequently better-looking than old, but external beauty does not belong to the most valuable properties of a human being. Even in the theatre and the cinema youth and beauty do not play such a dominating part as we believe. The great artists are neither beautiful nor young; it is their inner qualities that make them important.

"It is a real tragedy to see a woman of forty fighting desperately to appear twenty-five or thirty. Her flirtations with boys twenty years younger are ridiculous. We men are not much better. There are men at sixty who think they are twenty. Such people base their lives on a great misunderstanding. They believe that it is only the years of youth that count, that are worth living.

"Youth has certainly its bright side. It has great charm, but the later years are considerably better. The years often bring us sorrow and adversity—experience of different kinds that deepens and refines the man. An old man

possesses as much of idealism and sensitiveness as a young man, and often a great deal more. The greater part of the really valuable work carried on in the world is done by men who are no longer young. . . ."

### Nansen's Achievements

"We Norwegians," said Rector Halse, "ought to be the first to sing the praise of old age. Think of Fridtjof Nansen. In his youth he accomplished some fine sporting achievements, but what were these, compared with his work in later years? He was sixty years old when he saved millions of Russians from death by starvation. A younger man, say of thirty or forty, would not have been able to do this. At the age of sixty-eight he was the first not only in the morning bath and on the dancing floor, but also at the working desk



Dr. Nansen

at Geneva. The years gave him rich experiences, which taught him to love his fellow men. . . ."

"We must not forget that the word 'old' does not mean the same to-day as in earlier times. Shakespeare, who lived about 300 years ago, died when he was in the early fifties. According to our ideas he died young.

"Our length of life has been very much prolonged. We are active at least twenty years more than was possible at one time. Have you heard of the man of eighty who rides his bicycle from Moojøen to Oslo every summer—a distance of considerably more than 600 miles? John Forsell, the famous Swedish opera singer, sang his 'Don Juan' in Oslo last summer like a man in his prime—and he is sixty-six years old. Chaliapin, the world's greatest bass to-day, is sixty-one years old.

"We should not be afraid of old age, though it lacks, perhaps, the superabundant strength of youth. Old age is life's autumn. But the autumn has richer, warmer colours than any other season. To fear to-morrow is to spoil to-day. There is no moment in life when we can say: 'We have the best time behind us,' for the simple reason that we do not know the days to come. . . ."

"Old age is like the horizon. We can never reach it. When we get where we thought it was, we find only young people like ourselves. The old are always far in front of us, far away. *They are an illusion—they do not exist.*"

### More Sets in U.S.A.

THE latest figures of the American wireless industry show a continued increase in the sale of sets. According to the American magazine *Electronics*, more than one and three-quarter million sets were sold during the first six months of 1934, which is an increase of nearly 340,000 over the corresponding figure for 1933. The figures reveal two other interesting facts. The average retail price of a wireless set has risen appreciably, which indicates that Americans are tired of "midget" sets and are going back to more expensive models; and the popularity of car radio has not developed in accordance with the makers' anticipations. While general wireless sales have increased, there has actually been a decline in the sale of car radio sets. The pastime of "listening while you drive" has not swept the country as the manufacturers expected.



## FOREIGN BROADCASTING NEWS

## LISTENING IN THE AZORES

## What St. Miguel Residents Hear

*(From a Correspondent)*

ABOUT 320 receivers of the latest all-mains, all-wave type are in use in the island of St. Miguel, in the Azores. Owing to the geographical situation of the island, results on the medium waves, especially during the summer months, are mediocre, but during the winter the British Regional and National stations—especially West Regional—are received after dark at excellent strength with little fading. All the transmissions from the Empire Station are heard at varying degrees of strength, Transmissions 4 and 5 reaching a peak value in the early afternoon and evening. Generally speaking, the B.B.C. Empire Service is the most reliable source of entertainment for listeners in the Azores. Unfortunately, the chief city of St. Miguel, Ponta Delgada, is situated on the south side of the island, and immediately behind the city is a range of fairly high mountains of volcanic origin which seriously attenuate the signals of European medium-wave stations. Results on the north side of the island are excellent on the medium waves, and during even the summer months stations on that band are strongly received.

The new National Station in Lisbon (*Emissora Nacional*) has been received here at excellent strength, and the Portuguese Radio Club transmitter, CT1GL, is also occasionally heard.

St. Miguel has its own station, CT2AJ, which has been licensed as a "private broadcasting station" and has the full support of the local Government authorities in the broadcasting of gramophone recordings, studio presentations, and similar programmes. The station is also privileged to use for outside broadcasting purposes the Government-controlled telephone service of the city. CT2AJ is a non-commercial organisation and receives no solicited or other revenue. Among other things, the terms of its licence provide that the services of the station shall be available for the use of the Administration—e.g., for talks by Administration officials on non-political matters.

The transmitter installation is of a modern type, and the studio and speech-input equipment has been designed to ensure high-quality transmissions. Dynamic microphones are used throughout. More than eighty per cent. of the station's programmes consist of studio presentations. It is proposed to increase the power of the transmitter to 0.5 kW during the coming year, but, despite its present low power, it has a large listening public and is heard up to a distance of about 200 miles away.

## AUSTRIA

## The Jubilee Exhibition

*(From our Vienna Correspondent)*

The whole period of Ravag's activity since October 1, 1924, when it began broadcasting for 11,000 subscribers with a single transmitter of 35 watts power, until the present day, when there are 511,000 subscribers, and Bisamberg, the principal of its seven stations, transmits with a power of 100 kW, is illustrated in the minutest detail at the Jubilee Exhibition in the Vienna Messe Palast, which was opened by the President of the Republic on Saturday, October 6. The Exhibition, which will remain open for several weeks, includes a television section, a section displaying in sequence many hundreds of receiving sets placed on the market since 1924, with their original retail prices, and an exhibit of the Technical Department of the Vienna

Police, showing the instruments used by police officers. The Army also has a section of its own. Every educational aspect of broadcasting, and its use in schools as an auxiliary to the teaching of children, are allotted adequate space. A model studio is being used daily for the transmission of part of the Vienna programme, and visitors can look through its glass walls and see all that goes on within, hearing the programme from loudspeakers outside it.

## BELGIUM

## Winter Plans of I.N.R. Dramatic Department

M. Théo Fleischman, the Director of the Talks and Dramatic Department of Belgian broadcasting, announced in a recent broadcast the winter plans of his branch. An innovation to be introduced this season is that of microphone visits to museums and picture galleries and to important public institutions. With regard to the dramatic programmes, M. Fleischman desires to pay the homage they deserve to the great works of the past, and to select for production those contemporary plays which, by reason of their beauty, will afford enjoyment to listeners. Some of these plays may be written for the theatre or specially for broadcasting. Among the classical plays chosen are such old favourites as *Phèdre et Polyeucte*, *Le Malade Imaginaire*, *L'Amour Médecin* and *Le Bourgeois Gentilhomme*. The list of modern plays includes D'Annunzio's *La Gioconda*, Fabre's *L'Argent*, and, of course, many plays by Belgian authors. The number of radio plays, both foreign and Belgian, to be produced is quite considerable, and some of last year's successes will be repeated.

## FRANCE

*(From our Paris Correspondent)*

## "Le Parleur Inconnu" Honoured

M. Edmond Dehorter, the "Unknown Speaker," has been honoured by the award of the Gold Medal of Physical Education. M. Dehorter is one of the pioneers of broadcast commentaries on sporting events.

## Committee of Co-ordination: Recent Decisions

The Committee of Co-ordination has decided that meteorological forecasts shall be broadcast regularly at 8 a.m., 1 p.m., 7 p.m., and 10 p.m. (9.15 p.m. from Radio-Paris). The Committee has also examined a request received from the International Broadcasting Union to assist in an international programme of concerts to be given by various European nations in turn and not to last more than half an hour. The request met with a favourable reception. Regional stations were instructed to avoid relaying National concerts, in order to give their listeners a continuous alternative service.

## ITALY

## Government's Propaganda Campaign

*(From our Rome Correspondent)*

The Secretary of the National Fascist Party has recently circularised the secretaries of the federations of the Fasci di Combattimento, ordering them to see that the competent authorities arrange for all rural schools to have receiving apparatus for the purpose of making political and technical propaganda among rural children. The federation secretaries are urged to do their utmost to stimulate and co-ordinate the work, so that its results may be rapid and satisfactory, and to make a report to the federal secretaries with suggestions of organisations that might be made to collaborate in a more vigorous political and technical policy among the farming

- Political Broadcasts for Rural Italy
- Polish Search for National Humour
- An O.B. from the "Mouth of Hell"

population and the children in country schools. The circular goes on to say that it would be superfluous to enumerate the reasons for making this campaign or the advantages that will accrue from it to political propaganda. Under pressure from the Party and the Ministry of Communications, the firms manufacturing these rural receivers have agreed to sell them on reduced terms to schools, the offices of the Party, the Syndicates, Dopolavoro, and other official bodies. The circular ends by summing up the task of the secretaries as that of first making sure that every rural school has its receiving set, and then getting into touch with all the school and syndical authorities, in order that none of the possibilities of each local situation may be neglected.

## PORTUGAL

## A New Sound Effect

*(From our Lisbon Correspondent)*

One of the favourite walks of British visitors to Estoril is along the coast to a rocky headland fitly named the *Boca do Inferno* ("Mouth of Hell"). Here, owing to the formation of the cliffs, the heavy surf running in from the open Atlantic sets up a muffled roar which in rough weather can be heard many miles inland. This phenomenon was recently used by the *Emissora Nacional* to give a natural background of a storm at sea to accompany the first performance of a one-act play by the poet, Silva Tavares. The sound of the breakers came straight to the studio from the *Boca do Inferno*, where a microphone had been installed, and gave an atmosphere of vivid reality to the play's action.

## POLAND

## The "Lodge of Cynics"

*(From our Warsaw Correspondent)*

What was described to your Correspondent as "a circle of masters of humour," is at work here. Known as the "Lodge of Cynics," its function is to discover the type of humorous entertainment most likely to please Polish listeners. Several plays of unusual construction and of a highly satirical character have already been presented. M. Marynowski, the head of Polskie-Radio's Literary Department, said in an interview granted to your Correspondent that the task of the "Lodge" is by no means easy; censorship restrictions were a serious difficulty, and the presentation of intellectual humour in a form that listeners could spontaneously appreciate required careful preliminary consideration. At present, the "Lodge" has the co-operation of prominent authors and actors specialising in comedy, and so far they had confined their productions to plays reflecting the humorous side of public and private life in certain popular circles of the Polish community. M. Marynowski, however, was unable to forecast the lines along which the work of the "Lodge" would develop in the future.

## SWITZERLAND

## Suisse-Romande Orchestra's New Season

*(From a Correspondent)*

Ten concerts to be given by the Suisse-Romande Orchestra will be broadcast from the Lausanne and Geneva studios during the coming season. The conductors engaged include Ernest Ansermet, Albert Wolff, W. Mengelberg, and Franz von Hoeselin, and many well-known soloists, including Alexandre Brailowsky, Adolphe Busch, Marian Anderson, André de Ribapierre, Walter Gieseking, Jo Vincent, and Robert Casadesus, will be heard.



THE EMPIRE SECTION

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A Message from the AGENT-GENERAL FOR VICTORIA,

the Hon. RICHARD LINTON

It is the misfortune of an Age of Invention that even miracles become so quickly commonplace. It is only a few years since the human voice winged its way across the world and men excitedly speculated as to what effects would flow from such a wonder. Now we nonchalantly call a telephone number in Shanghai, in Texas, in Wagga Wagga, in Johannesburg, and grow irritated at a few moments' delay. Our children, never having known the time when the world was two deaf and dumb hemispheres, take it all for granted. To them it is not even a heritage, to be valued as such, but just part of their daily lives, like their meals.

The world is enjoying the fruits of broadcasting. Commerce, finance, even politics have shared the results of the subsequent revolution. There can be no question of its material benefits. Above and beyond these, however, there have been effects not so easy to evaluate, perhaps, since they cannot be put in a balance sheet, but none the less of immense importance. In a world of competitive business it may seem foolish to speak of the value of sentiment. Yet I, a commercial man, emphatically state that Understanding is the daughter of Sentiment and understanding is the basis of good business.

I have constantly wondered that Englishmen should so often fail to comprehend the depth of Australian affection for Britain. It is a feeling

that comes to us from our blood, deepened by our parents' stories of the land they left, broadened by the traditions of nobility they transplanted with them. Just as a scent, a sound, a distant view will recall to us a past event which has touched us, so will the actual sound of England, coming to us across half the world, suddenly set up in our minds a nostalgia, a dream of Home. The striking of Big Ben reverberates in us as we hear it on the wireless, and the echo is the echo of a dear voice dimly remembered. We stay up late to hear it. The Australian cities' noise is hushed; traffic has stopped; the streets are silent and empty. Then, softly but dramatically, we hear London calling. The great clock is London—London is England, and England our Mother. Our hearts are full of affection and our petty differences are but as fret and foam on the surface of a very deep stream which cut its channel too long ago to be deflected by the heels of mischievous boys breaking the turf on its banks. "London calling"! Yes, it calls home the thoughts of the thousands of scattered Englishmen away on the Empire's occasions. An Empire broadcast is the voice of a Mother to her distant children.

**The Man who made Australia, by FRANK RUSSELL**

HISTORY is too often told in a series of flashes the brightness of which serves to conceal what lies between. It is so with the early history of Australia, to which general attention has been directed on account of the forthcoming rejoicings of Victoria and its capital, Melbourne, in celebration of their joint Centenary.

Holland, Spain, France might have occupied the land their explorers sighted; they were content to look upon its unpromising shores from the sea. It was an Englishman, Cook, who first acquired its eastern coasts, and it was another English sailor who, eighteen years later, brought to Port Jackson the first sorry cargo of human wastage who came there as to a gaol, transported by a Government who had in their heads no vestige of the wondrous ideal which was to be found in Terra Australis—a new Britain Beyond the Seas—compensation to England for the recent loss of her penal settlement, the American colonies.

It was pure luck that, by the untimely death of the Brigadier-General of the famous 73rd

Regiment, ordered for service at Sydney to replace the wretched crew of self-seekers who formed the New South Wales Corps which had recently mutinied against Governor Bligh, a magnificent statesman should have been allowed to take the dead general's place. This was Lieut.-Col. Lachlan Macquarie, the O.C. the 73rd.

It was to this extraordinary man, so ill-used during his term, so vilified before and after his death, so misunderstood by the Colonial Office civil servants, that Australia owes its transformation from a contemptible, ill-governed prison, occupying an area running along the coast for 150 miles and inland another scant sixty, to a broad, planned colony where men could walk at full stature and take pride in building on Macquarie's foundations.

Macquarie was chided officially for his failure to understand what English politicians wanted. Despatches from the Colonial Office informed him acidly that men were committing crimes in England so as to be sent to the land he was making too attractive. His offence was that he

had balked at being a gaoler and had become a statesman. He encouraged a series of splendid explorations, built roads, opened up farm lands, settled free colonists, and even encouraged the better class of convicts, on their release, to hope to expiate their faults by taking part in his great work.

It is a fascinating story, this of Macquarie's, with extraordinary incidents of setbacks and betrayals, but of constant progress against official coldness and subsequent recall. Everything that Australia has accomplished since may be traced to the new hopes this Highland laird aroused in embittered or discouraged men who had forfeited their citizenship at home. When he left Australia, he thought he had failed, but so clear were the evidences of success found by his successors that they were constrained to carry on his work, with the later blessings of the statesmen in England who at last began to feel the first stirrings of a new possibility of Empire. Free men sought this new land, spread out with their flocks and herds over land opened up by Macquarie, penetrated to Queensland, to Victoria, and created—Australia.



Prince's Bridge from the south side of the Yarra

[By courtesy of Australian National Travel Assn.]



# The Centenary Celebrations

By GIBSON YOUNG

BEGINNING in October and continuing until April, 1935, Victoria will celebrate its centenary. Melbourne, the capital city, with its population of one million, will be the pivotal point of a comprehensive programme, which ranges from an Air Race from England to Australia to the Dedication of a National War Memorial. His Majesty the King will be represented at these celebrations by his third son, the Duke of Gloucester. Hundreds of distinguished men and women from most of the countries of the world will take part, champions in many sports will compete for large prizes, learned men from the well-known Universities will assemble for an International Science Congress, Cardinals, Bishops, and other Church dignitaries will journey to Melbourne early in December for the Eucharistic Congress, and Boy Scouts from all the countries bordering on the Pacific will attend a Christmas Jamboree at which they will meet the Chief Scout, Lord Baden-Powell.

The occasion is of such world-wide importance that it may be of interest to readers of WORLD-RADIO to read a few facts regarding the foundation of the State of Victoria exactly a hundred years ago.

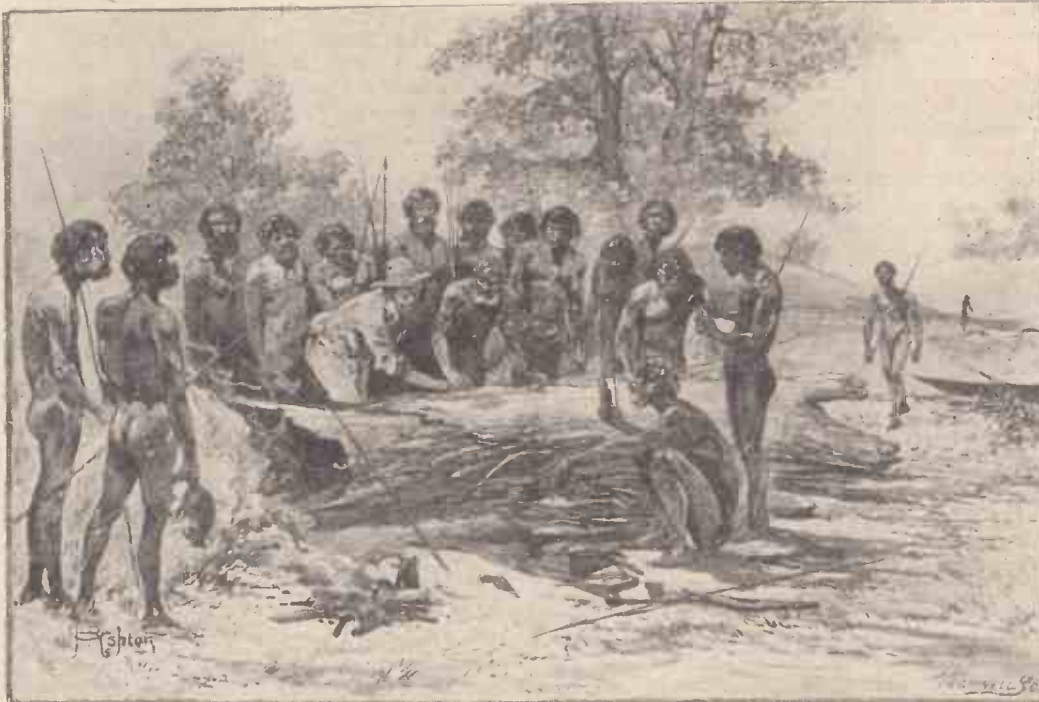
Three names stand out in this history as being jointly concerned in the opening chapter: Edward Henty, John Batman, and John Pascoe Fawcner.

In November, 1834, Edward Henty, son of an enterprising Sussex farmer, sailed into Portland Bay on the south-west coast of Victoria. His father and at least three brothers were at that time farming in the northern parts of Tasmania. Edward had for long enough cherished an idea that there was even better farming land on the mainland, across the Bass Straits. Accordingly, he set out in a small schooner to investigate. Portland chanced to be his first stopping-place, and so it happened that the first permanent settlement in that part of the country was made at a spot hundreds of miles from that which eventually became the capital and chief port, Melbourne. Although this southern tract of country, which was afterwards to be called Victoria, had been discovered and annexed as far back as 1803, no one had been sufficiently attracted by the possibilities of forming a permanent settlement.

The Hentys showed peculiar perspicacity in choosing this particular landing-place and home for their children, for Portland is the natural port for the western district of Victoria, which is to-day one of the most fertile sections of the whole State. The quality of its grazing land is unsurpassed by any in the Commonwealth. The Henty family still prosper in Portland and the neighbouring town of Hamilton (in which place I went to school with one of the great-grandsons of Edward Henty).

Six months later, in May, 1835, John Batman—also hailing from Tasmania—landed from a

small thirty-ton schooner, the *Rebecca*, on the banks of the river Yarra Yarra, which flows into the northern extremity of Port Philip Bay. Here he encountered tribes of Aborigines with whom he drew up an astonishing contract. In exchange for forty pairs of blankets, one hundred and thirty knives, forty-two tomahawks, forty mirrors, sixty-two pairs of scissors, two hundred and fifty handkerchiefs, eighteen red shirts, four flannel jackets, four suits of clothes, and one hundred and fifty pounds of flour, he persuaded the tribal chiefs to cede to him the right to cultivate over 500,000 acres in the



[By courtesy of the Agent-General for Victoria]  
Batman treating with the Aborigines

vicinity of his landing place. By this venture John Batman had actually founded "the Village," which was afterwards to become the seventh city in the Empire.

In 1803 Colonel David Collins was sent by the New South Wales Government to find a suitable place on the south coast on which to found a further convict settlement. Accommodation in New South Wales was insufficient. Fortunately for Victoria, Collins was not impressed with what he saw. When he set eyes on the country surrounding Port Philip, which was afterwards chosen by Batman as the most suitable place for his "village," Collins recorded the opinion that "every day's experience convinces me that this part of the country will never be resorted to by speculative men." By the irony of fate Collins Street, Melbourne, which is named after this intrepid prophet, is very much the resort of speculative men. It contains the principal banks, insurance companies' offices, and the Stock Exchange.

Batman's pushing methods with the natives on the mainland earned for him the envy and admiration of other Tasmanian settlers. One of these, John Pascoe Fawcner, lost little time in advancing his claims to portions of the same land which Batman fondly believed to be his own. In the following August, whilst Batman was still busy endeavouring to "legalise" his "treaty" with the Aborigines by obtaining official recognition of the deal from the Governor, Bourke, in Sydney, Fawcner landed on exactly the same spot on the Yarra on which Batman had conducted his conversations with the

natives. For some time after this these two claimants tried in every way possible to oust each other from this valuable property.

The boldness of Batman and Fawcner in practically seizing crown lands without payment, called the attention of the Government to this question of unauthorised occupations.

Considering the importance of Batman's enterprise, he was very shabbily treated by the authorities who might have acknowledged in some small way his contribution to the common weal. He was in no wise compensated for the loss of his lands, and five years later he died in comparative poverty.

It was not until some time later that the Port Philip district, as it was then known, received its name from the young Queen, and that Batman's "village" was called after her first Prime Minister, Lord Melbourne. The colony of Victoria continued under the jurisdiction of New South Wales until 1851.

Once the authorities had made a settlement of the land claims problem, there was no reason why the District of Port Philip should not flourish. A sturdy population was attracted by the richness of the soil and the ample presence of water over large areas. Sheep and cattle of the finest breeds were imported from the Homeland

and from New South Wales. The great woollen industry began to boom. All pastoral pursuits were particularly profitable, and, most important of all, the newly evolved colony started with a clean sheet so far as the convict system was concerned. Thanks to Colonel Collins no settlement had been made. Each of the other established States, New South Wales, Tasmania, South Australia, and the province which was afterwards to be known as Queensland, had been shamefully exploited by the Mother Country as settlements for her surplus criminal population, which she was unable to house in her own gaols. In order to understand this convict system problem, it is necessary to remember that at the accession of Queen Victoria, there were 200 offences against English law which could be punished by transportation. The theft of five shillings worth of food, the holding of certain political views, and poaching, resulted in terms of transportation which were in many cases entirely unmerited. In these circumstances it was only natural that the types of criminal varied as greatly as did the offence for which they were transported. At the one end of the scale there were men of the courageous integrity of the Tolpuddle Martyrs, and at the other the most savage cut-throats who were not improved by the brutality which was meted out to so many of them on arrival in the new continent. The majority of convicts proved, by their eventual usefulness and honesty, the futility of the legal system which had banished them from their homes.

The administration of the convict system





Melbourne's skyline, from the river

By courtesy of the Australian National Travel Assn.

gave rise to another of the blights from which the other colonies had suffered, the presence of a large corrective military class, possessing autocratic control over freedman and legal slave alike. Writing of one of these periods of military domination, Professor Ernest Scott of the University of Melbourne, may be quoted. "It was a great misfortune," he writes in his *Short History of Australia*, "that this period of military rule occurred; because, in the course of it, the colony (New South Wales) was brought to degradation by drink, corruption, and general iniquity, which required years to mitigate."

The State of Victoria was spared such plagues, and immediately started its upward course towards a destiny which has been one of almost continuous progress and well-being. There have been struggles, of course, but here were the makings of a garden State from which the fruits of the earth and the gems and precious stones of Cathay were eventually to be poured with such lavishness.

A few years later, in the early fifties, gold was discovered first in New South Wales, and then in enormous quantities in Victoria at places like Ballarat, Bendigo, Clunes, and Mount Alexander. As the news of King Solomon's Mines spread around the world, as the story was passed from mouth to mouth or from news-sheet to news-sheet, it did not tend to lose colour or magnitude. The rush to the gold fields was fantastic. Like all stampedes, it had its tragic side. My paternal grandfather was one of the early comers. A compositor and journeyman printer from Newcastle-on-Tyne, he had forsaken his employment at home to seek an easier fortune overseas. With a young wife he arrived at Melbourne after a voyage which lasted for four months. Before this article appears in print it is probable that the journey will have been flown in less than a week. However, allow my ancestor to fly with you backwards into time and tell you of his first experience on the goldfields more than eighty years ago. He writes: "Anne and I set out for Bendigo in an ox-waggon, with a number of other adventurers, with some of whom we eventually became quite friendly. It was a journey full of hardship and some danger from the dreaded bushrangers who infested all the routes to and from the goldfields. Many of these were escaped convicts from over the border in New South Wales. At night the females slept in the waggon, and the men, all of whom were fully armed, had to

be content with a bed of blankets and bracken underneath it.

"During the last eight weeks two other young men and I have been engaged in a form of digging which is new in these parts—that is, seeking the gold in a stone called quartz. This is a most laborious job and entails a considerable outlay in time and money. Once you get a reef, however, it is almost sure to yield you payable work for several years, and in some instances reveals a princely fortune to the owners.

"I like digging, exceedingly. The work is harder by far than working at the press, but for all that I would not now exchange my present employment for the softest journeyman printer's job available. I am as fat as a pig and as strong as a lion, and can handle a pick and shovel with any man, and strike a blow with a sledge-hammer that would do justice to any son of Vulcan. I have also grown a large, black beard and moustaches which, Anne says, give me a most furious cast.

"Provisions in Bendigo are fully 50 per cent. higher than in Melbourne. Milk is 1s. a pint, butter 3s. 6d. a pound, eggs 12s. a dozen, potatoes 6d. a pound, apples 2s. 6d. a pound, bread 3s. 6d. a four pound loaf, beer a 1s. a glass, liquor [by which he means all other spirituous drinks] 1s. a nobbler."

It will be seen from this letter that fortunes were not so easy to pick up as one might have imagined from the accounts which were published at the time. My grandfather did prosper, but not as the result of gold-digging. He built the first wooden house on Bendigo three weeks after my own father was born in a tent adjoining his claim.

The effect of the discovery of gold on the character of Australia is hard to estimate, but there is no doubt of the material advantages which accrued to many individuals and to the country generally. In the sixty years following the first rushes more than £600,000,000 had been swept or extracted from the soil of the Commonwealth. Since that time the supply has dropped considerably, but now that the price of gold has risen so dramatically, the gold industry is definitely flourishing again.

Unless you have been in the country, it is impossible to conceive the zest with which the Australian people enter into festivities, games, all outdoor sport, galas, commemorations, and pageants. This is one of the reasons why the Duke of Gloucester and all those visitors who go out for the Centenary Celebrations, will have such a gay time.

## Some Centenary Fixtures

- OCT. 13 to NOV. 10:—All-Australian Exhibition (manufactures, primary products, etc.).  
 OCT. 13 to NOV. 10:—Wild Australian Stampede.  
 OCT. 18 to 27:—Centenary Royal Agricultural Show.  
 OCT. 20:—Competitors in World's Greatest Air Race leave England (£15,000 and MacRobertson Trophy).  
 OCT. 20:—Caulfield Cup Race Meeting (£15,000 prize money).  
 OCT. 23 to 29:—Centenary Horticultural Show.  
 OCT. 27:—Moonee Valley Gold Cup (£6,000 prize money).  
 OCT.-NOV.:—Light Car Racing.  
 NOV. 1, 2, and 3:—South Street Band Championships, Ballarat.  
 NOV. 3:—Derby Day Race Meeting, Flemington (£10,000 prize money).  
 NOV. 5, 7, 9:—International Polo Tournaments.  
 NOV. 6:—Centenary Melbourne Cup Race (£10,000 Stake and Trophy valued at £200).  
 NOV. 8 to 16:—All-Australian Anglican Assembly.  
 NOV. 10:—Navy, Army, and Air Force Gymkhana, Displays, and Pageants.  
 NOV. 10:—Combined Aerial Pageant at Laver-ton. Includes the presentation of the prizes to winners of the MacRobertson International Air Race.  
 NOV. 11:—Dedication of National War Memorial.  
 NOV. 12 and 14:—Army, Navy, and Air Force Tattoo.  
 NOV. 12 to 21:—International Golf Championships (£5,000 prize money).  
 NOV. 14 and 15:—Ballarat Agricultural and Pastoral Society's Show.  
 NOV. 16 and 17:—Intra-Empire Public School Sports.  
 NOV. 16 to 19:—Portland Celebrations and Pageantry.  
 NOV. 17:—Henley Regatta.  
 NOV. 17:—Review of Army, Navy, and Air Force.  
 NOV. 19 to 26:—Women's Week, Women's International Congress. The subject is "Citizenship—Responsibilities and Opportunities."  
 NOV. 21 to DEC. 1:—Bendigo Centenary Agricultural Show and Mining Exhibition.  
 DEC. 2, 6, 7, 8, 9:—Roman Catholic Eucharistic Congress.  
 DEC. 27 to JAN. 10:—Boy Scouts' Pan-Pacific Jamboree.  
 DEC.-JAN.:—Victorian Yacht Racing Association Regatta.

## Itinerary of H.R.H. the Duke of Gloucester

- OCT. 18:—Arrive Melbourne, and officially open the Centenary Celebrations (on the steps of Parliament House).  
 OCT. 22 and 23:—Travel by easy stages to Canberra.  
 OCT. 24 and 25:—At Canberra.  
 The Duke will then return to Melbourne by road and rail through Gippsland.  
 NOV. 6:—Attend Melbourne Cup.  
 NOV. 9:—Attend the Opening of the Seventh Biennial Conference of the British Empire Service League, in the capital; also the Official Conference Banquet which follows.  
 NOV. 11:—Armistice Day Ceremony.  
 NOV. 12:—Embark for Tasmania.  
 NOV. 14:—Arrive Hobart.  
 NOV. 18:—Leave Tasmania, from Burnie.  
 NOV. 19:—Visit Portland.  
 NOV. 22:—Arrive Sydney. (During his stay in Sydney the Duke will visit some country centres.)  
 DEC. 1:—Arrive Brisbane, having travelled by easy stages from Sydney.  
 DEC. 10:—Sail from Brisbane in H.M.A.S. *Australia*, via New Zealand.



# EMPIRE PROGRAMME LETTERS

## A Football Enthusiast's Suggestion

From Marshall, Saskatchewan, Canada:—

"I have been a listener for quite a long time now, and I would like to suggest to you that during the coming football season you give out the Third Division results. I am sure it would be much appreciated by a great many listeners on Saturday afternoons. Many thanks for the cricket results, as I get them about a day and a half before we receive our papers."

## A Link with Birmingham

From Cape Town, South Africa:—

"Having left England some five years ago, I thought it would be a few more years before I heard any more music from London, but good reception and a good set seem to have brought me in closer contact with my people, who are in Birmingham.

"From 7 o'clock until I go to bed I have nothing else but Daventry. Last night I enjoyed Harry Gordon relayed from Aberdeen, and I think the Varieties from Radiolympia are wonderful. You can imagine in a country like ours—where, unfortunately, we have only one orchestra—how grateful we are for a wireless set."

## A Plea for Welsh Programmes

SIR,—I have pleasure in reporting to you consistently good reception of your transmissions on GSB and GSD.

My principal reason for writing, however, is to ask if it is an oversight on the part of the persons responsible for the Empire programmes which is responsible for the absence in the latter of any reasonable proportion of Welsh items.

To examine the programmes for a typical three-monthly period would be to conclude that the proportion of Welsh among Empire listeners was negligible. This, of course, as you are aware, is not so, and I have been asked by the Welsh people in Uganda to write and

## THE LAUNCHING—

September 26, 1934

(as heard by one Canadian Listener)

We stood beside them on the Clydeside "hard."

The sundering span of half a world away  
Had melted, and the sunlight of our day  
Dimmed to the murky reek of the launching yard.  
Then she whose every action claims regard  
Stepped forward, and we heard a quiet voice say:  
"I name thee *Queen Mary*, and I pray  
Safe journeys' joy for those thy hull shall guard."

And with the cultured tones of England spoke  
THE KING, —of long delay and sharp regret,  
And factory chimneys standing void of smoke,  
While workless thousands wondered on—and yet  
Of Faith that should outlive the wrecks of time  
And build on earth a Brotherhood sublime.

E. M.

ask you if nothing can be done to increase the number of Welsh items.

In this connexion I must add that, much as we enjoy listening to Tom Jenkins at the Plaza, Swansea, we Welsh people abroad do not regard such entertainment as typically Welsh.

I think you will sympathise with us in our experience of last week. We had looked forward exceedingly to hearing the half-hour of the week of the National Eisteddfod, which was our allowance in Transmission 4. When 6 p.m., G.M.T., came, the announcer was still announcing programmes for the following week. He then went on with "one or two announcements I have to make," and finally we were allowed to hear the Eisteddfod—in the middle of an item. We did not notice the same delay about fading out the concert when the time was up; in fact, we were rudely (in the Shakespearean sense) interrupted in the middle of listening to a choir singing the one Welsh piece of our (bare) half-hour.

I make no comment on the above true account of our Eisteddfod week in Central Africa, but I leave you to judge our disappointment.

Please use your influence to alter this state of affairs, thereby earning the gratitude of Welsh exiles.

Yours faithfully,

GORONWY ap GRIFFITH.

Kampala, Uganda, August 12, 1934.

[NOTE.—Every effort is made to ensure the running of programmes according to schedule, but there are occasions when the introduction of topical items necessitates a last-minute alteration in timing. These changes are avoided whenever possible. Requests for programmes of a certain type or nationality are of great value to programme-builders. There are frequently concerts from various parts of the British Isles; and Welsh, Irish, and Scottish items will continue to find a place in Empire programmes.—Ed.]

## EMPIRE NEWS

### AUSTRALIA

(From our Australian Correspondent)

#### Policy of the Commission

Mr. W. J. Cleary, the recently-appointed Chairman of the A.B.C., said, on his arrival at Adelaide, which he has visited in his tour of the national broadcast stations: "Although my position is only supposed to be a part-time one, I propose to give the next six months exclusively to the work of the Australian Broadcasting Commission." Mr. Cleary informed the people of South Australia that he is seeking to acquaint himself with the likes and dislikes of listeners. "The Australian Commission is only two years old," he remarked. "It is following the steps of the British Broadcasting Corporation, which is twelve years old, and is still finding it difficult to please everyone. So far as I can see the A.B.C. will have to consider a policy of its own. The wide spaces of Australia and the great distances between stations present a problem different from that of the B.B.C." Referring to Australian performers, Mr. Cleary said it was the duty of the Commission to encourage them, but it was also their duty to rehearse and improve themselves. The leavening of imported artists that came to Australia would help. He stated that the Commission was also endeavouring to frame a Federal policy on broadcast talks over the air.

#### Station for Political Party

The Commonwealth Government has granted a B class broadcasting licence to the United Australia Party, for a station to operate in Melbourne. This is considered to be the last for which there will be room "on the air" in Victoria.

### CANADA

#### Reception of Launching of *Queen Mary*

(From our Montreal Correspondent)

Radio listeners in Canada had two chances of hearing the broadcast of the launching of the 534 and its christening by *Queen Mary*. In Montreal the broadcast was distributed by CFCF, and in almost every home the receiver was tuned in early to make sure of getting the relay. In hundreds of business offices, also, work ceased so that the transmission might be listened to. Many offices are equipped with "radios"; others hired receiving sets for the occasion. Montreal was fortunate in hearing clearly every detail, including the breaking of the bottle. The breaking away of timbers, the grinding of chains, and the reverberating splash as the giant liner took the water, came over as clearly as if the launching had been in Montreal; and the speeches by the King and others were also brought over without a word being slurred. Several hundred invited guests heard the broadcast aboard the Cunarder *Ascania* in Montreal Harbour. At night the Canadian Radio Commission, which had taken a record of the broadcast, rebroadcast it across Canada.

### CEYLON

#### Broadcast of Throne Presentation Ceremony

(From our Ceylon Correspondent)

A very enthusiastic reception was accorded to his Royal Highness the Duke of Gloucester when he visited Ceylon on his way to Australia in connexion with the Centenary Celebrations in Melbourne. H.M.S. *Sussex* put into Colombo at 8 a.m. on September 20, and his Royal Highness landed at 10.30 a.m., when he was received by his Excellency the Governor, and the Members of the State Council and other Officials were presented to him. His Royal Highness then drove in State to Government

Lodge, through gaily decorated streets thronged with people who had come from all parts of the island to offer a welcome to his Majesty's son.

After spending two days in Nuwara Eliya his Royal Highness visited Kandy on September 23 to fulfil the principal object of his visit—the presentation to the people of Ceylon of the Throne and Crown of the last King of Kandy, which, it may be remembered, have been kept in the Throne Room at Windsor Castle for over 100 years, and which his Majesty the King had graciously decided should be returned to the people of Ceylon. The Ceremony took place in the Audience Hall of the Kings of Kandy, the proceedings being broadcast from there through Colombo. To quote the official commentator,

"the Audience Hall of the Kings of Kandy has come out of its long sleep to echo once more to the voice of Royalty. Once again it lives and throbs with the tense emotions of the expectant throng of loyal subjects; once again it glitters with colour and gorgeous pageantry."

Ceylon will long remember the visit of his Royal Highness, and those who could not attend the Ceremony, but who listened to the broadcast of it, will also have long and happy recollections of a ceremony both thrilling and impressive.

#### Canada's Economic Progress

SIR WILLIAM CLARK, late High Commissioner in Canada and High Commissioner Designate for the South African Protectorates, is to be the guest of honour of the Royal Empire Society at the first City Luncheon of its new Session at the Cannon Street Hotel on Tuesday, October 16. The subject of his address will be "Canada's Economic Progress." Sir Archibald Weigall, Chairman of Council of the Society, will preside.



## FOREIGN LANGUAGES

## FRENCH

Tuesdays, 6.50—7.20 p.m. (National Programme)

## A. REMARKS ON PRONUNCIATION.

1. In our last lesson, the pronunciation drill contained phrases and sentences in which the French vowel *i* was long.

Listeners should study, in the B.B.C. French Pamphlet, p. 3, the rules that govern Vowel length in French. After having studied these rules, and familiarised themselves with the phonetic symbols, they might transcribe in the phonetic script, the phrases and sentences given in the pronunciation drill on p. 5 of the pamphlet.

## 2. CERTAIN MISTAKES TO BE AVOIDED.

(a) English students are almost invariably tempted to make the French Vowel *i* long, when it is final in a word, e.g., when there is no consonant sound following the vowel. In that position the vowel *i*, like all other French vowels, is short: Ex. *Oui, merci. Par ici. J'ai fini*, etc. . . .

(b) The English short *i* vowel as in *mist, fit, ill*, etc., must never be used when pronouncing French.

(c) Southern English speakers who do not roll the *r* sound at all, in words like *fear, dear, leer, etc.*, will have realised that, in French, the *r* sound must be heard in words like *frent, dire, live*, etc. Do not pronounce the French word *dire* as you pronounce the English word *dear*.

B. Key to Exercise B, *Nelson's First French Course*, p. 17.

1. Les vaches sont dans la cour. 2. Les pigeons sont dans le jardin. 3. Les chats sont sous la table. 4. Marie a les fleurs. 5. Les cochons sont dans le champ. 6. Les livres sont sur le pupitre. 7. Les boîtes sont dans la salle. 8. Jean a les pains.

C. Key to Exercise C, *Course*, p. 17.

1. Les plumes sont dans la boîte, or les plumes sont sur la table, or les plumes sont sur le pupitre, etc. . . . 2. Les livres sont sur la table, or les livres sont dans la salle, etc. . . . 3. Les cochons sont dans la cour. 4. Les moutons sont dans les champs. 5. Marie a les fleurs. 6. Jean a les livres. 7. Marie a les crayons. 8. Jean a les plumés.

N.B.—It is perfectly clear that, in the preceding exercise, every question is capable of being answered in different ways. We cannot, for lack of space, give all the possible answers; but our readers will know that, within the limits of their vocabulary, they can write any answer that will make sense.

## D. Key to the additional exercises which are given on page 5 of the French Pamphlet.

## Exercise I. Specimen Answers

1. Les livres sont sur les tables. 2. Ce sont les chats. 3. Les fleurs sont dans les boîtes. 4. Ce sont les cochons. 5. Les vaches sont dans les champs. 6. Ce sont les moutons.

## Exercise II.

1. Les plumes ne sont pas dans la boîte. 2. Les fleurs ne sont pas dans le champ. 3. Jean n'a pas les livres. 4. Les poules ne sont pas dans la cour. 5. Les moutons ne sont pas dans les champs. 6. Les chiens ne sont pas sous la table. 7. Les crayons ne sont pas sous le livre. 8. Les tables ne sont pas dans la salle.

N.B.—In the preceding exercise students were asked to put certain given sentences into the negative form. A negation is, as a rule, expressed in French by a combination of two words, viz., the word *NE* which precedes the verb, and another word, generally *PAS*, which follows the verb: *les plumes sont dans la boîte, les plumes ne sont pas dans la boîte.*

When *NE* precedes a verb beginning with a vowel, it is written *N'* and pronounced *N*: Ex. *Jean a les livres, Jean n'a pas les livres; Marie est dans le jardin, Marie n'est pas dans le jardin*, etc.

The word *NE* is often pronounced *N*, although the ordinary spelling does not show the elision of *E*. This often happens when the word following *NE* begins with a consonant, and the word preceding *NE* ends with a vowel-sound: Ex. *Les cochons n(e) sont pas dans la cour. Les pigeons n(e) sont pas dans les champs.*

## Exercise III.

1. C'est la fleur. 2. Oui, mademoiselle, ce sont les plumes. 3. Oui, monsieur, la boîte est sous la table. 4. Jean a les crayons. 5. Oui, madame, les pigeons sont dans le jardin. 6. Ce sont les vaches.

E. Here is a literal translation of the short poem by Victor Hugo, which was read during the French Talk last Tuesday evening.

## Lumière et joie

Light and Joy

Tout chante et murmure,  
Everything sings and whispers,

Tout parle à la fois,  
All things speak at the same time.

Fumée et verdure,  
The smoke and the greenery,

Les nids et les bois;  
The nests and the woods;

Le vent parle aux chênes,  
The wind speaks to the oak-trees,

L'eau parle aux fontaines,  
The water speaks to the fountains,

Toutes les haleines,  
All the whispers

Deviennent des voix.  
Become voices.

F. I hope that a good many of my listeners will do not only the exercises set for Homework, but will devise for themselves many more exercises on the lines of the additional exercises given in the pamphlet. Here is for instance something quite easy and useful:

Turn all the statements of Exercise I in the pamphlet, p. 5, into questions by using *EST-CE QUE*, and answer the questions in the negative. First say aloud both questions and answers, then write them down.

Ex. *Est-ce que le livre est sur la table? Non, monsieur, le livre n'est pas sur la table.*

*Est-ce que c'est le chat? Non, madame, ce n'est pas le chat*, etc.

E. M. STÉPHAN.

## GERMAN

Thursdays, 6.50—7.20 p.m. (National Programme)

## Test on Lesson I

THE German equivalents for the English expressions, based on Lesson 1, given in the last issue of *WORLD-RADIO*.

1. Ich habe eine grosse Tasche in meinem Mantel. 2. Es ist eine Manteltasche. 3. Meine Tasche liegt auf dem Tisch. 4. Was für eine hübsche Handtasche! 5. Jede Dame hat eine Handtasche. 6. Was ist darin? 7. Ist dein Bleistift spitz? 8. Sein Bleistift ist stumpf. 9. Ich will ihn spitzen. 10. die Spitze des Bleistifts. 11. Die Feder ist im Federhalter. 12. Sie schreibt mit einer Füllfeder. 13. Womit schreibt sie? 14. Er schreibt seine Briefe immer mit blauer Tinte. 15. Er schreibt die Übungen in ein Heft. 16. Ist Ihr Heft ganz voll? 17. Mein neues Heft ist fast leer. 18. Hat er ein scharfes Taschenmesser? 19. Jeder Junge hat ein gutes Taschenmesser. 20. Wo ist Ihr Geld? 21. Was für eine Uhr haben Sie? 22. Ich habe eine neue Armbanduhr. 23. Er hat eine alte Taschenuhr. 24. Welche Farbe hat Ihr Taschentuch? 25. Das Damentaschentuch ist weiss. 26. Wo ist der Schlüssel?

27. Er liegt auf dem Tisch. 28. Ich stecke ihn ins (=in das) Schlüsselloch.

## Am Kaffeetisch

Helen: "Wie nett, dass ihr gekommen seid. Ich denke, wir trinken erst einmal Kaffee." Victor: "Ich habe mich schon den ganzen Tag auf Ihren guten Kaffee gefreut (1)." Marion: "Ja, ich auch. Nach dem Kaffee gehen wir mit frischen Kräften (2) an die Arbeit." H.: "Ich selbst trinke nachmittags lieber Tee, aber ich weiss ja, wie gern ihr Kaffee trinkt. Nehmen Sie Sahne (or Rahm) oder heisse Milch, Victor?" V.: "Wenn ich die Wahl (3) habe, trinke ich Kaffee lieber auf deutsche Art (4), d.h. mit Sahne." M.: "Ich nehme lieber heisse Milch." H.: "Habt ihr schon die Aufgaben für die nächste Deutschstunde gemacht?" M.: "Ich arbeite jeden Tage wenigstens eine halbe Stunde und habe schon alles wiederholt." V.: "Leider habe ich nicht jeden Tag Zeit, Deutsch zu arbeiten, und bin daher noch nicht so weit wie Sie." H.: "Ich habe zu meinem Schrecken (5) gemerkt, dass ich trotz meines Aufenthalts (6) in Köln sehr viel Grammatik vergessen habe." V.: "Aha, da ist es wirklich Zeit, dass wir einmal wieder ins Buch schauen." M.: "Ich fand, Herr Kroemer hat das letzte Mal beim Diktat ein bisschen zu schnell gesprochen." H.: "O, ich konnte gut mitkommen (7)." V.: "Und wie viele Fehler haben die beiden Damen gemacht?" H.: "Na (well), und wie viele haben Sie denn gemacht?" V.: "Das behalte ich für mich (8); aber sollten wir nicht lieber an die Arbeit gehen (9) als uns zu necken (10)?" M.: Gut! Habt ihr *Sack und Thompson*, das Pamphlet und *WORLD-RADIO* zur Hand?" (11).

(1) sich freuen auf, to look forward to  
(2) renewed strength. (3) choice. (4) in the German way. (5) to my horror. (6) stay. (7) follow. (8) I keep that to myself. (9) Had we not rather start work? Lit., go to work. (10) tease. (11) at hand, ready.

## Test on Lesson 2

Write out the German equivalents for the English expressions, based on the reading text of Lesson 2. Compare your written work with the key to be given in the next issue.

1. Does this teacher teach German? 2. I give German lessons. 3. He asks one question after another. 4. Have you put your book away? 5. She explains the difficult exercise to him. 6. Can you explain that to me? 7. He gave a good explanation. 8. All pupils have done their revision well (*lit.*, have revised diligently). 9. One after the other stood up. 10. Two German sentences are written (*lit.*, stand) on the blackboard. 11. He writes the new words on the blackboard. 12. Have you made many mistakes? 13. Is everything correct? 14. No, there is a mistake in the second German sentence. 15. The last lesson in the book was very easy. 16. We like our German lesson. 17. These exercises are rather difficult. 18. He corrects all mistakes. 19. Has she made a correction? 20. Please open your books. 21. He reads too quickly. 22. Have you done your English translation yet? 23. Does he translate well? 24. She translates from English into German. 25. There is no rule for this. 26. We go (are going) home.

Translation of the Reading Text of Lesson 21  
The Seasons: Autumn and Winter

"Herbst" ("Autumn") is the same word as the English word "harvest" and (thus) originally means "harvest." Autumn is the time of plenty. The corn gets ripe, the farmer picks the apples and pears and digs up the potatoes and roots (out of the fields). In September the vintage too begins; it lasts till the middle of October. In Germany - it is

(Continued on page 495)



# Europe's Programmes

A Fortnightly Review

By "YODELLER"

DURING the fortnight ending October 6, the European "ether" has given listeners the privilege of hearing the voices of no fewer than three world-famous sopranos. On Sunday, Elisabeth Schumann appeared before the Vienna microphone in a recital of songs by Joseph Marx, the composer himself accompanying her at the piano. This worthy descendant of Henrietta Sontag usually specialises in the songs of Strauss and Schubert, so that it was a change to hear her in the rather heavier type of *Lieder* by Marx. I am not sure that I liked the change.

On the previous Sunday, another Elisabeth—this time Elisabeth Rethberg—broadcast from the long-wave Hilversum, the singer being assisted by the A.V.R.O. orchestra; and her rendering of Beethoven's "Ah! Perfido" aria was a remarkable achievement. Finally, on Thursday, Copenhagen gave its listeners an opportunity of hearing the flute-like notes of the famous coloratura soprano, Conchita Supervia.

## An Amusing German Broadcast

On Wednesday, Munich radiated a programme entitled "A Trifle too Exotic." This, as the announcer took care to explain, was German composers' conceptions of music from foreign lands as compared with the reality. The sponsor of this programme was Hans Reimann, and the method he adopted was to introduce an "exotic" conception of a foreign land as painted musically by an alien composer, after which he gave an illustration—frequently by means of a gramophone record—of the actual music of that country. For instance, Herr Reimann introduced Ketelbey's "In a Persian Market," played by a glorious orchestra—all Eastern melody, atmosphere, and glamour. Then he played through a recording of national airs played by a—to our Western ears—quite unmusical orchestra from Teheran. Next came Luigini's "Ballet Egyptian," followed by that which to me is a dreadful series of noises, but which to the Egyptian *fellahin* is music. The programme proved to be great fun, illustrated as it was by a fund of witty humour and not a few cracks at what some people regard as the *snobisme* of musical taste. A better name for this broadcast might have been "Debunking the East."

## Broadcast Coincidence

On Monday, when listening to a portion of the "Scrapbook for 1910," broadcast from London Regional, I heard the commentator mention the old-time *Merry Widow* show. A moment later a chance touch of the dials brought in Stockholm, and by an odd coincidence I was just in time to hear the announcement of Lehár's *Merry Widow* operetta.

Later, I came upon Toulouse giving an abridged version of *Carmen*, but as that station was suffering from severe heterodyne interference, I forsook it in favour of Hamburg, from which station there came, curiously enough, the voice of Lucienne Boyer singing, in her own inimitable way, a song which is now invariably associated with her name: "Parlez-moi d'Amour."

## Budapest's Woman Announcer

The lady who speaks into the microphone at Budapest has always excited my intense admiration. Her linguistic abilities are amazing, for she announces regularly in the Magyar, German, and French tongues, and occasionally she

(Continued in next column)

## BRUSSELS (No. 2—Flemish)

FREQUENCY: 932 kc/s.

WAVELENGTH: 321.9 m.

POWER (COPENHAGEN): 15 kW.

DISTANCE AND BEARING FROM LONDON: 200 miles; 102°.

CALL: "Hier Brussel NIR!" or "Hier Brussel NIR, Uitzending van Vlanara" or "van Sarov!" etc.

INTERVAL SIGNAL: First few bars of Flemish popular song, "Dan zal het beeaiaard speelen!" by Peter Benoit.

Man announcer.

Announcements are made in Flemish only.

Closes down with the words: "En thans wenschen wy U een goede nacht. Wel te rusten!" followed by the National Anthem, "La Brabançonne."

(Continued from previous column)

adds English and Italian—all without apparent effort. On Saturday it was this lady's duty to announce a broadcast of Zeller's *The Bird Fancier*, and as this is a favourite operetta I listened with some interest to see how the title was rendered in the usual three languages. The lady gave the Magyar and German titles without difficulty. It was the French translation, however, which I wished to hear, as I could think of no idiom in that language for "Bird-fancier." Miss Budapest, however, seemed just as puzzled, for she hesitated a moment—the first time I have ever found her hesitate—then evaded the issue by announcing an "Operette de Zeller." The "Operette de Zeller" proved to be most enjoyable.

On Thursday I heard a Frenchman singing "Valentino," the film hit so popular in France, and was under the impression that it was coming from Radio-Strasbourg. A moment later, however, it became apparent that the "Frenchman" was an Englishman and the "French" station the Midland Regional. In other words, I had mistaken Stanley Holloway for one of our Gallic friends. Which only goes to prove that Mr. Holloway's imitative faculties are as much at home in a foreign idiom as they are when dealing with the idiosyncrasies of a certain gentleman who persists in dropping muskets.

## Sir Edward Elgar

For years the German musical public has given to Sir Edward Elgar the recognition which is his due, and it seems strange that a foreign nation should have perceived our great composer's true merit at an earlier period than we did ourselves. On Friday listeners to Cologne heard a superb version of the late Sir Edward's *Enigma Variations* played by the station orchestra, which interpreted this lovely work with all the skill and feeling its author could have desired.

Another Englishman is now rapidly obtaining a foreign radio public—George Bernard Shaw. Mr. Shaw's works have been in the Continental programmes on one or two occasions lately, and last week Radio-Paris transmitted a wireless version of *You Never Can Tell*, the actors being drawn from the "Art et Travail" group. The company—an amateur one, I presume—worked very hard, but to me it seemed that the Shavian wit lost something of its brilliance in the translation into another language.

Other items heard during the period under review include a comic opera by Suppé from Rome; a conversation between persons flying in an airplane over Berlin and a member of the studio staff, contact being maintained by a short-wave wireless receiver; and, finally, Schubert's "Trout Quintet" from Vienna.

## Last Week's Log

(September 30—October 6)

By "THE SEARCHER"

LAST week saw the end of the long fine spell that we have enjoyed for so many months. Rain fell every day, and on the Thursday there was a gale of wind accompanied by remarkably low temperature readings. It is not, therefore, surprising that I have to report the presence of atmospheric interference throughout the week, the worst evening being that of the Thursday, when they were so bad that there was no pleasure in listening to any but the most powerful foreign stations.

As is natural under such conditions, the long-wave stations were the worst sufferers from natural interference. Only at intervals, in fact, were they at all worth bothering about. As a matter of duty I searched over the long waveband each day and found that Huizen, Radio-Paris, Luxembourg, and Oslo were generally coming in with good strength. Warsaw was receivable without interference at times on most days, but Motala and the Eiffel Tower invariably suffered from strong heterodynes. Kalundborg was at good strength during the week, but was badly jammed on the Saturday. The Deutschlandsender never reached more than moderate loudspeaker strength.

## Transmissions that Defeat Interference

A remarkable feature of the medium waves was the way in which certain stations came through without interference, though one would expect them to be either completely jammed or accompanied by an unpleasant background. An outstanding instance is Frankfurt, which shares the 251-metre channel with Cassel, Freiburg-im-Breisgau, Kaiserslautern, and Trier. On every evening, with the exception of the Saturday, Frankfurt was clear. Lyons-la-Doua, Genoa, Rennes, and Nürnberg are other examples. It will be interesting to see whether this state of affairs continues as, with the approach of winter, the field strength of the smaller wavelength partners increases.

Budapest, Beromünster, Athlone, and Stuttgart were all in excellent form, but Vienna was slightly below par on the Monday and Tuesday. Brussels No. 1 and Prague also showed a slight falling off on the Tuesday, though otherwise these two stations, with Florence and Cologne, came in as well as could be desired.

Sottens was in splendid form on the Friday and Saturday, and the Ecole Supérieure was particularly good on the same two evenings. Stockholm has varied a little, but has never fallen below good loudspeaker strength. Its best evenings were the Monday, Thursday, and Saturday. Rome and Munich scored full marks throughout the week.

One hoped that Leipzig was entirely clear of the heterodyne troubles which were in evidence some months ago. This week, unfortunately, there has been a recrudescence of heterodyne interference, Leipzig's transmissions having been spoilt on the Tuesday and the Saturday. Berlin and Hamburg were always well received, and Brussels No. 2 obtained a "V.G." in the Log every evening. Breslau would have done so but for a certain falling off on the Saturday.

The Poste Parisien has been somewhat variable; its best nights were the Monday, Friday, and Saturday. Bordeaux was always well received. I have already mentioned the jamming of Frankfurt on the Saturday; this station was also rather on the weak side on the Tuesday.

Trieste had a fine record for the week, and Königsberg was particularly good on the last four evenings. Nürnberg always came through at loudspeaker strength, but gave the best account of itself on the Friday and Saturday.



# IN NEXT WEEK'S PROGRAMMES

## SUNDAY

### BRUNO WALTER AT AMSTERDAM

2.10—3.40 p.m. HILVERSUM (301.5 m.). The Concertgebouw Orchestra, conducted by Bruno Walter: Dusolina Giannini (arias).

### THE EUCHARISTIC CONGRESS

3.0—3.45 p.m. RADIO-PARIS (1,648 m.) and several other stations. A relay from Buenos Aires.

### WAGNER OPERAS

5.35—9.0 p.m. MUNICH (405.4 m.), relayed by Nürnberg, etc. "Lohengrin."

6.30—9.0 p.m. COLOGNE (455.9 m.). "The Flying Dutchman."

### THE BOIELDIEU CENTENARY

7.0—9.0 p.m. STUTTART (522.6 m.). "The White Lady."

## MONDAY

### DOHNÁNYI AND JOSEF HOFFMANN

6.40—8.50 p.m. BUDAPEST (549.5 m.). Philharmonic Concert.

### DVOŘÁK'S "SAINT LUDMILLA"

7.0—9.35 p.m. BRNO (325.4 m.) and PRAGUE (470.2 m.).

### "LOVE IS THE BEST DOCTOR"

8.30—9.30 p.m. BRUSSELS No. 1 (483.9 m.). Molière's "L'amour médecin," with Lully's music.

## TUESDAY

### "THE GIPSY BARON"

7.0—9.30 p.m. WARSAW (1,339 m.), relayed by Lwów, Wilno, etc. Johann Strauss's "Zigeunerbaron."

### MAHLER'S FOURTH SYMPHONY

8.55 p.m. HUIZEN (1,875 m.) K.R.O. Orchestra.

### THE DRESDEN STRING QUARTET

9.15—10.0 p.m. OSLO (1,154 m.). Mozart and Brahms Quartets.

## WEDNESDAY

### MUSIC AT OLD VERSAILLES

7.0—7.30 p.m. COPENHAGEN (255.1 m.), relayed by Kalundborg (1,261 m.). A Lully and Rameau Programme.

### A Nietzsche Anniversary

On Monday evening, October 15, at 7.15, all the German stations are to commemorate the ninetieth anniversary of Nietzsche's birth. The veneration in which his countrymen still hold him is not an easy thing to understand when we recall how emphatically and consistently he denounced their militant pride, how he derided their claims to culture, upholding the ideals of the Latin nations as far more in accord with the advance of civilisation. There was a time, indeed, when the spread of his doctrines was looked upon as a national danger to Germany, but since the War opinion has again veered round. The younger generation, there as elsewhere, no doubt looks on him and his philosophy as hopelessly out of date, but no broadminded observer of the trend of things to-day can fail to see in how many ways the world is shaping itself as Nietzsche foretold it would have to do. The broadcast ought to be of special interest at the present moment, if anything like full advantage is taken of it to point a moral to the Germany of 1934.

### Russian Music

The fifth Thursday Symphony Concert of the Season at Copenhagen, on October 18, is, except for the Wagner prelude at its close, an all-Russian one, with Malko conducting and Horowitz playing the first Tchaikovsky piano-forte Concerto. The Symphony is a work which Professor Malko has introduced already to many European audiences: it has done a good deal to interest the world outside the composer's

native Russia, in music which is already recognised as of real originality. Born in 1905, Shostakovich is one of the most brilliant young members of the so-called Leningrad group, musical descendants of the school of Rimsky-Korsakov. He already has a second symphony to his credit, as well as other orchestral and chamber music, and an opera founded on Gogol's story, *The Nose*. And it may commend him to dance-tune enthusiasts to learn that he has made a clever orchestration of *Tea for Two*, which he calls *Tahiti Trot*. This Symphony has the four movements of tradition: an Allegretto heralded by a slower Introduction, a Scherzo with its Trio, a Lento beginning with an oboe solo with a melody afterwards played by solo violin, and a vivid and dramatic Finale. Like the first movement, the last begins with an introduction, which follows the third movement without a break. A drum roll connects the two. The score includes a pianoforte as well as the usual full modern concert orchestra.

### Ill-fated Manon

The unhappy heroine of Abbé Prévost's story is the central figure of Massenet's opera *Manon*, to be broadcast from the Paris Opéra-Comique by Radio-Paris on Saturday, October 20, at 8.30 p.m. She—or, rather, her creator—has provided several opera and ballet composers with plots on which to base their music, but nowadays it is only Massenet's and Puccini's which are regularly given. Both set forth the tragedy along much the same lines, though Massenet's five acts make a more connected

story of it than Puccini's four. Massenet's is the older of the two by nine years: it was heard first in January, 1854, at the theatre whose artists are singing it on Saturday.

### Molière and the Doctors

Molière, like Shakespeare, has become a popular radio dramatist *sans le faire exprès*, and the frequent broadcasts of his plays from French and Belgian stations are a tribute to the immortality of his genius. This winter Brussels No. 1 is presenting a series of Molière plays, which begins on Monday, October 15, with *L'Amour Médecin*, or *Love is the Best Doctor*, to give it the title under which it is now being played at the Winter Garden Theatre, London. Molière himself described this play as "a little impromptu," which was written, rehearsed, and produced in exactly five days, and although his usual grace and wit are revealed in every scene, the plot is extremely simple. Lucinde, the daughter of Sganarelle, is melancholy because she is unable to marry a young admirer, but Sganarelle, who does not wish to lose a dowry and a daughter simultaneously, pretends that her illness is physical and summons a number of doctors to examine her case. Their varying diagnoses allow Molière to indulge in many gibes at the expense of the medical profession. Eventually the young admirer appears in the guise of a doctor, and, by an ingenious stratagem, persuades Sganarelle to sanction his marriage with Lucinde. It is very slight but very charming, and with Lully's music it should provide excellent entertainment.

## THE VIENNA PHILHARMONIC

7.5—9.10 p.m. VIENNA (506.8 m.), relayed by Graz, Innsbruck, etc. Bruckner's fourth Symphony, Chopin's first Concerto (Josef Hofmann).

### A BIBLICAL OPERA

7.45 p.m. ROME (420.8 m.), relayed by Naples, Bari, etc. "Deborah and Jael," by Pizzetti (from Turin on Saturday).

## THURSDAY

### MALKO AND HOROWITZ

7.10—9.15 p.m. COPENHAGEN (255.1 m.), relayed by Kalundborg (1,261 m.). A programme of Russian music.

### "THE OPERA BALL"

7.30—9.0 p.m. FRANKFURT (251 m.) and STUTTART (522.6 m.). Heuberger's merry operetta.

### ROSSINI'S "BARBER"

7.45—10.30 p.m. TURIN (263.2 m.), relayed by Milan, Trieste, etc., and by PRAGUE (470.2 m.), VIENNA (506.8 m.), WARSAW (1,339 m.). "The Barber of Seville" (from Rome on Sunday).

## FRIDAY

### LEHÁR'S "MERRY WIDOW"

7.0—9.0 p.m. STOCKHOLM (426.1 m.), relayed by Motala, etc.

### MADAME WEINGARTNER CONDUCTS

8.0—9.0 p.m. PRAGUE (470.2 m.), a Weingartner, Brahms programme.

### VIENNA'S "SINGING BOYS"

8.15 p.m. HUIZEN (1,875 m.).

### A LOTTE LEHMANN RECITAL

8.30—10.0 p.m. STRASBOURG (349.2 m.).

## SATURDAY

### A WEINBERGER OPERETTA

7.0—9.0 p.m. BRATISLAVA (298.8 m.) and PRAGUE (470.2 m.). "The Voice of Spring," by the composer of "Schwanda."

### MASSENET'S "MANON"

8.30 p.m. RADIO-PARIS (1,648 m.). From the Opéra-Comique.

### FRENCH PLAYS

8.30—10.30 p.m. STRASBOURG (349.2 m.). Three short plays.



# PROGRAMME STATIONS IN ALPHABETICAL ORDER

The Frequencies and Wavelengths shown are those on which the Stations are at present working

	kc/s	m.	kW		kc/s	m.	kW
Aberdeen	1285	233.5	1	Linz (Austria).. Relays Vienna	1294	231.8	0.5
Algiers (North Africa)	941	318.8	12	London Regional (Gt. Britain)	877	342.1	50
Athlone (Ireland).. Relayed by Dublin and Cork	565	531	60	London National (Gt. Britain)	1149	261.1	50
Augsburg (Germany).. Relays Munich	1267	236.8	2	Lwów (Poland).. Relays Warsaw	795	377.4	16
Barcelona (Spain) EAJr	795	377.4	5	Lyons (La Doua) (France)	648	463	15
Bari (Italy).. Relays Rome	1059	283.3	20	Madrid (Spain) EAJ7	1095	274	7
Basle (Switzerland).. Relayed by Beromünster	1375	218.2	0.5	Magdeburg (Germany).. Relays Hamburg	1330	225.6	1.5
Belfast (N. Ireland)	1122	267.4	1	Midland Regional (Gt. Britain)	767	391.1	25
Belgrade (Yugoslavia)	686	437.3	2.5	Milan (No. 1) (Italy).. Relays Turin	814	368.6	50
Berlin (Germany)	841	356.7	100	Milan (No. 2) (Italy).. Relays Rome	1357	221.1	4
Berne (Switzerland).. Relayed by Beromünster	1375	218.2	0.5	Monte Ceneri (Switzerland)	1167	257.1	15
Beromünster (Switzerland) .. Relays Basle and Berne	556	539.6	100	Moravská-Ostrava (Czechoslovakia)	1113	269.5	11.2
Bordeaux Lafayette (France)	1077	278.6	12	Moscow (No. 1) (Russia)	174	1724	500
Bournemouth	1474	203.5	1	Motala (Sweden).. Relays Stockholm	216	1389	30
Bratislava (Czechoslovakia)	1004	298.8	13.5	Munich (Germany) .. Relayed by Augsburg, Kaiserslautern, and Nürnberg	740	405.4	100
Bremen (Germany).. Relays Hamburg	1330	225.6	1.5	Naples (Italy).. Relays Rome	1104	271.7	1.5
Breslau (Germany).. Relayed by Gleiwitz	950	315.8	17	North National (Gt. Britain)	1013	296.2	50
Brno (Czechoslovakia)	922	325.4	32	North Regional (Gt. Britain)	668	449.1	50
Brussels (No. 1) (Belgium)	620	483.9	15	Notodden (Norway).. Relays Oslo	1357	221.1	0.08
Brussels (No. 2) (Belgium)	932	321.9	15	Nürnberg (Germany).. Relays Munich	1267	236.8	2
Bucharest (Romania)	823	364.5	12	Oslo (Norway) .. Relayed by Fredrikstad, Hamar, Notodden, Porsgrund, Rjukan, Stavanger and Trøndelag	260	1154	60
Budapest (No. 1) (Hungary)	546	549.5	120	Paris (Poste Parisien) (France)	959	312.8	100
Cassel (Germany).. Relays Frankfurt	1195	251	1.5	Paris (Ecole Supérieure) (France)	695	431.7	7
Cologne (Germany)	658	455.9	100	Paris (Radio-Paris) (France)	182	1648	75
Copenhagen (Denmark) .. Relayed by Kalundborg	1176	255.1	10	Pittsburgh (U.S.A.) .. (See also Short-Wave List)	980	305.9	50
Cork (I.F.S.) .. Relays Athlone	1240	241.9	1	Porsgrund (Norway).. Relays Oslo	850	352.9	0.7
Danzig (Free City) .. Relays Königsberg	1303	230.2	0.5	Poznań (Poland).. Relays Warsaw	868	345.6	16
Deutschlandsender (Germany)	191	1571	60	Prague (Czechoslovakia)	638	470.2	120
Dornbirn (Austria).. Relays Vienna	1294	231.8	0.5	Radio-Normandie (France)	1456	206	10
Dresden (Germany).. Relays Leipzig	1285	233.5	1.5	Reykjavik (Iceland)	208	1442	16
Droitwich (Gt. Britain)	200	1500	150	Riga (Latvia)	583	514.6	15
Dublin (Ireland).. Relays Athlone	1348	222.6	1	Rjukan (Norway).. Relays Oslo	1348	222.6	0.15
Flensburg (Germany).. Relays Hamburg	1330	225.6	1.5	Rome (Italy) ... Relayed by Naples, Milan (No. 2), Turin (No. 2), and Bari	713	420.8	50
Florence (Italy).. Relays Turin	609	492.6	20	Ruyssedele (Belgium) (See Short-Wave List)			
Frankfurt-am-Main (Germany) .. Relayed by Trier, Kaiserslautern, Cassel, and Freiburg	1195	251	17	Salzburg (Austria).. Relays Vienna	1348	222.6	0.5
Fredrikstad (Norway).. Relays Oslo	776	386.6	0.7	Schenectady (U.S.A.) .. (See also Short-Wave List)	790	379.5	50
Freiburg (Germany) .. Relays Frankfurt and Stuttgart	1195	251	5	Scottish National (Gt. Britain)	1050	285.7	50
Geneva (Switzerland).. Relayed by Sottens	401	748	1.3	Scottish Regional (Gt. Britain)	804	373.1	50
Genoa (Italy).. Relays Turin	986	304.3	10	Sottens (Switzerland).. Relays Geneva	677	443.1	25
Gleiwitz (Germany).. Relays Breslau	1231	243.7	5	Stavanger (Norway).. Relays Oslo	1276	235.1	0.5
Göteborg (Sweden).. Relays Stockholm	941	318.8	10	Stettin (Germany).. Relays Hamburg	1330	225.6	1.5
Graz (Austria).. Relays Vienna	886	338.6	7	Stockholm (Sweden) .. Relayed by Motala, Göteborg and Hörby	704	426.1	55
Hamar (Norway).. Relays Oslo	519	578	0.7	Strasbourg (France)	859	349.2	15
Hamburg (Germany) .. Relayed by Bremen, Flensburg, Hanover, Magdeburg, and Stettin	904	331.9	100	Stuttgart (Germany).. Relayed by Freiburg	574	522.6	100
Hanover (Germany).. Relays Hamburg	1330	225.6	1.5	Toulouse (Radio-Toulouse) (France)	913	328.6	60
Helsinki (Finland).. Relays Lahti	895	335.2	10	Trier (Germany).. Relays Frankfurt	1195	251	2
Hilversum (Holland)	995	301.5	20	Trieste (Italy).. Relays Turin	1222	245.5	10
Hörby (Sweden).. Relays Stockholm	1131	265.3	10	Trøndelag (Norway).. Relays Oslo	629	476.9	20
Huizen (Holland)	160	1875	7	Turin (No. 1) (Italy) .. Relayed by Milan, Genoa, Florence and Trieste	1140	263.2	7
Innsbruck (Austria).. Relays Vienna	519	578	0.5	Turin (No. 2) (Italy).. Relays Rome	1366	219.6	0.1
Juan-les-Pins (Radio Côte d'Azur) (France)	1249	240.2	2	Vatican City (Italy) (See Short-Wave List)			
Kaiserslautern (Germany).. Relays Munich and Frankfurt	1195	251	1.5	Vienna (Bisamberg) (Austria).. Relayed by Graz, Innsbruck, Klagenfurt, Linz, Salzburg, and Dornbirn	592	506.8	120
Kalundborg (Denmark).. Relays Copenhagen	238	1261	75	Warsaw (No. 1) (Poland) .. Relayed by Katowice, Lwów, Poznań, and Wilno	224	1339	120
Katowice (Poland).. Relays Warsaw	758	395.8	12	West National (Gt. Britain)	1149	261.1	50
Kaunas (Lithuania)	155	1935	7	West Regional (Gt. Britain)	977	307.1	50
Klagenfurt (Austria).. Relays Vienna	1294	231.8	0.5	Wilno (Poland).. Relays Warsaw	536	559.7	16
Königsberg (Germany).. Relayed by Danzig	1031	291	60	Zeesen (Germany) (See Short-Wave List)			
Lahti (Finland).. Relayed by Helsinki	166	1807	40				
Leipzig (Germany).. Relayed by Dresden	785	382.2	120				

For List of Stations in Order of Frequencies and Wavelengths see page 510



# Programmes: SUNDAY Oct. 14

## NATIONAL

Time Signals: Big Ben.—12.30 p.m., 10.30 p.m. Greenwich.—4.30 p.m., 9.0 p.m.  
 10.30-10.45 a.m. (Droitwich)—Weather.  
 11.0 (Droitwich)—Service in Welsh.  
 12.30 p.m. (Droitwich)—The Bernard Crook Quintet. La Fringante (Fiocco). Canzonetta (Boccherini). Minuet (Boccherini). Clair de Lune, Passepied (Debussy). Children's Dance Banquet Scene (The Miracle) (Humperdinck). Indian Lament (Dvořák). The Sylvan Tyrol (Godowsky). Romance (Rubinstein). A Tale (Medtner). Waltz (Serenade for Strings) (Tchaikovsky).  
 1.15 (Droitwich)—The Walford Hyden Magyar Orchestra.  
 2.15 (Droitwich)—Records: Opera.  
 3.0 (Droitwich)—A Pianoforte Recital by Adelaide Newman.  
 3.30 (Droitwich)—Dunblane Cathedral Musical Festival. The Choir of the Cathedral with the Scottish Wireless Singers and the New Light Orchestra, relayed from Dunblane Cathedral.  
 4.30—Children's Service, relayed from the Church of St. Mary, Redcliffe, Bristol.  
 5.0—"The Reformation"—1. A. F. Pollard, Litt.D., F.B.A.  
 5.20—"Question Time on Tower Hill"—1. The Rev. D. O. Soper.  
 5.35—"Measure for Measure"—by William Shakespeare. Adapted for broadcasting by Barbara Burnham. Music composed and conducted by Herbert Menges. Production by Howard Rose.  
 7.20—Recital. Miriam Licette (Soprano). Winifred Small (Violin).  
 7.55 (Droitwich)—Service from St. Martin-in-the-Fields.  
 8.45 (Droitwich)—An appeal on behalf of the National Children's Home and Orphanage by Lord Wakefield of Hythe, C.B.E., LL.D.  
 8.50—"The News."  
 9.0—The Wireless Military Band. Conductor, B. Walton O'Donnell. William Pleeth (Violoncello). Band: Overture, Nell Gwyn (Edward German). William Pleeth: Tarentella (Squire); Berceuse (César Cui). Band: Ballet Music, Sylvia (Delibes). William Pleeth: Élegy (Faure); Mazurka (Popper). Band: Dance of the Hours (La Gioconda) (Ponchielli).  
 10.0—Reginald King and his Orchestra. Selection of Songs (Sanderson). Silver Hair and Heart of Gold (Maurice). Swing of the Kilt (Ewing). Her name is Mary (Ramsey). Fiddlers' Fancy (Howard). Alice Blue Gown (Tierney). Portrait of a Toy Soldier (Ewing). Fantasy, The Three Bears (Coates).  
 10.45—Épilogue.

## REGIONAL

Time Signals: Big Ben.—12.30 p.m., 10.30 p.m. Greenwich.—4.30 p.m., 9.0 p.m.  
 11.0 a.m.-12.15 p.m. (West)—Service.  
 12.30-4.30 p.m. (except Midland)—Droitwich.  
 4.30—The B.B.C. Theatre Orchestra. March, Entry of the Gladiators (Fučík). A Roman Rhapsody (Carabella). Gavotte and Minuet (Manon) (Massenet). Demande et Réponse (Coleridge-Taylor). Three Russian Dances (Bullerian). Cavatina (Raff). Witches' Dance (MacDowell). Bridal Procession (Grieg). Overture, La Belle Hélène (Offenbach).  
 5.30 (except Midland)—Fred Hartley and his Novelty Quintet. Two Tunes (Coward). Selection of Leslie Stuart's Songs. A Little Love (Silesu). The Kerry Dance (Molloy). Nocturne in E flat (Chopin). You were so charming (Carr). The Broken Melody (Biene). Moonbeams' Dance (Gibbons). Believe me if all (arr. Hartley). The Sailor Man (Charles Wood). Scottish Fantasy (Hartley). I hear you calling me (Marshall). Slow Waltz (Delibes). If you could care for me (Darewski). The Banjo Song (Homer). Victorian Recollections (arr. Hartley).  
 5.30 (Midland)—The Creswell Colliery Band. Charles Badham (Pfe).  
 6.30-7.45 (except Midland, North, and West)—The B.B.C. Orchestra (C). Dorothy Stanton (Soprano).  
 6.30-7.45 (Midland)—Jan Barenaška and his Orchestra. Charles Gellion (Tenor).  
 6.30 (North)—The B.B.C. Northern Orchestra. Louis Godowsky (Violin). Overture, Roman Carnival (Berlioz). First Suite, The Maid of Arles (Bizet). Concerto in E minor (Mendelssohn). Scherzo, Queen Mab (Berlioz). Rhapsody España (Chabrier).  
 6.30-7.45 (West)—The Cardiff Symphony Orchestra. Clifford Deri (Baritone).  
 7.45 (North)—Announcements.  
 7.55-8.50 (Scottish till 8.45)—Droitwich.  
 8.45 (Scottish)—An appeal on behalf of the Glasgow Royal Maternity and Women's Hospital by R. A. Lennie, M.D.  
 8.50—"The News."  
 9.0—"Pilgrim's Way."—10—Temptation. A tale of Everyman's Journey through Life.  
 9.30—Sunday Orchestral Concert—1. Beethoven Programme. Eva Turner (Soprano). The B.B.C. Orchestra (Section B), conductor Adrian Boult. Overture, Leonora No. 3. Scene and Aria, Ah, Perfido. Symphony No. 7, in A.  
 10.45—Épilogue.

## EMPIRE SUMMARY

For wavelengths, see S.W. List  
**Transmission 1 (GSD, GSB)**  
 7.15 a.m.—Big Ben. Organ Music. †  
 7.30—The Eucharistic Congress at Buenos Aires. A Talk\* by the Rev. Father Martindale, S.J.  
 7.45—Douglas Cameron (Violoncello).  
 8.15—Service\* from St. Columbia's Presbyterian Church, Cambridge.  
 9.0—Newsletter. 9.15—Close Down.  
**Transmission 2 (GSF, GSB)**  
 12.30 p.m.—Big Ben. The Bernard Crook Quintet.  
 1.0—(See 7.30 a.m.).  
 1.15—The Walford Hyden Magyar Orchestra.  
 1.45—Newsletter. 2.0—Close Down.  
**Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSE, GSB)**  
 2.15 p.m.—Big Ben. (See 8.15 a.m.).  
 3.0—Adelaide Newman (Pianoforte).  
 3.30—The Dunblane Cathedral Music Festival. The Choir of the Cathedral with the Scottish Wireless Singers and the New Light Orchestra.  
 4.30—The B.B.C. Theatre Orchestra.  
 5.0—Newsletter.  
 5.15—(See 7.30 a.m.).  
 5.30—Fred Hartley and his Novelty Quintet with Brian Lawrence.  
 5.45—Close Down.  
**Transmission 4 (GSD, GSB)**  
 6.0 p.m.—Big Ben. The Creswell Colliery Band. Charles Badham (Pianoforte).  
 6.30—(See 7.30 a.m.).  
 6.45—The B.B.C. Orchestra (Section C), conducted by Joseph Lewis. Dorothy Stanton (Soprano).  
 7.30—Sports Talk.\*  
 7.45—Winifred Small (Violin).  
 7.55—Service from St. Martin-in-the-Fields.  
 8.45—Newsletter.  
 9.0—The Wireless Military Band. William Pleeth (Violoncello).  
 10.0—Reginald King and his Orchestra. 10.45—Close Down.  
**Transmission 5 (GSC, GSA)**  
 11.0 p.m.—Big Ben. The Bernard Crook Quintet. Stella Murray (Contralto).  
 12 midnight—(See 7.55 p.m.).\*  
 12.45 a.m.—Newsletter.  
 1.0—(See 7.30 a.m.).  
 1.15—Close Down.  
 \* Electrical Recording  
 † Gramophone Records

## PRINCIPAL EVENTS

**SERVICES AND SACRED MUSIC**  
 9.0 a.m. Kalundborg: Protestant Service.  
 9.30 ,, Warsaw: Service and music.  
 10.0 ,, Italian stations: Mass from Florence.  
 3.0 p.m. Radio-Paris, etc.: The Eucharistic Congress at Buenos Aires. Papal Benediction.  
 7.15 ,, Stockholm: The Leipzig "Thomaner Chor."  
**CONCERTS**  
 11.15 a.m. Warsaw: The Philharmonic; songs.  
 2.10 p.m. Hilversum: From Concertgebouw; Dusolina Giannini (Soprano); Bruno Walter.  
 2.25 ,, Kalundborg: Choral and instrumental.  
 5.0 ,, Brussels No. 1: Symphony orchestra.  
 7.0 ,, Frankfurt: Tchaikovsky's Sixth; operatic.  
 7.0 ,, Sottens: Radio-Suisse Romande Orchestra.  
 7.45 ,, Oslo: Orchestra and pianoforte.  
 8.0 ,, Brussels No. 1: Liszt programme.  
 8.55 ,, Hilversum: Opera and operetta music.  
 9.0 ,, Brussels No. 2: Grieg programme.  
 10.10 ,, Budapest: Cigány Band Lakatos.  
 11.0 ,, Frankfurt, Stuttgart: Operetta music.  
**OPERAS**  
 1.30 p.m. Strasbourg: "La Bohème" (Puccini).  
 5.35 ,, Munich, etc.: "Lohengrin" (Wagner).  
 6.30 ,, Cologne: "The Flying Dutchman" (Wagner).  
 7.0 ,, Stuttgart: "La Dame blanche" (Boieldieu).  
 7.45 ,, Rome, etc.: "The Barber of Seville" (Rossini).  
 9.0 ,, Berlin: "The Unwilling Marriage" (Humperdinck).  
**CHAMBER MUSIC**  
 6.30 p.m. Oslo: Quintet (Sinding).  
 6.35 ,, Königsberg: Old English music.  
**PLAYS**  
 5.0 p.m. Radio-Paris: Comedy programme.  
 8.30 ,, Paris PTT: "Le Demi-monde" (A. Dumas, fils).  
**DANCE MUSIC**  
 4.0 p.m., Warsaw; 9.30, Budapest, Oslo, Warsaw; 9.45, Frankfurt; 9.50, Munich, Breslau; 10.0, Kalundborg, Stuttgart; 10.10, Brussels No. 1 and 2; 10.15, Hamburg, Deutschlandsender; 10.25, Hilversum; 10.30, Radio-Paris, Strasbourg.  
**MISCELLANEOUS**  
 11.0 a.m. Cologne, Deutschlandsender, etc.: "The Rhineland from the Air."

Hours of Transmission in Greenwich Mean Time  
 PARIS (Ecole Supérieure) has reverted to its original name of PARIS (PTT).  
 The Programmes for Bucharest and Reykjavik did not arrive in time for inclusion in this Week's Issue.

### 5 a.m.

BERLIN, BRESLAU, COLOGNE, DEUTSCHLANDSENDER, FRANKFURT, KÖNIGSBERG, LEIPZIG, MUNICH, STUTTGART, 5.35—See Hamburg.  
 HAMBURG, 5.35—Harbour Concert.  
 MOSCOW (No. 1), 5.15—Light Music.

### 6 a.m.

BERLIN, BRESLAU, COLOGNE, DEUTSCHLANDSENDER, FRANKFURT, KÖNIGSBERG, LEIPZIG, MUNICH, STUTTGART, 6.0—See Hamburg.  
 BEROMÜNSTER, 6.30—Wind Band.  
 HAMBURG, 6.0—Harbour Concert.  
 PRAGUE, 6.0—Music; News. 6.30—Orchestra.

### 7 a.m.

BERLIN, 7.0—See Hamburg. 7.25—Motto. 7.30—Reading.  
 BRESLAU, 7.0—See Hamburg. 7.15—Motto. 7.25—Trio in A minor (Tchaikovsky).  
 COLOGNE, 7.0—News. 7.30—Service.  
 DEUTSCHLANDSENDER, 7.0—For Farmers. 7.55—Talk: Duty.  
 FRANKFURT, 7.0—See Hamburg; News. 7.25—Gym. 7.45—Wind Band.  
 HAMBURG, 7.0—Harbour Concert. 7.15—Time; News. 7.30—Gym. 7.45—Wireless Notes.  
 KÖNIGSBERG, 7.0-7.15—See Hamburg.  
 LEIPZIG, 7.0—See Hamburg. 7.20—Organ.

MUNICH, 7.0—See Hamburg. 7.15—Wireless Notes. 7.45—Wind Band.  
 PARIS (Radio-Paris), 7.0—Records. 7.15—Press Review. 7.45—Gym.  
 PRAGUE, 7.0—Orchestra. 7.30—Sketch (Pánková). 7.50—Sonata for Viola and Pianoforte (Rubinstein).  
 STUTTGART, 7.0—See Hamburg. 7.15—News.  
 VIENNA, 7.55—Records.

### 8 a.m.

BERLIN, 8.0—Service from Potsdam Garrison Church.  
 BRESLAU, 8.0—Trio (contd. from 7.25). 8.15—"Silesian Churches"—Report from Zedlitz. 8.40—Talk: Games and Toys for Children.  
 COLOGNE, 8.0—Surprise Programme. 8.45—Readings.  
 DEUTSCHLANDSENDER, 8.0—Talk (contd. from 7.55).  
 FRANKFURT, 8.0—Protestant Service. 8.45—"Friedrich Nietzsche"—Sequence with Music by Behm, Richard Strauss, and Trunk.  
 HAMBURG, 8.0—Art Notes. 8.15—Records.  
 HILVERSUM, 8.10—Records. 8.15—Gardening Talk. 8.40—Football Notes. 8.43—V.A.R.A. String Ensemble. Conductor: De Groot.  
 HUIZEN, 8.10—Religious Programme.  
 KÖNIGSBERG, 8.0—Protestant Service.  
 LEIPZIG, 8.0—Service. 8.30—Concert by the Erfurt a-cappella Choir. Conductor: Bergzow.  
 MOSCOW (No. 1), 8.0—Light Music. 8.58—Time.  
 MUNICH, 8.0—Wind Band (contd. from 7.45). 8.30—Protestant Service.  
 PARIS (PTT), 8.0—News. 8.30—John Girard (Organ).  
 PARIS (Radio-Paris), 8.0—Records.  
 PRAGUE, 8.0—Sonata (Rubinstein) (contd. from 7.50). 8.15—Meditation. 8.30—An Appeal. 8.35—Reading.

RADIO-NORMANDIE, 8.0—Records. 8.15—Military Music.  
 STOCKHOLM, 8.0—For Farmers. 8.30—Records. String Quartet in F (Beethoven).  
 STUTTGART, 8.0—Protestant Service from Karlsruhe. 8.45—Ferdinand Merten (Cello) and Erwin Kübler (Pianoforte). Adagio (Bach). Minuet (Boccherini). Moment musical (Schubert). Toccata (Frescobaldi). Minuet (Debussy). La Source (Davidov).  
 VIENNA, 8.0—Records. 8.55—Service from the Franciscan Church.  
 WARSAW, 8.0—Time; Hymn; Records. 8.7—Gym. 8.22—Records. 8.30—News. 8.40—Records. 8.50—For Housewives. 8.55—Announcements.

### 9 a.m.

BEROMÜNSTER, 9.0—Roman Catholic Address. 9.45—Chamber Music.  
 BRESLAU, 9.0—"German Heritage"—Sequence (Wilfert). Station Choir and Soloists. Conductor: Paqué. 9.45—Ballads by Rudolf Watzke (Bass-Baritone) and Karl Uhlendahl (Recitations). Siegfrieds Schwert (Püddemann). Jung Dietrich (Püddemann). Gregor auf dem Stein (Loewe).  
 BRNO, 9.30—Verse-Speaking Choir.  
 BUDAPEST, 9.0—Roman Catholic Service.  
 COLOGNE, 9.0—Readings. 9.30—See Frankfurt.  
 DEUTSCHLANDSENDER, 9.5—Weather.  
 FRANKFURT, 9.0—Sequence (contd. from 8.45). 9.15—Dialogue: The Donaueschingen Music Festival, relayed from Donaueschingen. 9.30—Contemporary German Music—Relay of the Music Festival from the Festhalle, Donaueschingen. Swabian Choir and Orchestra. Conductor:

Hans Grischkat. Hedwig Cantz (Soprano). Hermann Achenbach (Baritone). Talk by Rudolf Sommer. Music for Choir, Strings and Flutes (Maler). Music for String Orchestra (Wittmer). Choir and Baritone: Der Gärtner (Hugo Hermann), to Text by Tagore. "An die Natur"—Cantata (Distler).  
 HILVERSUM, 9.0—V.A.R.A. String Ensemble. 9.20—Talk. 9.40—Tierie (Organ).  
 HUIZEN, 9.0—Religious Programme (contd. from 8.10).  
 KALUNDBORG, 9.0—Service from Roskilde Cathedral. 9.10—Sacred Music.  
 KÖNIGSBERG, 9.0—Russian. 9.30—See Frankfurt.  
 LEIPZIG, 9.0—Talk: The German Reich. 9.30—Programme Notes.  
 MOSCOW (No. 1), 9.0—News. 9.15—Russian Authors at the Microphone.  
 MUNICH, 9.0—Protestant Service (contd. from 8.30). 9.10—Chimes. 9.15—Reading. 9.40—Humperdinck Concert for the Eightieth Anniversary of his Birth. The Stuteny String Quartet and Hanna Eschenbrucher (Soprano). Songs: (a) Blumen sprache, (b) Mein Gruss, (c) Blauweilchen, (d) Lenzkospeln, (e) Flattern, (f) Geheimnis, (g) Entsangung, (h) Maiahung. String Quartet in E.  
 OSLO, 9.5—Sonata in A No. 42 for Pianoforte and Violin (Mozart), on Records.  
 PARIS (PTT), 9.0—John Girard (Organ). 9.30—For Children.  
 PRAGUE, 9.0—Service.  
 ROME, 9.0—Rural Programme.  
 SOTTENS, 9.0—Protestant Service.  
 STOCKHOLM, 9.0—Talk: Alcohol. 9.30—Talk: Pronunciation.  
 STRASBOURG, 9.30—Classical Records.  
 STUTTGART, 9.0—Cello and Pianoforte (contd. from 8.45). 9.15—

Hans Pfitzner Songs. Gertrud Pfitzinger (Mezzo-Soprano) and the Station Orchestra—Conductor: Drost. An den Mond. Ist der Himmel darum im Lenz so blau. Sonst. Verrat. Gretel. 9.45—"Versunkene Heimat"—Play (Kanning).  
 TURIN, 9.0—See Rome.  
 VIENNA, 9.0—Service from the Franciscan Church.  
 WARSAW, 9.5—Records. 9.30—Service and music.

### 10 a.m.

BERLIN, 10.30—Bach Concert. String Orchestra, Hermann Diener and Charlotte Hampe (Violins). Air from Suite in D, No. 3. Violin Concerto in D minor.  
 BEROMÜNSTER, 10.0—Chamber Music. 10.30—Bernhard Moser reads.  
 BRESLAU, 10.0—Ballads (contd. from 9.45). 10.15—"Herr Schellmuffsky's Adventures"—Sequence (Reuter-Schnee), with Music by Sczuka.  
 BRNO, 10.0—Station Orchestra. Conductor: Bakala. Holub (Violin).  
 BRUSSELS (No. 1), 10.0—Classical Records.  
 BRUSSELS (No. 2), 10.0—Max Alexys Orchestra.  
 BUDAPEST, 10.15—Protestant Service.  
 COLOGNE, 10.0—See 9.30 Frankfurt.  
 DEUTSCHLANDSENDER, 10.0—Fritz Dietrich reads his own Poems. 10.15—Weather. 10.30—Bach and Brahms Records.  
 FRANKFURT, 10.0—Contemporary German Music (contd. from 9.30).  
 HAMBURG, 10.0—"Worpswede"—Sequence (Tegmeier and Uphoff), with Music by Licht.  
 HILVERSUM, 10.0—Tierie (Organ). 10.10—Service from Amsterdam.  
 HUIZEN, 10.0—Protestant Service from Amsterdam.

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SUNDAY Oct. 14

10 a.m. (contd.)

**KALUNDBORG**, 10.0—Service (contd. from 9.0). 10.30—News.  
**KÖNIGSBERG**, 10.0—See 9.30 Frankfurt.  
**LAHTI**, 10.0—Station Orchestra.  
**LEIPZIG**, 10.20—Trio in B flat (Schubert).  
**MONTE CENERI**, 10.30—Announcements; Religious Address.  
**MOSCOW** (No. 1), 10.0—Russian Authors at the Microphone. 10.15—Talk in Swedish: The Peasants and Collective Farming.  
**MÜNICH**, 10.0—Humperdinck Concert (contd. from 9.40). 10.20—Reading from Homer's "Odyssey" (Translation by Scheffer).  
**PARIS** (Poste Parisien), 10.0—Press Review. 10.20—News. 10.25—Operetta Records. 10.50—Records.  
**PARIS (PTT)**, 10.0—Sports Review. 10.15—Dervaux Symphonic Jazz Band.  
**PRAGUE**, 10.0—See Brno.  
**RADIO-NORMANDIE**, 10.30—Records.  
**ROME**, 10.0—See Turin.  
**SOTTENS**, 10.0—Service (contd. from 9.0). 10.10—Records.  
**STOCKHOLM**, 10.0—Service.  
**STRASBOURG**, 10.0—Classical Records. 10.45—Protestant Service.  
**STUTTGART**, 10.0—"Versunkene Heimat"—Play (Kanig) (contd. from 9.45). 10.30—Records.  
**TURIN**, 10.0—Mass from the Church of the Annunciation, Florence.  
**VIENNA**, 10.0—Reading. 10.20—Commentary on the International Handball Championships: Austria v. Hungary. 10.50—Light Classical Music. Vienna Symphony Orchestra. Conductor: Sorantin. Colette Frantz (Violin). Chaconne (Bach-Hubay). Spanish Symphony (Lalo). Negro Rhapsody (Goldmark). Cortège (Sorantin). Song and Intermezzo (Kodály). Slav March (Tchaikovsky).  
**WARSAW**, 10.0—Service; Records: Sacred Music.

11 a.m.

**ALGIERS**, 11.30—Records.  
**BERLIN**, 11.0—Military Band from Altenburg. Conductor: Lange. (For details see Leipzig.)  
**BEROMÜNSTER**, 11.0—Records: Marches. 11.30—News. 11.40—Italian Music.  
**BRESLAU**, 11.0—Symphony Orchestra. Conductor: Schmidt-Belden. Overture, "Yelva" (Reissiger). Selection, "Carmen" (Bizet). Delirien-Walzer (Strauss). Die kleine Kompagnie (Ganglbauer). Scandinavian Suite (Juel-Frederiksen). March (Blankenburg). Selection, "The Water Carrier" (Cherubini). Verlorene Melodie (Marquardt). Waltz, Laura (Millöcker). Selection, "The Count of Luxembourg" (Lehár).  
**BRUSSELS** (No. 1), 11.0—Alexys Dance Band.  
**BRUSSELS** (No. 2), 11.0—Records. 11.57—Weather.  
**BUDAPEST**, 11.0—Protestant Service (contd. from 10.15). 11.20—Time. 11.30—Bizet Concert. Opera House Orchestra. Conductor: Rajter. Overture, Patrie. Jeux d'enfants. Scènes bohémiennes. Selection, "L'Arlesienne." Suite, Roma.  
**COLOGNE**, 11.0—Over the Rhine-land in Two Balloons. 1. The Cologne Balloon, with Karl Lenders. At the Microphone: Rudolf Rauher. 2. The Ernst Brandenburg Balloon from Düsseldorf, with Karl Schäfer. At the Microphone: Willi Schäfer-diek. 3. Commentary on Records.  
**DEUTSCHLANDSENDER**, 11.0—See Cologne.  
**FRANKFURT**, 11.0—Records.  
**HAMBURG**, 11.0—See Cologne.  
**HILVERSUM**, 11.0—Service (contd. from 10.10); Organ Recital. 11.40—Time. 11.41—Topical Talk.  
**HUIZEN**, 11.0—Protestant Service (contd. from 10.0); Records; Sacred Music. 11.55—K.R.O. Orchestra. Conductor: Gerritsen. Stars and Stripes (Souza). Overture, "Le Roi d'Yvetot" (Adam). Abendlied (Schumann). Suite (Dunhill). Kirmes am Rhein (Dreissen). Selection, "A Waltz Dream" (O. Strauss).  
**KALUNDBORG**, 11.0—Chimes. 11.2—Youth Festival from the Odd Fellows' Palace. Addresses; Recitations; Community Singing; Orchestra; Songs.  
**KÖNIGSBERG**, 11.0—See Cologne.  
**LAHTI**, 11.0—Service in Swedish.  
**LEIPZIG**, 11.0—Military Band from

Altenburg. Conductor: Lange. March, Deutscher Geist (Lindemann). Overture, "Oberon" (Weber). Waltz, Im schönen Tal der Isar (Hanns Löhr). Trombone Concertino (Sachse). Die kleinste Truppe (Hanns Löhr). Selection, "Tiefand" (d'Albert). March (Kunze).  
**MONTE CENERI**, 11.5—Marches of the Nations. 11.30—Orchestra. Overture, "The Thieving Magpie" (Rossini). Slav Dance No. 7 (Dvořák). Selection, "L'amico Fritz" (Mascagni). 11.55—News.  
**MOSCOW** (No. 1), 11.0—English Programme: (a) Talk: The Housing Question; (b) Weekly Review; (c) Letter-box.  
**MÜNICH**, 11.0—Military Band from the Feldhernhalle.  
**PARIS** (Poste Parisien), 11.0—Records. 11.20—Popular Music.

**BRUSSELS** (No. 2), 12.0—Orchestra. Conductor: Douliez. Divertissement flamand (Vidal). Two Neapolitan Songs (Volpatti). Old French Airs (Broustet). Tyrolean Peasant Dances (Pachernegg). Hornpipe (Bantock). Overture, "Flotte Bursche" (Suppe). Wine, Woman, and Song (Strauss). Scènes de la vie parisienne (Casadesus).  
**BUDAPEST**, 12.0—Bizet Concert (contd. from 11.30).  
**COLOGNE**, 12.0—Announcements. 12.10—Greetings. 12.15—Chamber Orchestra. Conductor: Hartmann. Ernst-August-Marsch (Blankenburg). Pester-Walzer (Lanner). Prelude, "Zampa" (Herold). Dances, "Undine" (Lortzing). Wedding Day on Trolldhaugen (Grieg). Ständchen (Mausz). Bauerngalopp (Pachernegg). Prelude, "Berliner Luft" (Lincke). Waltz, Gold

Entr'acte, "Rosamunde" (Schubert). Three Pieces (Granados): (a) Moresca, (b) Oriental, (c) Spanish Dance No. 5 Four Pieces (Albéniz): (a) Cordoba, (b) Sevilla, (c) España, (d) Concert Waltz.  
**PARIS** (Radio-Paris), 12.0—Religious Address. 12.20—Sacred Music on Records. 12.30—Bilboquet. 12.45—Pascal's Orchestra. Serenade (Chantrier). March (Ibanez). Madrigal (Simonetti). Intermezzo (Rust). "Cello Solo. Guerre des Valses (Grothe). Melody (De la Presle). Selection, "La finta giardiniera (Mozart). Barcarolle (Rust). Piano-forte Solo. Waltz (Siede). Birthday Greetings (Ketelbey). Soldiers of Lilliput (Löhr).  
**PRAGUE**, 12.0—Orchestra. 12.30—Talk. 12.45—12.55—Announcements.

**KALUNDBORG**, 1.0—Talk in French: Jacques Cartier. 1.20—Records. 1.50—For Children.  
**JUAN-LES-PINS** (Radio Côte d'Azur), 1.0—News. 1.15—Orchestra.  
**KÖNIGSBERG**, 1.0—Chess. 1.30—Talk.  
**LEIPZIG**, 1.0—Weather. 1.5—Talk: Thuringia. 1.35—For Women.  
**MONTE CENERI**, 1.55—See Sottens.  
**MÜNICH**, 1.0—Weather; Programme Announcements. 1.10—For Farmers. 1.30—Records.  
**PARIS** (Poste Parisien), 1.0—1.20—Records. 1.30—Records.  
**PARIS (PTT)**, 1.0—News. 1.20—Opera Relay from the Opéra-Comique: (a) "La Bohème"—Opera in Four Acts (Puccini); (b) "Les Rendez-vous Bourgeois"—Opéra-Comique in One Act (Nicolò). Conductor: Cohen.  
**PARIS** (Radio-Paris), 1.0—Pascal's Orchestra (contd. from 12.45). 1.45—Commentary in French on the International Eucharistic Congress, at Buenos Aires.  
**PRAGUE**, 1.30—Horse-Racing Report.  
**RADIO-NORMANDIE**, 1.0—Popular Music.  
**ROME**, 1.0-1.15—See Turin. News in the Interval.  
**SOTTENS**, 1.55—Commentary on the International Football Match Switzerland v. Czechoslovakia.  
**STRASBOURG**, 1.0—News. 1.15—Records. 1.20—"La Bohème"—Opera in Four Acts (Puccini), from the Opéra-Comique, Paris.  
**STUTTGART**, 1.0—See Frankfurt.  
**TOULOUSE** (Radio-Toulouse), 1.5—Orchestra. 1.15—Chansonnettes. 1.30—Orchestra. 1.45—Protestant Service.  
**TURIN**, 1.0-1.15—Records.  
**VIENNA**, 1.0—Report: The Ravag Jubilee Exhibition.  
**WARSAW**, 1.0—Records.

2 p.m.

**ATHLONE**, 2.0—Records.  
**BERLIN**, 2.0—For Small-Holders. 2.45—For Farmers.  
**BEROMÜNSTER**, 2.0-2.45—See 1.55 Sottens.  
**BRESLAU**, 2.0—Records. 2.30—For Children, from Zedlitz.  
**BUDAPEST**, 2.0—For Farmers. 2.50—Military Band.  
**COLOGNE**, 2.0—Talk: Parents and Children. 2.25—Scandinavia in Dance and Song—Sequence with Records and Music (Bombe).  
**DEUTSCHLANDSENDER**, 2.0—Talk: Chess. 2.15—Chaliapin Records. 2.30—Chopin Pianoforte Music on Records.  
**FRANKFURT**, 2.0—For Farmers.  
**HAMBURG**, 2.0—Brunswick Poets and Composers Concert by Kathie Hecke-Isensee (Soprano), Marie Osterloh (Pianoforte) and Willy Palmado (Violin). Pianoforte Solos (Litoff): (a) Spinnlied, (b) Auf dem See. Wilhelm Raabe Songs (Jürgens): (a) Die schönste Blume im Garten mein, (b) An der Landstrass' im Graben, (c) Ein Brieflein an meinen Schatz. Romance from the Violin Concerto (Czernik). Pianoforte Solos: (a) Nocturne in A flat (Fesva), (b) Bagatellen (Köhler). Riccardo Huch Songs (Witt): (a) Du (b) Sehnsucht, (c) Unersättlich. Impromptu, Op. 38, for Pianoforte (Witt). 2.45—Reading: Animal Stories.  
**HILVERSUM**, 2.0—Book Review (contd. from 1.40). 2.10—Concertgebouw Orchestra, from the Concertgebouw, Amsterdam. Conductor, Bruno Walter. Dusolina Giannini (Soprano). Symphony in D (Mozart). Aria, "Don Giovanni" (Mozart). Vetrata di Chiesa (Respighi). Aria, "Norma" (Bellini). Selection, "Tristan and Isolde" (Wagner).  
**HUIZEN**, 2.0—Report of the International Eucharistic Congress from Buenos Aires.  
**JUAN-LES-PINS** (Radio Côte d'Azur), 2.0—Protestant Service.  
**KALUNDBORG**, 2.0—For Children. 2.25—People's Concert. The Copenhagen Workers' Choir. Conductor: Louis Clausen. Folmer Jensen and Ove Peters (Pianoforte Duets). My Beautiful Home (Berggreen). Stillness (Hellmuth). Sunday Peace (Brau). Evensong (Lanzky). Thou knowest well the little, lovely Land (Horneman). The Knight's Song (Gade). Pianoforte Duets: (a) Marche caractéristique (Schubert), (b) Waltz and Hungarian Dance (Brahms). Workers' Song (Larsen). Peace (Gross). When a Day's Work is Done (Clausen). Sounds (Lagercrantz). Nature and the Heart (Lindblad). Olav Trygvason (Reissiger).



The Rhine from the air. Cologne and other stations broadcast from balloons over the Rhine at 11.0 a.m.

11.50—Records of Cigány Music.  
**PARIS** (PTT), 11.0—Records.  
**PARIS** (Radio-Paris), 11.30—Organ Variations (Ahlen). Berceuse (Olson). Chromatic Fantasia (Olson). Fughetta (Bach). Prelude and Fugue in A minor (Handel).  
**PRAGUE**, 11.5—News. 11.15—Orchestra.  
**RADIO-NORMANDIE**, 11.0—Sacred Music. 11.30—Orchestra.  
**ROME**, 11.0-11.15—Bible Reading. 11.30—Records.  
**SOTTENS**, 11.0—Records. 11.30—News. 11.40—Records.  
**STOCKHOLM**, 11.0—Service (contd. from 10.0). 11.45—Weather. 11.55—Time.  
**STRASBOURG**, 11.0—Service (contd. from 10.45). 11.30—Roman Catholic Service.  
**STUTTGART**, 11.0—See Cologne.  
**TURIN**, 11.0-11.15—Bible Reading. 11.30—Records.  
**VIENNA**, 11.0—Light Classical Music (contd. from 10.50).  
**WARSAW**, 11.0—Fanfare; Weather. 11.5—Theatre Notes. 11.15—Philharmonic Orchestra from the Conservatoire. Conductor: Mierzejewski. Mme. Szabraska (Songs). Utiava (Smetana). Folk Dances (Borodin). Five Songs. Scheherazade (Rimsky-Korsakov). Three Songs.

and Silver (Lehár). Per un bacio (Tosti). Vorrei morire (Tosti). Nixengeflüster (Heykens). Ständchen (Heykens). Einzug der Frühlingsblumen (Kockert). Hochzeitsständchen (Klose). In True fest (Teike).  
**DEUTSCHLANDSENDER**, 12.0—Greetings. 12.10—See Hamburg.  
**FRANKFURT**, 12.0—Talk: The Third Reich. 12.15—Choral Concert. Conductor: Lorscheider.  
**HAMBURG**, 12.0—Weather. 12.10—Station Orchestra. Conductor: Secker.  
**HILVERSUM**, 12.0—Talk (contd. from 11.41). 12.10—Light Music. Kovacs Lajos Orchestra.  
**HUIZEN**, 12.0—K.R.O. Orchestra (contd. from 11.55). 12.40—Talk.  
**KALUNDBORG**, 12.0—Youth Festival (contd. from 11.2). 12.20—Literary Talk in English. 12.40—Talk in German: The Armistice, 1918.  
**JUAN-LES-PINS** (Radio Côte d'Azur), 12.30—Amusement Guide; Orchestra.  
**KÖNIGSBERG**, 12.0—Station Orchestra. Conductor: Wilcken.  
**LEIPZIG**, 12.0—See Munich.  
**MONTE CENERI**, 12.5—Orchestra-Extract, "Peer Gynt" (Grieg). Romance, Lungi (Tosti). Rustle of Spring (Sinding). 12.30—Rita Kittena (Songs). Aria, "The Czar's Bride" (Rimsky-Korsakov). Aria, "The Fair at Sorotchinsk (Mussorgsky). Song (Rachmaninov). Cavatina and Rondo, "A Life for the Czar" (Glinka). Lullaby (Gretchaninov). The Nightingale (Alabiev). Folk Song, Il capro nell'orto. Spring (Satchnovsky).  
**MÜNICH**, 12.0—Small Symphony Orchestra.  
**PARIS** (Poste Parisien), 12.5—Kito the Clown. 12.15—Sound-Film Records. 12.45—News. 12.50—Records.  
**PARIS (PTT)**, 12.0—Records. 12.15—Locatelli Orchestra. Tales from the Vienna Woods (Strauss). Serenata Morisca (Chapi). Le chaland qui passe (Bixio). Slav Dance (Dvořák). Sérénade berceuse (Luciani). Lied (Schubert).

**RADIO-NORMANDIE**, 12.0—Concert. 12.30—News. 12.45—Popular Music.  
**ROME**, 12.5—See Turin.  
**SOTTENS**, 12.0—Records.  
**STRASBOURG**, 12.0—Announcements; Records. 12.15—Station Orchestra. Conductor: De Villers. Marianne Ricklin (Soprano).  
**STUTTGART**, 12.0—Topical Programme. 12.15—Records.  
**TURIN**, 12.0—News. 12.5—Request Records. 12.30—Records.  
**VIENNA**, 12.0—Light Music. Vienna Symphony Orchestra. Conductor: Holzer. Rosner (Violin).  
**WARSAW**, 12.0—Talk. 12.15—Philharmonic Orchestra (contd. from 11.15).

1 p.m.

**ATHLONE**, 1.0—Records.  
**BERLIN**, 1.0—Sports Report. 1.15—Marcel Wittrisch and Hans Bund Records.  
**BEROMÜNSTER**, 1.0—Fritsch Peasant Bnd. 1.55—See Sottens.  
**BRESLAU**, 1.0—Market Prices. 1.10—For Women. 1.30—Records.  
**BRNO**, 1.0-1.15—For Farmers, in German.  
**BRUSSELS** (No. 1), 1.0—News. 1.10—Radio Orchestra. Conductor: Gason.  
**BRUSSELS** (No. 2), 1.0—News. 1.10—Records.  
**BUDAPEST**, 1.0—Records.  
**COLOGNE**, 1.0-1.45—Chamber Orchestra (contd. from 12.15).  
**DEUTSCHLANDSENDER**, 1.0—"Winnetou and the Gold-diggers"—Play for Children (Hilde Stein-Zobellitz). 1.40—Talk for the Country Woman.  
**FRANKFURT**, 1.0—"Punch's Birthday"—Play (Freyberg).  
**HAMBURG**, 1.0—For Children.  
**HILVERSUM**, 1.0—Orchestra (contd. from 12.10). 1.10—Records. 1.40—Book Review.  
**HUIZEN**, 1.0—K.R.O. Orchestra. Selections, "Rigoletto" (Verdi) and "The Merry Widow" (Lehár). The Forge in the Forest (Michaelis). Ein Walzerlied (Petras). The Rosary (Nevin). Dem lantz entgegen (Blankenburg). 1.40—Literary Talk.

12 noon

**ALGIERS**, 12.0—Flute Records. 12.15—Berard Programme 12.30—Station Orchestra. Le campagne s'éveille (Flament). L'angélus tinte (Pesse). Pas les prés fleuris (Berger). Les accordailles (Gillet). Danse villageoise (Chabrier). Les cigales (Filippucci). Farandole (Varny). Alsatian Dances (Lévadé). Folk Song (Wohanka).  
**BERLIN**, 12.0—Report by Wilhelm Ehlers. 12.15—See 12.0 Munich.  
**BEROMÜNSTER**, 12.30—Fritsch Peasant Band.  
**BRATISLAVA**, 12.30—For Farmers. 12.45-12.50—Water Level.  
**BRESLAU**, 12.0—Symphony Orchestra (contd. from 11.0).  
**BRUSSELS** (No. 1), 12.0—Song Records. 12.30—Monologue by Mme. Baufre. 12.40—Records.



SUNDAY Oct. 14

2 p.m. (contd.)

KÖNIGSBERG, 2.0—Chamber Music. Clementine and Leopoldine von Hermann (Violin and Pianoforte). Grave (F. Bach). Gavotte (Bach). Rondo brillant in E flat (Weber). Cantabile (Mozart-Moffert). Minuet (Mozart-Burmester). 2.30—Talk: The East Prussian Trade School Courses. LEIPZIG, 2.0—Götte (Guitar); Schneider (Flute); and Matz (Viola). Allegro (Kreutzer). Minuet (Weber). Theme with Variations (Carulli). Rondo (Brand). 2.30—Reading for Young People. MADRID (EAJ7), 2.30—Sextet. Peer Gynt, Suite No. 2 (Grieg). MONTE CENERI, 2.0—See 1.55 Sottens. MOSCOW (No. 1), 2.0—Programme Announcements. 2.15—For Children. 2.58—Time. MUNICH, 2.0—Records. 2.20—Fair Play for Children after Grimm (Teuber). Music by Eichhorn. PARIS (PTT), 2.0—Opera Relay (contd. from 1.20). PARIS (Radio-Colonial), 2.45—Light Music. RADIO-NORMANDIE, 2.0—Dance Music. 2.30—Light Music. SOTTENS, 2.0-2.45—Commentary on the Switzerland v. Czechoslovakia Football Match (contd. from 1.55). STOCKHOLM, 2.0—For Children. 2.30—"At the Dairy Farm"—Songs and Stories. STRASBOURG, 2.0—"La Bohème"—Opera (Puccini) (contd. from 1.20). STUTTGART, 2.0—Variety. TURIN, 2.45—Records; Sports Notes. VIENNA, 2.5—News. 2.20—Talk for Farmers: The 1934 Harvest. 2.45—Chamber Music by the Prix Quartet. Quartet in B flat (Taneiev). Movement, Quartet in C minor (Schubert). WARSAW, 2.0—For Farmers. 2.15—Mme. Kaupé (Songs). 2.45—Talk: A Worker's Impressions of Bulgaria.

3 p.m.

BERLIN, 3.0—See Königsberg. BEROMÜNSTER, 3.45 (approx.)—Records. BRESLAU, 3.0—Orchestra. Conductor: Peter. BUDAPEST, 3.0—Military Band. 3.30—To be announced. COLOGNE, 3.0—Report on the Winter-Favourite Race from the Cologne-Merheim Race-course. 3.10—Concert, Part I.—Folk Songs, by a Dresden Boys' Choir. Part II.—The Station Schrammel Quartet and Willy Schneider (Baritone). DEUTSCHLANDSENDER, 3.0—See Breslau. FRANKFURT, 3.0—See Königsberg. HAMBURG, 3.0—See Breslau. HILVERSUM, 3.0—Orchestra (contd. from 2.10). 3.40—Records. 3.50—Talk. HUIZEN, 3.0—Report from the Eucharistic Congress at Buenos Aires. The Pope's Message and Papal Benediction. 3.45—Records. 3.55—For Invalids. KALUNDBORG, 3.0—People's Concert (contd. from 2.25). KÖNIGSBERG, 3.0—Station Orchestra. Conductor: Wilcken. LEIPZIG, 3.0—See Königsberg. MOSCOW (No. 1), 3.0—News. 3.30—Communist Party Programme. MUNICH, 3.0—See Breslau. PARIS (PTT), 3.0—Opera Relay (contd. from 1.20). PARIS (Radio-Colonial), 3.0—Light Music. PARIS (Radio-Paris), 3.0—Transmission from the International Eucharistic Congress at Buenos Aires: The Pope's Message and the Papal Benediction. 3.45—Records: Redemption (Franck). Sinfonia (Bach). PRAGUE, 3.0—Jazz Music. RADIO-NORMANDIE, 3.0—Musical Comedy Memories. 3.30—Light Music. ROME, 3.15—Talk. 3.30—Records; Sports Notes. STOCKHOLM, 3.0—English. 3.30—Records. STRASBOURG, 3.0—"La Bohème"—Opera (Puccini) (contd. from 1.30). STUTTGART, 3.0—See Königsberg. TURIN, 3.0—Records; Sports Notes. VIENNA, 3.0—Chamber Music (contd. from 2.45). 3.30—Reading of the Pope's Message to the Eucharistic Congress, relayed from Buenos Aires. 3.45—Book Review. WARSAW, 3.0—Reading. 3.20—Wilkomirski (Cello). Sonata in D minor (Debussy). Minuet (Ravel). Sicilienne (Faure). Scherzo (Gardard). 3.45—Charades.

4 p.m.

BERLIN, 4.0—Report on the Football Match, Berlin v. South-West Germany, from the Stadium. BEROMÜNSTER, 4.0—Variety. BRATISLAVA, 4.30—Folklore Programme from Koscice. BRESLAU, 4.0—Orchestra (contd. from 3.0). BRNO, 4.55—German Transmission. Choral Concert of German Folk Songs. BUDAPEST, 4.0—To be announced. 4.30—Talk: The Prince of Wales. COLOGNE, 4.0—"Leichlingen"—Sequence (Hinrichs). 4.40—Johann Strauss in America—Gramophone Concert. Part I.—The Philadelphia Symphony Orchestra: The Blue Danube. Tales from the Vienna Woods. Part II.—The Chicago Symphony Orchestra: Roses from the South; Wine, Woman, and Song. DEUTSCHLANDSENDER, 4.0—See 3.0 Breslau. FRANKFURT, 4.0—See Königsberg. HAMBURG, 4.0—See 3.0 Breslau. 4.45—The Worswede Moors—Scene (Sauer). HILVERSUM, 4.0—Talk (contd. from 3.50). 4.10—Sports Talk; Records. 4.40—V.A.R.A. Orchestra. Conductor: De Groot. Four Overtures: "La belle Hélène (Offenbach)", "The Gipsy Baron (Joh. Strauss)", "Das Modell (Suppé)", "Gipsy Love" (Lehár). HUIZEN, 4.0—For Invalids. 4.40—Records: Sacred Music. KALUNDBORG, 4.0—Service. KÖNIGSBERG, 4.0—Sports Notes. 4.10—Orchestra (contd. from 3.0). LAHTI, 4.0—Talk. 4.10—Records. 4.35—Talk. LEIPZIG, 4.0—Report from Schöneck. 4.45—Reading (Keller). MONTE CENERI, 4.0—Light Music, from the Café Huguenin, Lugano. 4.30—Records: Chamber Music. MORAVSKÁ-OSTRAVA, 4.55—Variety in German. MOSCOW (No. 1), 4.0—Communist Party Programme. 4.30—Talk: The October Revolution; Letter-Box. 4.55—Concert. MUNICH, 4.0—See 3.0 Breslau. 4.30—Talk: Rothenburg ob der Tauber. 4.50—"Die Rockenstubb"—Folk Play (Postleb). OSLO, 4.0—Orchestra. Rakoczy Overture (Kéler-Béla). Waltz, Morgenblätter (Strauss). Leggenda d'amore (Bece). Selection, "The Tales of Hoffmann" (Offenbach). Landerkennung (Grieg). Intermezzo (Mascagni). March (Alm). PARIS (PTT), 4.0—Opera Relay (contd. from 1.20). PARIS (Radio-Paris), 4.0—Music and Play for Young People. PITTSBURGH, 4.0—Calvary Episcopal Church. 5.15—Gould and Sheffer. 5.30—Radio City Concert. PRAGUE, 4.0—Jazz. 4.30—Talk. 4.45—Records. 4.55—German Transmission: "Amok"—Radio Film (Sordan-Feld). RADIO-NORMANDIE, 4.0—Light Music. 4.30—For Children. 4.45—Light Music. ROME, 4.0—Vocal and Instrumental. STOCKHOLM, 4.0—Weather. 4.5—Records. 4.30—Talk. STRASBOURG, 4.0—"La Bohème"—Opera (Puccini) (contd. from 1.20). 4.30—Records. STUTTGART, 4.0—Humorous Records. 4.10—See Königsberg. TURIN, 4.0—String Orchestra. In the Interval: Football Report and Sports Notes. VIENNA, 4.0—Book Review (contd. from 3.45). 4.10—Report on Records: The Graf Hunyady Races. 4.30—Talk: Fuchs. 4.55—Record. WARSAW, 4.0—Dance Music. 4.50—Reading.

5 p.m.

BERLIN, 5.0—Literary Programmes. BEROMÜNSTER, 5.0—Records: Yodels and Zither Music. 5.30—Talk: Emile Zola. BRATISLAVA, 5.0—Hungarian Transmission: Programme Announcements; Station Orchestra. Conductor: Schimpl. 5.45—Recitations. BRESLAU, 5.0—Sports Report. 5.30—Weekly Review. BRNO, 5.0—German Transmission (contd. from 4.55). BRUSSELS (No. 1), 5.0—Concert. Symphony Orchestra. Longue (Viola). Suite in G (Bach). Viola Concerto (Lanque). Les petits riens (Mozart). Petite suite (Debussy). In the Interval: Football Results. BRUSSELS (No. 2), 5.0—Lionel's Club Band, from the Century Hotel, Antwerp. In the Interval: Sports. BUDAPEST, 5.0—Bura Cigány Band. COLOGNE, 5.0—"Die Alte im

Walde"—Play (Gath and Petry) with Music by Heller and Schumann. DEUTSCHLANDSENDER, 5.0—To be announced. 5.25—Dr. Berendt discusses Hadamovsky's New Wireless Book. 5.35—See Munich. FRANKFURT, 5.0—Barrack-room Stories. 5.15—Contemporary German Music, from Donaueschingen. Military Band, Trossingen Mouth-Organ Band and Soloists. New German Folk Songs (arr. Fischer). Löns Songs (Graener). Dances for Flute and Lute (Schmid). Alte Kinderrime (Knab). Military Band: (a) March, Mein Vaterland (Kayer), (b) Romanze (Husadel), (c) Heimat, dir zu Ruhm und Ehr (Kannitz). Mouth Organ Band: (a) Sonntags im Dorf (Curt Herold), (b) Waltz (Bohnet). HAMBURG, 5.0—"The Worswede Moors" (contd. from 4.45). 5.15—See Frankfurt. HILVERSUM, 5.0—V.A.R.A. Orchestra (contd. from 4.40). 5.10—Steyn (Accordion) and Jong (Pianoforte). 5.25—Ballet égyptien (Luigin) by the V.A.R.A. Orchestra. Conductor: De Groot. 5.40—Football Notes. HUIZEN, 5.0—Service from Ulrum. KALUNDBORG, 5.0—Service (contd. from 4.0). 5.20—Talk. 5.50—Weather. KÖNIGSBERG, 5.0—"Petermann geht friee"—Comedy in Dialect (Bink). 5.45—Songs and Ballads by Paulpeter Rafalski (Bass). LAHTI, 5.10—Kunnas ("Cello). 5.40—Talk. LEIPZIG, 5.0—Reading (contd. from 4.45). 5.15—See Frankfurt. MONTE CENERI, 5.0—Talk for Children: Elephants. 5.15—Records, Cinema-Organ Music. 5.30—For Children. 5.45—Dance Records. MORAVSKÁ-OSTRAVA, 5.0—Variety (contd. from 4.55). MOSCOW (No. 1), 5.0—Concert. 5.55—Light Music and Dance Music. MUNICH, 5.0—"Die Rockenstubb" Folk Play (contd. from 4.50). 5.25—Talk on the following Transmission. 5.35—"Lohengrin"—Opera in Three Acts (Wagner), relayed from the Opera House. OSLO, 5.0—Literary Talk. 5.30—Provincial Programme: Southern Norway. PARIS (Poste Parisien), 5.0—Orchestra. PARIS (PTT), 5.0—Two One-Act Comedies: (a) "Les grands garçons" (Paul Gerdaly), (b) "Les Balances" (Georges Courteline). PARIS (Radio-Paris), 5.0—Two Plays: "L'Avancement" (Polonais); "Les Trois Souds". PITTSBURGH, 5.0—Calvary Episcopal Church. 5.15—Gould and Sheffer. 5.30—Radio City Concert. PRAGUE, 5.0—"Amok"—German Film (contd. from 4.55). 5.55—News in German. RADIO-NORMANDIE, 5.0—Light Music. ROME, 5.0—Vocal and Instrumental Concert (contd. from 4.0). 5.15—Weather. SOTTENS, 5.0—Records. 5.30—Religious Address. STOCKHOLM, 5.0—Evensong. STRASBOURG, 5.0—Orchestral Concert. Conductor: Roskam. Jean Weber (Saxophone). Slav Rhapsody (Volpatti). Schatzwalzer (Joh. Strauss). Song of the Bees (Filippucci). Sous bois (Staub). Foxtrot (Tobias). Selection, "The Bayadère" (Kálmán). Tango (Fancelle). Saxophone Solo. Intermezzo (Transalotter). Foxtrot (McKnight). Pasodoble (Doelle). STUTTGART, 5.0—Records. 5.30—Sports Report. TURIN, 5.0—String Orchestra. 5.20—Sports Report. VIENNA, 5.0—Records. 5.35—Reading: "Also sprach Zarathustra" (Nietzsche). WARSAW, 5.0—"Horsztynski"—Play (Stowacki).

6 p.m.

ALGIERS, 6.0—Music. 6.15—Records. 6.30—Operetta Music. 6.35—Accordion. BARCELONA, 6.0—Station Orchestra. 6.30—Florencio Magaña (Tenor). BELGRADE, 6.0—Talk. 6.30—Roman Catholic Service. BERLIN, 6.0—German Artisans' Day Programme: Guild Songs and Sayings. 6.40—Sports Report. BEROMÜNSTER, 6.0—News. 6.5—Scandinavian and Slav Music. BRESLAU, 6.0—"In Praise of Work"—Folk Play (Wabschke), Music by Koschinsky. BRNO, 6.50—Talk.

BRUSSELS (No. 1), 6.0—Argentine Music with Commentary. 6.45—French Music by Hélène Dinsart. Variations (Chevallard). Reflets dans l'eau (Debussy). Feux d'artifice (Debussy). La vallée des cloches (Ravel). Etude in Waltz Form (Saint-Saëns). BRUSSELS (No. 2), 6.0—Opera Records. 6.15—Orchestra. Conductor: Douliez. Overture, "La princesse jaune" (Saint-Saëns). Mattinata (d'Ambrosio). Waltzes (Dreissen). Russian Dance (Bullerian). Romanian Folk Songs (Dolfi-Dauber). Student Song Pot-pourri (Manfred). Ballet, "Le train bleu" (Milhaud). Old Viennese Songs and Dances (Pacher-negg). BUDAPEST, 6.0—Bura Cigány Band. 6.15—Talk. 6.50—News. COLOGNE, 6.0—Report: Düsseldorf Tram Day. 6.20—Sports Report. 6.30—"The Flying Dutchman"—Opera in Three Acts (Wagner). Conductors: Buschikötter and Breuer. DEUTSCHLANDSENDER, 6.0—See 5.35 Munich. In the Interval at 6.35, Reading; Sports Notes. FRANKFURT, 6.0—See Stuttgart. HAMBURG, 6.0—Bremen Artisans' Choral Society. Conductor and Commentator: Zimmermann. 6.35—Sports Report. 6.55—Weather. HILVERSUM, 6.0—Records: Extracts, "The Barber of Seville" (Rossini). 6.40—Recitations. 6.55—Light Music. Conductor: Horst Down South (Middleton-Tiemeyer). Fairy on the Clock (Meyers-Dostal). By the Waters of Minnetonka (Lawrence). Was spielt die Welt (Dostal). Ev'ry day is a lucky day (Carlton). Knave of diamonds (Steele). Lazy bones (Mecca-Carmichael). Piece (Dvoracek). Nach Wien (Robrecht). HUIZEN, 6.0—Service (contd. from 5.0); Sacred Songs by a Women's Choir. KALUNDBORG, 6.0—News. 6.30—Talk: England, our Western Neighbour. KÖNIGSBERG, 6.0—Songs and Ballads (contd. from 5.45). 6.15—Talk. 6.35—Sixteenth and Seventeenth Century English Harpsichord Music by Eta Harich-Schneider. Doctor Bull's myself (John Bull). His dream, his Rest, his Humour (Farnaby). The Carman's Whistle (Byrd). Suite in G (Purcell). Ground (Purcell). Toccata (Purcell). LAHTI, 6.0—Helmi Liukkonen (Songs). 6.30—Recitation. 6.50—Station Orchestra. LEIPZIG, 6.0—See Breslau. MONTE CENERI, 6.0—Dance Records. 6.15—Talk: Distinguished Swiss Women. 6.30—Androlo (Accordion). 6.45—News. 6.55—Record. MUNICH, 6.0—"Lohengrin" (Wagner) (contd. from 5.35). 6.35—Weather; Sports Notes. OSLO, 6.0—Provincial Programme (contd. from 5.30). 6.15—News. 6.30—Time. 6.31—Quintet (Sinding) with Introductory Talk. Philharmonic String Quartet and Kari Aarvold Slager (Pianoforte). PARIS (Poste Parisien), 6.0—Orchestra. 6.15—Sousa's Marches. 6.30—Dance Music. PARIS (PTT), 6.0—Wireless Talk. 6.30—News. PARIS (Radio-Paris), 6.0—The Adison Orchestra. PITTSBURGH, 6.0—Radio City Concert. 6.30—Highlights of the Bible. PRAGUE, 6.5—Dance Music. 6.50—Travel Talk. RADIO-NORMANDIE, 6.0—Dance Music. 6.30—Light Music. ROME, 6.30—Sports Notes; Dopolavoro Report; Announcements. SOTTENS, 6.0—Mlle. Tatianoff (Songs). 6.30—Sports Notes. 6.59—Weather. STOCKHOLM, 6.0—Evensong (contd. from 5.0). 6.15—Weather; News. 6.35—Play (Duhamel). STRASBOURG, 6.0—Medical Talk. 6.15—Sports Review. 6.30—Orchestra. STUTTGART, 6.0—"Rainbow"—Variety. TOULOUSE (Radio-Toulousse), 6.0—News. 6.15—Opera Music. March from "The Valkyrie" (Wagner). Barcarolle, "Tales of Hoffmann" (Offenbach). Arab Dance, "Peer Gynt" (Grieg). Overture, "Don Giovanni" (Mozart). 6.30—Operetta Songs. 6.45—Soloist Programme. TURIN, 6.30—News; Dopolavoro Notes; Records. VIENNA, 6.5—News. 6.15—Songs and Arias by Pia Igy (Soprano). 6.45—Report: The Burg Kreuzenstein Folk Festival.

7 p.m.

ALGIERS, 7.0—Accordion. 7.15—Records. 7.55—News. BARCELONA, 7.0—Concert of Viennese Waltzes by the Station Orchestra. Two Waltzes (Strauss): (a) The Blue Danube, (b) Wine, Woman, and Song. Two Waltzes (O. Straus) from (a) "A Waltz Dream," (b) "Die Teresina." 7.40—Songs. BELGRADE, 7.0—To be announced. 7.30—Station Orchestra. BERLIN, 7.0—See Leipzig. BEROMÜNSTER, 7.0—Talk: Swiss Economics. 7.30—"Frohinn" Male Voice Choir. BORDEAUX-LAFAYETTE, 7.30—Records. 7.45—Sports Notes. BRATISLAVA, 7.50—Pianoforte Sonata No. 2 (Beethoven). BRESLAU, 7.0—See Leipzig. BRNO, 7.50—Violin Sonata in F (Beethoven). BRUSSELS (No. 1), 7.0—French Music (contd. from 6.45). 7.15—Religious Address. 7.30—News: Music Review. BRUSSELS (No. 2), 7.0—Orchestra (contd. from 6.15). 7.15—Roman Catholic Address. 7.30—News. 7.50—Review. 7.55—Music Review. BUDAPEST, 7.0—News. 7.10—"The Viennese Bride"—Play in Three Acts (Orbok-Békéffy). COLOGNE, 7.0—"The Flying Dutchman"—Opera (contd. from 6.30). DEUTSCHLANDSENDER, 7.0—See 5.35 Munich. FRANKFURT, 7.0—Station Orchestra and Soloists. Conductor: Rosbad. Symphony No. 6 in B minor, The Pathetic (Tchaikovsky). Overture, "Norma" (Bellini). Sextet from "Lucia di Lammermoor" (Donizetti). Music (Verdi): (a) Extracts, "A masked Ball," (b) Quartet, "Rigoletto," (c) Extracts, "Aida." HAMBURG, 7.0—Opera Music from Kiel. Conductor: Döring. March and Extracts, "Carmen" (Bizet). Overture, "Martha" (Flotow). Selection, "Das Nachtlager in Granada" (Kreutzer). Selection, "Aida" (Verdi). Waltz, "Faust" (Gounod). HILVERSUM, 7.0—Light Music (contd. from 6.55). 7.40—Time; News. 7.55—Beethoven Concert. A.V.R.O. Orchestra. Conductor: Treep. Pas (Pianoforte). Overture, "Coriolanus." Pianoforte Concerto No. 3. HUIZEN, 7.0—Sacred Songs by a Women's Choir. 7.25—Football Results. 7.30—Talk. 7.55—K.R.O. Boys. Conductor: Lustenhouwer. KALUNDBORG, 7.0—Chimes. 7.2—Preil's Instrumental Ensemble. March, "Wonder Bar" (Dubin-Warren). Waltz Potpourri (Gray). Weisst du, wie das ist (Roland). The Old Clock (Melborn). The Wedding of Mr. Mickey Mouse (Vienna). 7.20—Relay from the Scala Cinema: Extracts, "Marie Louise"—Sound Film. 7.30—"An Evening in New Homes"—Report. 7.55—Joe Venuti Light Music. Preil (Violin), Mortensen (Bass Saxophone), Lange (Guitar) and Hansen (Pianoforte). KÖNIGSBERG, 7.0—Sports Report. 7.10—Variety. LAHTI, 7.0—Station Orchestra. 7.45—News. LEIPZIG, 7.0—Vocal and Instrumental Concert. MONTE CENERI, 7.0—Records. 7.15—The 1812 Overture (Tchaikovsky) on Records. 7.30—"Anna II"—Play (Müglin). MORAVSKÁ-OSTRAVA, 7.5—Station Orchestra. Conductor: Divis. MOSCOW (No. 1), 7.0—Symphony Concert. MUNICH, 7.0—"Lohengrin" (Wagner) (contd. from 5.35). OSLO, 7.0—Quintet (Sinding) (contd. from 6.31). 7.15—Talk with Readings: Henrik Wergeland. 7.45—Station Orchestra. Conductor: Kramm. Betty Humby (Pianoforte). Overture, "Figaro" (Mozart). Pianoforte Concerto (Delius). Suite (Verdi). PARIS (Poste Parisien), 7.0—Sports Notes. 7.10—News. 7.15—Records of Kreisler, Tito Schipa, Pablo Casals and Ninon Vallin. PARIS (PTT), 7.45—Aviation Notes. 7.53—Announcements.



SUNDAY Oct. 14

7 p.m. (contd.)

PARIS (Radio-Paris), 7.0—Radio Paris Circus. 7.30—Topical Talk.

PITTSBURGH, 7.0—Variety. 7.15—Bob Becker. 7.30—Dramatic Programme.

PRAGUE, 7.5—Variety. 7.50—Recital on Two Pianofortes, Ailemande (Couperin). Andante and Variations (Schumann). Toccatina (Hodge). Piece (Zadon-Rée). Waltz in D flat (Chopin-Rée). Cowboy's Serenade (Réc). Waltz, Frühlingsstimmen (Strauss-Rée).

RADIO-NORMANDIE, 7.0—Light Music.

ROME, 7.0—News; Records. 7.45—"The Barber of Seville"—Opera in Two Acts (Rossini).

RUYSSELEDE, 7.45—News in French.

SCHENECTADY, 7.30—Gene Arnold and the Commodores.

SOTTENS, 7.0—Suisse Romande Orchestra. Conductor: Echenard. Casanelli d'Istria (Pianoforte). Priests' March, "Athalie" (Mendelssohn). Pianoforte Concerto in E flat (Liszt). Extracts from a Suite (Strong). 7.30—Poetry Reading by Lily Pommier. 7.50—Station Orchestra. Conductor: Echenard. Slav Rhapsody No. 1 (Dvořák). Ballet Music, "Petrushka" (Stravinsky). Night on the Bare Mountain (Mussorgsky).

STOCKHOLM, 7.0—Play (Duhamel) (contd. from 6.35). 7.15—The St. Thomas' Choir of Leipzig, from the Engelbrekt Church. Conductor: Straube. Lindqvist (Organ). Organ Sonata in G (Bach). Gloria Patri (Dulichius). Als Jacob nun das Kleid sah (Senff). Maria wallt zum Heiligtum (Eccard). Tristest er anima mea (Kuhnau). Pater-noster (Hassler). Organ: Pas-sacaglia in C minor (Bach). Jesu, meine Freude (Bach). In the Interval at 7.45: Poetry Reading.

STRASBOURG, 7.0—Orchestra. 7.30—News. 7.45—Records.

STUTTART, 7.0—"La Dame blanche"—Comic Opera (Boieldieu). Station Choir and Orchestra. Conductor: Drost.

TOULOUSE (Radio-Toulouse), 7.0—Musical Comedy. 7.15—Military Music. 7.30—News. 7.45—Sound-Film Music.

TURIN, 7.0—Sports Notes; Announcements; Records. 7.45—Military Band. In the Intervals: Humorous Items and Film Review.

VIENNA, 7.0—Report: The Burg Krenzenstein Folk Festival (contd. from 6.45). 7.15—Motto. 7.20—"Münchhausens letzte Lüge"—Comedy in Three Acts (Keim).

WARSAW, 7.0—Symphony Orchestra. Conductor: Oziminski. Wolfson (Pianoforte). Overture, "Eury-anthe" (Weber). Concertino (Weber). Two Popular Swedish Melodies (Svendsen). Suite, "Sigurd Jorsalfar" (Grieg). 7.45—News. 7.55—Talk: Work in Poland.

8 p.m.

ALGIERS, 8.0—Time. 8.2—Sports. 8.15—Recitations. 8.20—News. 8.30—Station Orchestra. Overture, "William Tell" (Rossini). Waltz (Waldeufel). Scènes alsaciennes (Massenet). Overture, "Mignon" (Thomas). Persian Dances (Guiraud). Ballet, "Le Cid" (Massenet).

ATHLONE, 8.30—Time. 8.31—Sacred Music by the Station Orchestra.

BARCELONA, 8.0—Dance Music.

BELGRADE, 8.0—Announcements. 8.10—Station Orchestra.

BERLIN, 8.0—See 7.0 Leipzig. 8.30—News; Sports Notes.

BEROMÜNSTER, 8.0—News. 8.10—Organ, from Basle Cathedral.

BORDEAUX-LAFAYETTE, 8.0—See Paris (PTT).

BRATISLAVA, 8.0—Sonata (Beethoven) (contd. from 7.50). 8.15—Slovak Programme: Art Talk; Moyzes Symphony No. 2 in A minor. Three Songs, Finale, Prelude, Passacaglia, Cadenza. Station Orchestra. Conductor: Dyk.

BRESLAU, 8.0—See 7.0 Leipzig.

BRNO, 8.0—Violin Sonata in F (Beethoven) (contd. from 7.50).

BRUSSELS (No. 1), 8.0—Liszt Concert, Symphony Orchestra. Delvigne (Pianoforte). Les préludes. Piano-

forte Solos. Ce qu'on entend sur la montagne. Pianoforte Solos. Rhapsody.

BRUSSELS (No. 2), 8.0—Old Flemish Folk Songs by the Brussels Schola Cantorum, Conductor: Van de Velde. 8.45—Wireless Notes.

BUDAPEST, 8.0—"The Viennese Bride"—Play (contd. from 7.10).

COLOGNE, 8.0—"The Flying Dutchman"—Opera (contd. from 6.30).

DEUTSCHLANDSENDER, 8.0—See 5.35—Munich. In the interval at 8.20: News.

FRANKFURT, 8.0—Orchestra (contd. from 7.0).

HAMBURG, 8.0—Two Humorous Scenes: (a) The Opening of a Light Railway (Walter Brauns), (b) Meier's First Flight (Peter Steinbach).

HILVERSUM, 8.0—Beethoven Concert (contd. from 7.55). 8.40—News. 8.55—A.V.R.O. Orchestra. Conductor: Treep. Anders (Tenor) Overture, "The Merry Wives of Windsor" (Nicolaï). Aria, "Der Freischütz" (Weber). Song, "Czar and Carpenter" (Lortzing). London Every Day (Coates). Arias, "The Girl of the Golden West" (Puccini) and "Manon Lescaut" (Puccini). Overture, "Carnival in Rome" (Joh. Strauss). Song, "Eine Nacht in Venedig" (Joh. Strauss). "The Count of Luxembourg" (Lehár), and "Countess Maritza" (Kálmán). March (Blanken-burg).

HUIZEN, 8.0—K.R.O. Boys (contd. from 7.55). In the Interval at 8.40: News.

JUAN-LES-PINS (Radio Côte d'Azur), 8.0—Amusement Guide; Sports Notes. 8.15—Concert.

KALUNDBORG, 8.0—Light Music (contd. from 7.55). 8.20—Reading (Wied). 8.35—Modern Operetta Music by Prell's Instrumental Ensemble. March from "Lieber Reich—aber glücklich" (Kollo). Waltz "Schön ist die Welt" (Lehár). Selection, "The Flower of Hawaii" (Abraham). Pasodoble, "Skönjomfru" (Reesen).

KÖNIGSBERG, 8.0—Variety (contd. from 7.10).

LEIPZIG, 8.0—Vocal and Instrumental Concert (contd. from 7.0).

MONTE CENERI, 8.0—Records: Mandoline Music. 8.35—Records: Swiss Regimental Marches.

MORAVSKÁ-OSTRAVA, 8.0—Orchestra (contd. from 7.5). 8.5—Yugoslav Songs. 8.30—A Play.

MOSCOW (No. 1), 8.0—German Programme: Weekly Review; Letter-box. 8.55—Chimes from the Kremlin.

MUNICH, 8.0—"Lohengrin" (Wagner) (contd. from 5.35). In the Interval at 8.20: News.

OSLO, 8.0—Orchestra (contd. from 7.45). 8.40—News.

PARIS (Poste Parisien), 8.10-8.40—"Le bonhomme jadis"—One-Act Play (Murger). 8.55—A Radio Film.

PARIS (PTT), 8.0—Records: French Operetta Music. 8.30—"Le Demi-Monde"—Comedy in Five Acts (Dumas Fils).

PARIS (Radio-Paris), 8.0—Variety. Conductor: André. Popular Marches (Bosc). Songs and Melodies. Overture, "Giralda" (Adam). Songs and Melodies. Selection, "Romeo and Juliet" (Gounod). Songs and Melodies. Destiny Waltz (Baynes). Java (Yvain). One Step (Paradis). In the Interval at 8.30: Press Review.

PITTSBURGH, 8.0—Dramatic Programme. 8.30—Vespers—Shady-side Church.

PRAGUE, 8.0—Two Pianofortes (contd. from 7.50). 8.15—See Bratislava.

RADIO-NORMANDIE, 8.0—Light Music. 8.15—Sports Notes. 8.30—Opera and Operetta Music. Song, "Le jour et la nuit" (Lecoq). Arioso, "Benvenuto Cellini" (Diaz-Hirsch). Two Melodies (Benatzky). Aria, "Robert le Diable" (Meyer-beer). Song, "La Vivandière" (Godard). Two Arias, "The Pearl Fishers" (Bizet). Songs, "Veronique" (Messenger). Arias, "La Dame Blanche" (Boieldieu). Bolero "Le cœur et la main" (Lecoq). Arioso, "Le roi de Lahore" (Massenet). Selection, The Huguenots (Meyerbeer).

ROME, 8.0—"The Barber of Seville"—Opera (Rossini) (contd. from 7.45).

RUYSSELEDE, 8.0—See Brussels No. 1.

SCHENECTADY, 8.0—Talkie Picture Time—Sketch.

SOTTENS, 8.0—Station Orchestra

(contd. from 7.50). 8.15—News. 8.30—"La Nuit Blanche"—Operetta in One Act (Offenbach).

STOCKHOLM, 8.0—St. Thomas' Choir (contd. from 7.15). 8.45—Weather; News.

STRASBOURG, 8.0—News in German; Records. 8.30—See Paris (PTT).

STUTTART, 8.0—"La Dame Blanche"—Comic Opera (Boieldieu) (contd. from 7.0).

TOULOUSE (Radio-Toulouse), 8.0—Sound-Film Music. 8.15—Orchestra. 8.30—Songs.

TURIN, 8.0—Military Band (contd. from 7.45).

VIENNA, 8.0—"Münchhausens letzte Lüge"—Comedy (contd. from 7.20).

WARSAW, 8.0—Variety. 8.45—Sports.

9 p.m.

ALGIERS, 9.0—Orchestra (contd. from 8.30). 9.55—News.

ATHLONE, 9.0—Sacred Music. Station Orchestra. John Lynskey (Songs). 9.30—Franklin (Violin). 9.50—Ethna Carbery Poetry Recital by Seamus MacManus.

BARCELONA, 9.0—Chimes; Records.

BELGRADE, 9.0—News. 9.20—To be announced.

BERLIN, 9.0—"The Unwilling Marriage"—Comic Opera in Three Acts (Humperdinck). Station Choir and Orchestra. Conductor: Steiner.

BEROMÜNSTER, 9.0—Organ (contd. from 8.10). 9.15—Sports Notes.

BORDEAUX-LAFAYETTE, 9.0—See 8.0 Paris (PTT).

BRATISLAVA, 9.20—News in Hungarian.

BRESLAU, 9.0—News; Sports Notes. 9.30—Records. 9.50—See Munich.

BRUSSELS (No. 1), 9.0—"Les aveugles"—Play after Breughel (de Ghelderode). 9.15—Viennese Music. Radio Orchestra. Conductor: Gason. Selection, "The Gipsy Baron" (Strauss). "The Land of Smiles" (Lehár). Schubert Potpourri (Ralp). Schneeglöckchen (Strauss). Four Viennese Pieces (Kreisler). Selection, "The Little Café" (Benatzky). Radetzky March (Strauss).

BRUSSELS (No. 2), 9.0—Grieg Music: March, "Sigurd Jorsalfar." Norwegian Dances. Pianoforte Pieces. Second Suite, Peer Gynt. Pianoforte Piece. Symphonic Dances.

BUDAPEST, 9.0—News. 9.30—Eröss Takács Jazz Band.

COLOGNE, 9.0—News. 9.20—Records. 9.50—See Munich.

DEUTSCHLANDSENDER, 9.0—To be announced. 9.50—News.

FRANKFURT, 9.0—News. 9.10—News; Sports. 9.20—Sunday Sports. 9.45—Hauck-Reichert Dance Band; Variety Items.

HAMBURG, 9.0—News. 9.30—Dance Music.

HILVERSUM, 9.0—A.V.R.O. Orchestra (contd. from 8.55). 9.55—Records.

HUIZEN, 9.0—K.R.O. Boys (contd. from 7.55). 9.30—Records. 9.40—K.R.O. Orchestra Conductor: van 't Woud. King Cotton March (Souza). Overture, "Poet and Peasant" (Suppe). Roses from the South (Strauss). Parade im Märchenwald (Noack). Rusticanello (Cortopassi). Serenata (Toselli). 9.55—News.

JUAN-LES-PINS (Radio Côte d'Azur), 9.0—News; Dance Music. 9.30—Request Programme.

KALUNDBORG, 9.5—News. 9.15—Swedish Folk Songs by Edith Norrie. 9.30—Prell's Instrumental Ensemble. When I am looking at you (Stothart). Cuban Love Song (Stothart). Love thy Neighbour (Revel). I've been so blue (Deltour). Quicksilver (Caphat).

KÖNIGSBERG, 9.0—News; Sports Report. 9.15 (approx.)—Variety (contd. from 7.10). 9.50—See Munich.

LEIPZIG, 9.0—News; Sports Report. 9.15 (approx.)—Vocal and Instrumental (contd. from 7.0). 9.45—See Frankfurt.

MADRID (EAJ7), 9.0—Sextet; Flamenco Songs.

MOSCOW (No. 1), 9.5—Talk in English: Russian Miners.

MUNICH, 9.0—"Lohengrin" (Wagner) (contd. from 5.35). 9.50—Dance Music.

OSLO, 9.0—Topical Talk. 9.15—Sports Notes. 9.30—Dance Records.

PARIS (Poste Parisien), 9.0—A Radio Film.

PARIS (PTT), 9.0—"Le Demi-Monde"—(Dumas Fils) (contd. from 8.30).

PARIS (Radio-Paris), 9.0—Variety (contd. from 8.0). In the Interval at 9.15, News.

PITTSBURGH, 9.0—Kansas City Symphony. 9.30—Carlsbad Products.

PRAGUE, 9.0—News. 9.20—Record. 9.25—News in German. 9.30—Czech Dances by the Prague Pianoforte Duo and Tino Muff (Song Refrains).

RADIO-NORMANDIE, 9.0—Opera and Operetta Music (contd. from 8.30). 9.30—Military Music. 9.45—Dances.

ROME, 9.0—"The Barber of Seville"—Opera (Rossini) (contd. from 7.45).

RUYSSELEDE, 9.0—News in Flemish.

SCHENECTADY, 9.0—Talkie Picture Time-Sketch.

SOTTENS, 9.5-9.15—Sports Notes.

STOCKHOLM, 9.0—Light Music. Overture (Kéler-Béla). Waltz, Telegramme (Strauss). Piece (Tellam). Potpourri (Geiger). Serenade (de Micheli). Potpourri (Dostal).

STRASBOURG, 9.0—See 8.30 Paris (PTT).

STUTTART, 9.0—News. 9.45—Records.

TOULOUSE (Radio-Toulouse), 9.0—"Prince Igor"—Opera (Borodin) (Concert Version).

TURIN, 9.0—Military Band (contd. from 7.45).

VIENNA, 9.0—Light Music. Vienna Symphony Orchestra. Conductor: Schönherr. Rosner (Violin). March (Bauer). Overture (Killer). Styrian Melodies (Eller). Waltz (Dit). Marching Song (Riendel). Polka Mazurka (Gretsch). Österreich über alles (Mosheimer). Selection, "Frühling im Wiener Wald" (Ascher). Two Pieces (Stefanides): (a) Serenade, (b) In der Oesteria. Waltz, In Marinekreisen (Jaksch). Oriental Intermezzo (Toif). Stolz Potpourri (Dostal). March (Fučik). In the Interval, News.

WARSAW, 9.0—Letter-Box. 9.15—Music. 9.30—Dance Music.

10 p.m.

ATHLONE, 10.0—Ethna Carbery Poetry (contd. from 9.50). 10.20—Helen Jones (Soprano). 10.35—Pipes and Fiddle.

BARCELONA, 10.0—Records. 10.45—Chess Lesson.

BERLIN, 10.0—"The Unwilling Marriage" (Humperdinck) (contd. from 9.0).

BORDEAUX-LAFAYETTE, 10.0—See 8.0 Paris (PTT).

BRESLAU, 10.0—See Munich.

BRUSSELS (No. 1), 10.0—News. 10.10—Dance Music.

BRUSSELS (No. 2), 10.0—News. 10.10—See Brussels (No. 1).

BUDAPEST, 10.0—Eröss-Takács Jazz Band. 10.10—Lakatos Cigány Band: Folk Music.

COLOGNE, 10.0—See Munich.

DEUTSCHLANDSENDER, 10.0—Weather. 10.15—Dance Music from Hamburg.

FRANKFURT, 10.0—Hauck-Reichert Dance Band.

HAMBURG, 10.0—Dance Music.

HILVERSUM, 10.0—Records. 10.25—Kovacs Lajos Orchestra.

HUIZEN, 10.0—K.R.O. Orchestra (contd. from 9.40). 10.20-10.40—Choral Epilogue. Conductor: Pickkers.

JUAN-LES-PINS (Radio Côte d'Azur), 10.0—Request Programme. 10.30—Variety.

KALUNDBORG, 10.0—Dance Music. KÖNIGSBERG, 10.0—See Munich. LEIPZIG, 10.0—See Frankfurt. MADRID (EAJ7), 10.0—Sextet; Flamenco Songs. 10.30—Relay from the International Eucharistic Congress. Buenos Aires (on Records).

MADRID (EAQ), 10.15—News. 10.30—Spanish Music; Programme from Madrid (EAJ7); News.

MOSCOW (No. 1), 10.5—Swedish Programme: (a) Talk: The October Revolution; (b) Weekly Review.

MUNICH, 10.0—Dance Music. OSLO, 10.0—Dance Records.

PARIS (Poste Parisien), 10.0—A Radio Film. 10.20—News. 10.30—Light Music.

PARIS (PTT), 10.0—"Le Demi-Monde" (Dumas Fils) (contd. from 8.30); Goidy Dance Band.

PARIS (Radio-Paris), 10.0—Variety (contd. from 8.0). 10.30—Dance Music.

PITTSBURGH, 10.0—Roses and Drums. 10.30—Radio Explorer's Programme. 10.45—Albert Payson Terhune.

RADIO-NORMANDIE, 10.0—Concert. 10.30—Light Music.

STRASBOURG, 10.0—See 8.30 Paris (PTT). 10.30—Press Review. 10.35 (approx.) Dance Music.

STUTTART, 10.0—Dance Music from Baden-Baden.

TOULOUSE (Radio-Toulouse), 10.0—Orchestra. 10.15—News. 10.30—Operetta Songs.

TURIN, 10.0—News.

VIENNA, 10.0—Light Music (contd. from 9.0). 10.35—Brunner Dance Band—Songs by Sternau.

WARSAW, 10.0—Weather. 10.5—Dance Music.

11 p.m.

ATHLONE, 11.0—Time: News.

BRESLAU, 11.0-11.30—See Munich.

BRUSSELS (No. 1), 11.0—Dance Music.

BRUSSELS (No. 2), 11.0—See Brussels (No. 1).

COLOGNE, 11.0-11.30—See Munich.

FRANKFURT, 11.0—Operetta Music.

HILVERSUM, 11.0-11.40—Kovacs Lajos Orchestra.

JUAN-LES-PINS (Radio Côte d'Azur), 11.0—Variety.

KALUNDBORG, 11.0—Chimes. 11.2-11.30—Dance Music.

KÖNIGSBERG, 11.0-11.30—See Munich.

LEIPZIG, 11.0-11.30—See Frankfurt.

MADRID (EAJ7), 11.0—Eucharistic Congress Relay (contd. from 10.30). 11.15—Dance Music.

MADRID (EAQ), 11.0—See Madrid (EAJ7).

MUNICH, 11.0-11.30—Dance Music. PARIS (Poste Parisien), 11.0—Broad-way Hits. 11.15—Musical Comedy and Old-Time Favourites.

PARIS (PTT), 11.0—Dance Music by the Goidy Orchestra.

PITTSBURGH, 11.0—Those Three Girls. 11.15—Spartan's Trio lians. 11.30—Grand Hotel.

RADIO-NORMANDIE, 11.0—Opera Music. 11.30—Dance Music.

STRASBOURG, 11.0—Dance Music.

STUTTART, 11.0—See Frankfurt.

TOULOUSE (Radio-Toulouse), 11.0—Argentine Band. 11.15—Chansonnettes. 11.30—Orchestra. 11.50—Chansonnettes.

VIENNA, 11.0—Brunner Dance Band Songs by Sternau.

ZEESEN, 11.15—Popular Orchestral Music.

12 midnight

BEROMÜNSTER, 12.0—Station Music.

JUAN-LES-PINS (Radio Côte d'Azur), 12.0—Variety.

MADRID (EAQ), 12.0—Variety.

PITTSBURGH, 12.0—Silken Strings. 12.30—Variety.

RADIO-NORMANDIE, 12.0—Dance Music.

SCHENECTADY, 12.45—Wendell Hall.

STUTTART, 12.0—See 11.0 Frankfurt.

TOULOUSE (Radio-Toulouse), 12.0—News. 12.5—"Au Caveau de Minuit"—Radio Fantasy. 12.15-12.30—Operetta Music. Overture, "La petite Bohème" (Hirschmann). Selection, "The Dubarry" (Millöcker-Mackeben).

1 a.m. (Monday)

PARIS (Radio-Colonial), 1.0—Concert.

PITTSBURGH, 1.0-6.0—Popular Programme.

RADIO-NORMANDIE, 1.0—News. 1.10—Dance Music.

SCHENECTADY, 1.0-4.0—Variety.



NATIONAL

Time Signals: Big Ben—10.15 a.m., 12 noon, 5.15 p.m., 6.30 p.m., 12 midnight. Greenwich—10.30 a.m., 2.0 p.m., 6.0 p.m., at the beginning of the Second News (normally 9.30 p.m.), 11.30 p.m. 10.15 a.m. (Droitwich)—Service. 10.30 (Droitwich)—Weather Forecast. 10.45—"Things I Remember": A Kitchen Maid in the Eighties, by a Cook. 11.0—"To Unemployed Clubs." 11.20—Records. 11.30 (ex. Scottish)—For Schools: German Talk—2. 11.30 (Scottish)—Cinema Organ. 11.45—Records: "Alda" Act II (Verdi). 12.30 p.m.—Organ Recital by R. H. Clifford Smith. 1.0—The Scottish Studio Orchestra. 2.0 (except Scottish)—Herring Fishing Bulletin. 2.0-4.0 (Scottish)—Regional Programme. 2.5-2.50 (ex. Scottish)—For Schools: Gardening Lesson, 2.30—History. 2.50 (ex. Scottish)—Records. 3.35 (ex. Scottish)—For Schools: German Lesson. 4.0—A Sonata Recital by Bessie Rawlins (Violin) and Reginald Paul (Pianoforte). Sonata in A (Pizzetti). 4.30—The B.B.C. Midland Orchestra. 5.15—The Serge Krish Septet. 6.0—"The First News." 6.25—Interlude. 6.30—"Science in the Making." Mr. Gerald Heard. 6.45—"The Theatre." Desmond MacCarthy. 7.5—"From Plainsong to Purcell." The Foundations of English Music. My Lady Nevells Booke (William Byrd), played by Rudolph Dolmetsch (Harpischord). 7.30—"Poverty in Plenty"—3. H. D. Henderson: "The Slump and the Growth of Productive Power." 8.0—"Rolling Stones"—3. A Modern Sinbad, by "Sinbad." 8.15—"Wonder Bar." A Musical Show. English book and lyrics by Rowland Leigh. Music by Robert Katscher. Adapted for the microphone by C. Denis Freeman. 9.30—"The Second News." 10.0—Chamber Music. The Kutchner String Quartet. Sophie Wyss (Soprano). Quartet in B flat (K. 458) (Mozart). Autumn, in the Ruins of an Abbey (Faure); O Cienciarella, Lamento, Zilimbri (Henri Tomasi). Quartet No. 2 in G, Op. 18 (Beethoven). 11.10—"The Decay of Lying," from "Intentions," by Oscar Wilde, read by Patric Curwen. 11.15-12.0—Dance Music. The Casani Club Orchestra, directed by Charles Kunz.

REGIONAL

Time Signals: Big Ben—10.15 a.m., 12 noon, 5.15 p.m., 6.30 p.m., 12 midnight. Greenwich—10.30 a.m., 2.0 p.m., 6.0 p.m., at the beginning of the Second News (normally 10.0 p.m.), 11.30 p.m. 10.15-10.45 a.m. (ex. Midland)—National. 10.45—The Western Studio Orchestra. Marjorie Grant (Soprano). 12 noon (Belfast)—Cinema Organ. 12.30 p.m.—Haydn Heard's Band. 1.30—Records. 2.0 (except Scottish)—Orchestra. 2.0 (Scottish)—Records. 2.25 (Scottish)—For Schools: Reception Test, 2.30—History. 2.50 (Scottish)—Records. 3.0 (except Scottish)—The Belfast Wireless Orchestra. Frederick R. Amor (Viola). 3.10-4.0 (Scottish)—For Schools: Science, 3.35—German. 4.0—Records: Variety. 4.45—Doris Aldridge (Contralto). Stanley Bishop (Pianoforte). 5.15—The Children's Hour. 6.0—"The First News." 6.30 (ex. Midland and Scottish)—Troise and his Mandoliers. 6.30 (Midland)—Pattison's Salon Orchestra. 6.30 (Scottish)—Cinema Orchestra. 7.15 (ex. North)—Dance Orchestra. 7.15 (North)—The Penketh Tannery Works Band. Wilfred Pickering (Bass). 8.0 (London)—B.B.C. Orchestra (E). 8.0 (Midland)—Music of the Seventeenth Century. 8.0 (Scottish)—Records. 8.0 (West)—Arthur Fear (Baritone). The Swansea and District Royal Male Choir. 8.0 (Belfast)—The Military Band. James Johnston (Tenor). 8.15 (North)—"Music of the Church"—6. Hexham Abbey. 8.15 (Scottish)—"I want to abolish—Jazz." 8.40 (Scottish)—The Studio Orchestra. Lillie Blakemore (Soprano). Neil Forsyth (Baritone). 8.45 (West)—"Market Special." 9.0 (London and Belfast)—Celebrity Trio. Olive Groves (Soprano). 9.0 (Midland)—"Young Men in Industry"—J. E. Irvine. 9.0 (West)—The Studio Orchestra. Mai Ramsay (Soprano). 9.5 (North)—Topical Talk. 9.15 (Midland)—Pye Hill and District Male Choir. Walter Heard (Flute). 9.20 (North)—Records. 10.0—News Summary. 10.10 (Scottish from 10.30)—The Casani Club Orchestra. 10.10 (Scottish)—Piping and Fiddling. 10.40—Dance Records. 11.0-12.0 (Midland till 11.15)—The Casani Club Orchestra.

EMPIRE SUMMARY

For wavelengths, see S.W. List  
Transmission 1 (GSD, GSB)  
7.15 a.m.—Big Ben. Miscellaneous Programme.†  
8.0—Sports Talk.\*  
8.15—Recital by Elizabeth Mooney (Soprano), Patrick Colbert (Bass), Harold Fielding (Violin).  
9.0—Empire News. Dairy Produce Notes.  
9.15—Close Down.  
Transmission 2 (11.0—12.30 GSG, GSF; 12.30—2.0 GSF, GSB)  
11.0 a.m.—Big Ben. The Western Studio Orchestra. Marjorie Grant (Soprano).  
11.45—Records of Opera.  
12.30 p.m.—Organ Recital by Clifford Smith.  
1.0—Sports Talk.\*  
1.15—Scottish Studio Orchestra.  
1.45—Empire News.  
2.0—Close Down.  
Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSE, GSB)  
2.15 p.m.—Big Ben. Arthur Salisbury and his Orchestra.  
2.45—Sports Talk.\*  
3.0—The Belfast Wireless Orchestra.  
3.15—William Walker presents "More Bits of Ballyhoo."  
4.0—A Sonata Recital.  
4.30—The B.B.C. Midland Orchestra.  
5.0—Empire News.  
5.15—The Serge Krish Septet.  
5.45—Close Down.  
Transmission 4 (GSD, GSB)  
6.0 p.m.—Big Ben. Empire News. Dairy Produce Notes.  
6.15—Interlude.†  
6.30—Troise and his Mandoliers, with Don Carlos (Tenor).  
7.15—The B.B.C. Dance Orchestra.  
8.0—Talk: "Family Album." S. R. Littlewood.  
8.15—"Wonder Bar." A Musical Show.  
9.30—Pye Hill and District Male Choir. Walter Heard (Flute).  
10.0—Empire News.  
10.15—The Casani Club Orchestra.  
10.40—Dance Music.†  
10.45—Close Down.  
Transmission 5 (GSC, GSA)  
11.0 p.m.—Big Ben. Overtures.†  
11.20—"Meet Hanaud," presented by his creator, A. E. W. Mason.  
11.35—Dance Music.  
12 midnight—(See 8.15 a.m.).  
12.45 a.m.—Empire News. Dairy Produce and Pig and Poultry Notes.  
1.0—Close Down.  
\* Electrical Recording  
† Gramophone Records

MONDAY Oct. 15

PRINCIPAL EVENTS

CONCERTS

2.30 p.m. Kalundborg: Orchestra and pianoforte.  
6.40 " Budapest: Philharmonic Orchestra, Hofmann (pianoforte). Conductor: Dohnányi.  
7.0 " Brno, Prague: "St. Ludmilla" (Dvořák).  
7.15 " Beromünster: Symphony concert.  
7.15 " Kalundborg: Viennese music.  
7.15 " Oslo: Symphony No. 5 (Dvořák), etc.  
7.15 " Sottens: Men's choir, village music.  
7.40 " Vienna: German operatic music.  
7.45 " Cologne, Berlin, Königsberg: Soldiers' music.  
7.45 " Leipzig: Relay from Gewandhaus.  
7.45 " Stockholm: Conductor: Nils Grevillius.  
7.55 " Hilversum: Light orchestral.  
8.0 " Warsaw: Old Polish music.  
9.0 " Brussels No. 2: Modern Flemish music.  
9.10 " Budapest: Cigány Band Magyari.  
9.50 " Vienna: Operatic music.

OPERA, OPERETTAS

8.0 p.m. Radio-Paris: "Don Quichotte" (Massenet).  
8.30 " Strasbourg: Three one-act operettas.

CHAMBER MUSIC

6.35 p.m. Deutschlandsender: Quartets (Haydn, 7.45, Tchaikovsky).  
8.30 " Paris PTT: Quartets (Haydn, Beethoven, Borodin), songs.  
9.15 " Kalundborg: Quartet (Béla Bartók).  
9.45 " Poste Parisien: Trio (Jean Cras).  
10.0 " Cologne: Sonatas of the Baroque period.

RECITALS

6.30 p.m. Stockholm: Bach pianoforte music.  
7.45 " Munich: Instrumental and vocal.  
9.0 " Turin, etc.: Virgilio Ranzato (violin).  
9.10 " Huizen: Organ.  
9.30 " Stuttgart: Songs by Julius Weismann.

PLAYS AND TALK

7.15 p.m. Munich and German Stations: Nietzsche anniversary.  
7.45 " Frankfurt: "Christoph Mahr, the Bell-Founder"  
8.30 " Brussels No. 1: "L'Amour Médecin" (Molière) with Lulli's incidental music.

DANCE MUSIC

5.0 p.m. Brussels No. 1; 6.30, Brussels No. 2; 9.25, Breslau, Königsberg; 10.0, Kalundborg; 10.5, Warsaw; 10.10, Brussels Nos. 1 and 2; 10.15, Budapest; 10.30, Paris PTT, Radio-Paris; 10.50, Vienna, (new records).

Hours, of Transmission in Greenwich Mean Time.

6 a.m.

BERLIN, 6.0—News. 6.10—Orchestra.  
BRESLAU, DEUTSCHLANDSENDER, HAMBURG, KÖNIGSBERG and LEIPZIG, 6.0—News. 6.10—See Berlin.  
COLOGNE, 6.0—News. 6.15—Orchestra.  
FRANKFURT, 6.0—Orchestra.  
MUNICH, 6.0—See Frankfurt.  
PARIS (Radio-Paris), 6.45—Gym.  
STUTTGART, 6.0—See Frankfurt.  
WARSAW, 6.7—Records; News.

7 a.m.

BERLIN, 7.0—Gym. 7.30—Records; Announcements.  
BRESLAU, 7.0—Hymn; Motto; Records; Gym.  
COLOGNE, 7.0—Orchestra. 7.20—Gym.  
FRANKFURT, 7.0-7.30—Orchestra.  
HAMBURG, 7.0-7.40—Announcements; Records.  
HILVERSUM, 7.40—Records.  
HUZEN, 7.40—Bible Reading; Meditation.  
KALUNDBORG, 7.30—Service.  
KÖNIGSBERG, 7.0—Service. 7.30—Gym.  
LEIPZIG, 7.0—Gym. 7.20—Records.  
MUNICH, 7.0—See Frankfurt.  
PARIS (Poste Parisien), 7.10—Fanfare. 7.15—Records; News.  
PARIS (Radio-Paris), 7.0—Records. 7.15—Press Review. 7.45—Gym.  
STUTTGART, 7.0—See Frankfurt. 7.30—Gym.

8 a.m.

BRESLAU, 8.0—News.  
DEUTSCHLANDSENDER, 8.40—For Women.

HILVERSUM, 8.0—Records.  
HUZEN, 8.0—Bible Reading; Meditation.  
KÖNIGSBERG, 8.5—For Schools.  
PARIS (Poste Parisien), 8.5—Light Music. 8.20—News. 8.45—Cookery.  
PARIS (Radio-Paris), 8.0—Records.

9 a.m.

BERLIN, 9.0-9.25—News.  
BRESLAU, 9.10—"The King of the Forests"—A Sequence about Deer (Kloss-Mettke). 9.40—Records.  
COLOGNE, 9.0—News. 9.10—Soprano and Guitar. 9.30—Talks.  
DEUTSCHLANDSENDER, 9.0—News. 9.15—"Lake Constance"—Sequence (on Records). 9.45—Gym.  
FRANKFURT, 9.0—News. 9.10-9.40—For Schools.  
HAMBURG, 9.0—News.  
HILVERSUM, 9.0—Records. 9.40—Religious Programme. 9.55—Recitations.  
HUZEN, 9.0-9.10—Records.  
KÖNIGSBERG, 9.40—News.  
LEIPZIG, 9.0—Exchange; Announcements. 9.15-9.45—For Schools.  
MUNICH, 9.15—Fairy Tales to Music.  
PRAGUE, 9.5—News; Records.  
STUTTGART, 9.0—News. 9.15—For Schools. 9.45—Grieg Music.

10 a.m.

BERLIN, 10.25-10.30—Exchange.  
BRESLAU, 10.0—Records; News.  
COLOGNE, 10.0—Talks. 10.30—Post Office Concert.  
DEUTSCHLANDSENDER, 10.40—Reading.  
FRANKFURT, 10.0—Concert. 10.30—Announcements; Exchange.  
HAMBURG, 10.0—Historical Play (Fritz Schneider). 10.30—Symphony Orchestra from Hanover. Conductor: v. Sosen. Esser (Violin).

HILVERSUM, 10.0—Recitations.  
10.15—Orchestra. Conductor: Wins. 10.40—Recitations.  
HUZEN, 10.10—Protestant Programme. 10.40—Reading.  
KÖNIGSBERG, 10.30—See Hamburg.  
LEIPZIG, 10.0—Announcements; Records; News.  
MUNICH, 10.5—Prices; News.  
PRAGUE, 10.5—Military Band.  
STUTTGART, 10.0—Grieg Music. 10.15—Announcements; Records.  
TURIN, 10.30—Trio.  
VATICAN CITY, 10.0-10.15—Religious Information in Italian.

11 a.m.

BERLIN, 11.0—Announcements. 11.25—See 10.30 Hamburg.  
BEROMÜNSTER, 11.0—Records. 11.29—News. 11.40—Records.  
BRESLAU, 11.0—Light Music. Conductor: Kaden.  
BUDAPEST, 11.5—Concert.  
COLOGNE, 11.0—Records. 11.45—News.  
DEUTSCHLANDSENDER, 11.0—See Frankfurt.  
FRANKFURT, 11.0—Orchestra. Conductor: Weidig.  
HAMBURG, 11.0—Announcements. 11.25—Symphony Orchestra (contd. from 10.30).  
HILVERSUM, 11.0—Orchestra. 11.40—V.A.R.A. Ensemble.  
HUZEN, 11.0—Reading. 11.10—Records. 11.40—Police Messages; Records.  
KALUNDBORG, 11.2—Bendix String Ensemble.  
KÖNIGSBERG, 11.0—Announcements. 11.25—See 10.30 Hamburg.  
LEIPZIG, 11.0—Announcements. 11.25—See 10.30 Hamburg.  
MONTE CENERI, 11.0—News; Records.  
MUNICH, 11.0—Records.  
PRAGUE, 11.0—News; Records. 11.35—Prague Chamber Orchestra.  
SOTTENS, 11.30—News. 11.40—Small Radio-Lausanne Orchestra. Conductor: Moser.

STUTTGART, 11.0—See Frankfurt.  
TURIN, 11.0—Trio. 11.30—Records. 11.45—News.  
WARSAW, 11.0—News. 11.10—Dance Music.

12 noon

BERLIN, 12.0—Midday Echoes. 12.15—March and Dance Records.  
BEROMÜNSTER, 12.0—Records; Exchange.  
BRESLAU, 12.0—Light Music. Conductor: Kaden.  
BRUSSELS (No. 1), 12.0—Request Records.  
BRUSSELS (No. 2), 12.0—Orchestra. Conductor: Walpot.  
BUDAPEST, 12.0—Concert. 12.30—Budapest Concert Orchestra.  
COLOGNE, 12.0—Small Station Orchestra. Conductor: Eysoldt. 12.45—News.  
DEUTSCHLANDSENDER, 12.0—"Dreams"—Records. 12.45—News.  
FRANKFURT, 12.0—News. 12.15—Russian Records.  
HAMBURG, 12.0—Exchange. 12.20—Light Music.  
HILVERSUM, 12.0—V.A.R.A. Ensemble.  
HUZEN, 12.0—Records. 12.10—Zwart (Organ).  
KÖNIGSBERG, 12.5—Records.  
LEIPZIG, 12.0—News. 12.10—The Halle Chamber Orchestra. Conductor: Zschiesing.  
MONTE CENERI, 12.5—Records: Folk Dances. 12.15-12.30—Cookery.  
MUNICH, 12.0—Records. 12.15—News. 12.25—Station Orchestra. Conductor: Winter. Gertrud Schuster (Violin). Overture, "Leonce und Lena" (Müller-Hartmann). Violin Concerto in G minor (Bruch).  
OSLO, 12.0—Records.  
PARIS (Poste Parisien), 12.0—Exchange. 12.5—Station Orchestra. Conductor: Hérent. In the Interval at 12.25: News.

PARIS (PTT), 12.0—Tourists' Notes. 12.15—National Orchestra. Conductor: Rosenthal. Jane Gatinéau (Songs). Overture, "La Trompette de M. le Prince" (Bazin). Dorfschwalben aus Oesterreich (Strauss). Suite, Pas tous pays (Lacocq). Songs. Les Fantoccini (Lecocq). Pierrette (Chaminade). Rigaudon (Chaminade). Mexican Scenes (Missia). Romance (Dorson). London Sketches (Casadesu). Overture, "Les Cloches de Corneville" (Planquette).  
PARIS (Radio-Paris), 12.0—Pascal's Orchestra.  
PRAGUE, 12.0—Prague Chamber Orchestra. 12.45—Records.  
SOTTENS, 12.0—Orchestra (contd. from 11.40). In the Interval at 12.10: Exchange.  
STOCKHOLM, 12.0—Talk. 12.30—Light Music.  
STUTTGART, 12.0—Announcements. 12.15—See Frankfurt.  
TURIN, 12.0—Announcements. 12.5—Doreno Orchestra. In the Interval at 12.30: Records; Exchange.  
WARSAW, 12.0—News. 12.5-12.30—Dance and Song Records.

1 p.m.

ATHLONE, 1.30—Exchange; Records.  
BERLIN, 1.0—News. 1.15—Berlin Opera Announcements (on Records).  
BRESLAU, 1.5—Exchange. 1.10—Announcements; Records.  
BRUSSELS (No. 1), 1.0—News. 1.10—Symphony Orchestra. Canadian Fantasia (Gilson). Valse dolente (De Boeck). Rhapsodie languedocienne (Delcroix). Petite suite (Jongen). Entré du Duc d'Albe (Benoit).  
BRUSSELS (No. 2), 1.0—News. 1.10—Accordion; Records.  
BUDAPEST, 1.0—Budapest Concert Orchestra. 1.40—Announcements,



MONDAY Oct. 15

1 p.m. (contd.)

COLOGNE, 1.0—Orchestra (contd. from 12.0). 1.45—Cattle Prices.  
 DEUTSCHLANDSENDER, 1.55—Announcements; Exchange.  
 FRANKFURT, 1.0—Russian Records. 1.15—News. 1.30—Economic Review. 1.45—Exchange.  
 HAMBURG, 1.0—Light Music. 1.15—News. 1.30—Records.  
 HILVERSUM, 1.0-1.40—V.A.R.A. Ensemble. 1.55—Records.  
 HUIZEN, 1.0—Zwart (Organ). 1.40—For Schools.  
 KÖNIGSBERG, 1.0—Records; News. 1.30—Exchange.  
 LEIPZIG, 1.0—News; Exchange. 1.10—Orchestra (contd. from 12.10).  
 MUNICH, 1.0—News; Exchange. 1.20—For Gardeners.  
 PARIS (Poste Parisien), 1.5—Exchange. 1.15—Orchestra (contd. from 12.5).  
 PARIS (PTT), 1.0—News.  
 PARIS (Radio-Paris), 1.0—Pascal's Orchestra. In the Interval at 1.20: Exchange.  
 PRAGUE, 1.0-1.5—Exchange, in German.  
 STOCKHOLM, 1.0—Light Music. 1.25—Talk.  
 STUTTGART, 1.0-1.15—See Frankfurt.  
 TURIN, 1.0—Doreno Orchestra. 1.15-1.25—Exchange.

2 p.m.

ATHLONE, 2.0-2.30—Records.  
 BERLIN, 2.0-2.20—Exchange.  
 BEROMÜNSTER, 2.30—For Women.  
 BRESLAU, 2.0—Records. 2.10—Book Review. 2.30—Report: Unveiling of the Gustav Freytag Fountain in Kreuzburg.  
 COLOGNE, 2.15—Talk: The Right to Work. 2.30—Exchange. 2.50—Topical Talk.  
 DEUTSCHLANDSENDER, 2.15—Talk: Wood-Carving. 2.40—For Young People.  
 FRANKFURT, 2.15—For Children. 2.30—Talk: The Nordic Races. 2.45—For Students.  
 HAMBURG, 2.0—Exchange. 2.40—Shipping; Aviation.  
 HILVERSUM, 2.0—Records. 2.10—For Women. 2.40—Records.  
 HUIZEN, 2.0—For Schools. 2.15—Gardening Talk.  
 KALUNDBORG, 2.30—Radio Orchestra. Conductor: Hye-Knudsen. Augusta Haugsted (Pianoforte). Overture, "The Barber of Seville" (Rossini). Minuet and Gigue, "Céphale et Procris" (Grétry-Mottl). Invitation to the Dance (Weber). Andante, Haffner Serenade (Mozart). Selection, "Tiefand" (d'Albert). Pianoforte: (a) Rondo varié in D (Mozart). (b) Impromptu in B flat (Schubert). Overture, Fingal's Cave (Mendelssohn). Andante sostenuto and Intermezzo, Symphony in B flat (Svendens). Extracts, A Peasant Wedding (Söderman). Waltz and Galop (Lumby).  
 KÖNIGSBERG, 2.0—Market Prices. 2.30—Book Review.  
 LEIPZIG, 2.10—Art Review. 2.20—Talk: Friedrich Ludwig Jahn. 2.40—Exchange.  
 MUNICH, 2.10—Folk Songs of Lorraine by Olga Schwind (Soprano). 2.30-2.50—Reading (Schardt).  
 PARIS (Poste Parisien), 2.0—Exchange.  
 PARIS (PTT), 2.0—Records.  
 PRAGUE, 2.50—Exchange. 2.55—Orchestra.  
 STUTTGART, 2.30—Natural History Talk. 2.45—Beethoven's Childhood and Youth.  
 WARSAW, 2.30—News. 2.45—Orchestra; Songs.

3 p.m.

BERLIN, 3.0—"Light Music and Humour"—Small Station Orchestra. Conductor: Steiner. Peters, Thiem and Dorothea Hentli (Recitations). March (Teesching). Overture, "Das Veichenmadel" (Helmberger). Dutch Wind Mills (Heykens). Ewig blauer Himmel (Kutsch). Der Gaukler (Lindner). Russian Suite (Lindner). Karussell (Kick-Schmidt). Dramatic Fantasia (Sommer). Colombine (Kark). Du und Du (Strauss). Suite, German Baroque (Pachernegg). Minuet (Marx). Geheimnisvolle Sage (Juon). Humoristischer Aufzug (Juon). Norwegian Bridal Procession (Grieg).  
 BEROMÜNSTER, 3.0—Johann Strauss Music. 3.30—Reger, Strauss and Marx Lieder.

BRESLAU, 3.0—See Stuttgart.  
 COLOGNE, 3.0—See Berlin.  
 DEUTSCHLANDSENDER, 3.0—See Stuttgart.  
 FRANKFURT, 3.0—Light Music from Badenweiler. Conductor: Hitzig.  
 HAMBURG, 3.0—See Munich.  
 HILVERSUM, 3.0—Records. 3.20—Recitations. 3.40—V.A.R.A. Orchestra. Sogno d'autunno (Becc). Pensieri d'autunno (Leoncavallo). Chanson d'automne (Tchaikovsky). Overture, Im Herbst (Grieg).  
 HUIZEN, 3.0-3.25—Dressmaking. 3.40—Bible Reading; Songs; Organ.  
 KALUNDBORG, 3.0—Orchestra (contd. from 2.30).  
 KÖNIGSBERG, 3.0—"A Coffee Party in Treuburg"—Variety.  
 LEIPZIG, 3.0—Light Classical Records.  
 MONTE CENERI, 3.0—See Beromünster.  
 MUNICH, 3.0—Orchestra. Conductor: Böhm.  
 PARIS (Poste Parisien), 3.15—Exchange.  
 PARIS (Radio-Paris), 3.45—Exchange.  
 PRAGUE, 3.0—Orchestra.  
 SOTTENS, 3.0—See Beromünster.  
 STUTTGART, 3.0—Pforzheim Symphony Orchestra. Conductor: Leger. Lisel Stammberger (Soprano).  
 TURIN, 3.35—News. 3.45—For Children.  
 WARSAW, 3.0—Orchestra. 3.45—German.

4 p.m.

BEROMÜNSTER, 4.0—Chamber Music.  
 BRESLAU, 4.0—See 3.0 Stuttgart. 4.30—Market Prices. 4.35—Talk on Astronomy. 4.55—Hans Mackenroth Recital, by Margarete Schirde-wahn (Soprano) and Dora Thiel (Pianoforte). Eulenspiegelchen. Der kleine Max Reger. Chopin prälu-diert. Im Stile Mozarts. Es blüht ein Blümlein rosenrot. Schlaflied. Kein Halmlein. Man sucht ein Thema. Kommt ein Vogel geflogen. Wenn ich ein Vöglein wär. Wenn wir abends Kinder ernst zu Bette rufen. Am Morgen versuchen wir einen kleinen Walzer. Wenn die liebe alte Mühle wieder klappert. Wenn draussen Schneeflocken tanzen. Weissst du wieviel Sternlein stehen.  
 BUDAPEST, 4.0—Police Band.  
 COLOGNE, 4.0—Reading (Reinacher). 4.15—Mozart Recital by Hedwig Fassbaender (Violin) and Rohr (Pianoforte). Sonata in C. Rondo, Sonata in E flat. 4.45—Reading.  
 DEUTSCHLANDSENDER, 4.0—See 3.0 Stuttgart.  
 FRANKFURT, 4.0—Light Music (contd. from 3.0).  
 HAMBURG, 4.0—See 3.0 Munich. 4.30—Sports Report.  
 HILVERSUM, 4.0—V.A.R.A. Or-chestra (contd. from 3.40). 4.10—For Children. 4.40—V.A.R.A. Orchestra. Overture, "Marco Spada" (Auber). Ave Maria (Bach-Gounod). Serenade (Taregnii). Impressions rustiques (Razigade). Selection, "Faust" (Gounod).  
 HUIZEN, 4.0—Bible Reading; Songs; Organ. 4.40—Van der Horst Ensemble. Overture, "Iphigenia in Aulis" (Gluck). Adagio (Beethoven). Air (Beethoven). Selection, "La Juive" (Halévy). Selection, "The Arabian Nights" (Strauss). Records. Overture, "The Black Domino" (Auber). Die Königs-maid (Fetras). Selection, "Piccolino" (Guiraud). Danse macabre (Saint-Saëns). Selection, "L'enfant prodigue" (Debussy).  
 KALUNDBORG, 4.0—Orchestra (contd. from 2.30). 4.30—Ex-change. 4.42—A Poem. 4.45—Music Talk.  
 KÖNIGSBERG, 4.0—Variety (contd. from 3.0). 4.50—"A Bird's-Eye View of Danzig"—Discussion.  
 LEIPZIG, 4.0—Talk: The Brothers Grimm. 4.15—Austrian Songs by Hauschild. Ruhe in Gott (Folba). Vater unser (Folba). Sacred Songs (Pioner). (a) Gottes Nähe. (b) Dankgebet. (c) Erkenntnis. Two Ballads (Peschnitz): (a) Hans Spornck. (b) Romfahner. 4.50—Exchange.  
 MONTE CENERI, 4.0—See Beromünster.  
 MUNICH, 4.0—Orchestra (contd. from 3.0). 4.30—"RJR 16 List"—the History of a Regiment.  
 OSLO, 4.0—Radio Ensemble.  
 PARIS (Poste Parisien), 4.50—Ex-change.  
 PRAGUE, 4.0—For Children. 4.10—Educational Talk. 4.20—Record. 4.25—Talk; Records. 4.45—Sonata in B flat for Violin and Pianoforte (Mozart).

SOTTENS, 4.0—See Beromünster.  
 STOCKHOLM, 4.5—Folk Music. 4.30—Reading.  
 STUTTGART, 4.0—Symphony Or-chestra (contd. from 3.0).  
 TURIN, 4.0—For Children. 4.10—Dance Music.  
 VIENNA, 4.30—Karl Ettl (Bass). Schubert Lieder: (a) Liebesbot-schaft. (b) Greisengesang. Loewe Ballads: (a) Tom der Reimer. (b) Prinz Eugen. St. Jakob über dem Brückenbogen (Aich). Schumann Lieder: (a) Dein Angesicht. (b) Freisinn. Reiselied (Mendelssohn). Aria, "Die Drei Pintos" (Weber).  
 WARSAW, 4.0—Songs. 4.25—"Letter-Box. 4.35—Records. 4.50—Reading.

5 p.m.

BERLIN, 5.0—Announcements. 5.5—Gym., with Music. 5.30—"The Gay Parade"—a Pageant of Mari-onettes and Jugglers.  
 BEROMÜNSTER, 5.0—Choral Re-cords. 5.30—For Young People.  
 BRESLAU, 5.0—Hans Mackenroth Recital (contd. from 4.55). 5.30—Topical Talk. 5.50—Announce-ments.  
 BRUSSELS (No. 1), 5.0—Lionel's Club Dance Band.  
 BRUSSELS (No. 2), 5.0—Records. 5.10—Vincent (Pianoforte). Scherzo in B flat minor (Chopin). Scherzo fantasque (Scharres). Beaucoup d'insectes tourbillonnent au soleil (Saëys). Impromptu in A flat (Schu-ber). In the Intervals: Records. 5.40—Records: Prelude in G minor (Rachmaninov). 5.45—For Children.  
 BUDAPEST, 5.0—German Conversa-tion. 5.30—Records.  
 COLOGNE, 5.0—Little Boys at the Microphone. 5.20—French. 5.40—News. 5.50—Exchange; Sports Notes.  
 DEUTSCHLANDSENDER, 5.0—Book Review. 5.30—Talk on Records: Friedrich Ludwig Jahn. 5.40—"The Basque Country"—Talk with Records.  
 FRANKFURT, 5.0—For Young Peo-ple. 5.15—Book Review: Alfred Karrasch. 5.30—Talk. 5.45—Freiburg Municipal Orchestra. Con-ductor: Körner.  
 HAMBURG, 5.0—"Weather change-able"—Humorous Programme. 5.45—Exchange.  
 HILVERSUM, 5.0—V.A.R.A. Or-chestra (contd. from 4.40). 5.25—Jong and Steyn (Pianofortes).  
 HUIZEN, 5.0—Ensemble (contd. from 4.40).  
 KALUNDBORG, 5.0—Music Talk. 5.15—English. 5.45—Announce-ments.  
 KÖNIGSBERG, 5.0—"A Bird's-Eye View of Danzig" (contd. from 4.50). 5.25—For Young People.  
 LAHTI, 5.15—English. 5.45—Se-lection, "Tosca" (Puccini). Station Orchestra.  
 LEIPZIG, 5.0—Four Open-Air Thea-tre Sketches: (a) "Das Band"; (b) "Hormanns-Schlacht"; (c) "Die Fischerin"; (d) "Deutsche Passion 1933". 5.40—Light Music and Dance Music. The EmDe Orchestra.  
 MOSCOW (No. 1), 5.0—Concert. 5.30—Talk: Lermontov, Poet and Novelist. 5.55—For Collective Farmers.  
 MUNICH, 5.0—"The History of a Regiment" (contd. from 4.30). 5.10—Review of Books on and by Nietzsche. 5.30-5.50—"Fireside Dreams"—Records.  
 OSLO, 5.0—With the Microphone to Kjellberg. 5.30—French.  
 PARIS (PTT), 5.30—Talk. 5.45—Veterinary Talk. 5.0—Sonata (Mozart) (contd. from 4.45). 5.10—Market Prices. 5.20—Talks and News in German.  
 RADIO-NORMANDIE, 5.0—Dance Music. 5.15—Military Music. 5.30—Light Music.  
 ROME, 5.0—Corn Prices.  
 SOTTENS, 5.0—For Children. 5.30—For Women. 5.30—Small Radio-Lausanne Orchestra.  
 STOCKHOLM, 5.0—Records.  
 STRASBOURG, 5.0—Concert.  
 STUTTGART, 5.0—For Boys. 5.30—Oswald (Violin) and Giesen (Pianoforte). Prelude and Allegro (Pugnani). Waltz for Pianoforte (Brahms). Andalusian Romance (Sarasa). Waltz (Chopin). Hu-moresque (Dvořák). Prelude for Pianoforte (Rachmaninov). Polo-naise brillante (Wieniawsky).  
 TURIN, 5.0—For Farmers.  
 VIENNA, 5.0—Talk: Gothic Art in Austria. 5.15—Talk: Poster Art. 5.25—English. 5.50—Technical Review.  
 WARSAW, 5.10—Art Notes. 5.15—Flore Czarniecka (Pianoforte). 5.45—For Children.

6 p.m.

ATHLONE, 6.0—For Children. 6.45—News.  
 BARI, 6.15—News in Foreign Lan-guages; Records.  
 BELGRADE, 6.0—"Cello. 6.40—Announcements. 6.50—Records.  
 BERLIN, 6.0—"The Gay Parade" (contd. from 5.30). 6.20—An Inter-view with Andreas Feickert, the Leader of the German Students' Association. 6.40—Evening Echoes.  
 BEROMÜNSTER, 6.1—Talk. 6.20—English.  
 BRATISLAVA, 6.30—Slovak Folk Songs.  
 BRESLAU, 6.0—See Munich.  
 BRNO, 6.55—Talk on the 7.0 Trans-mission.  
 BRUSSELS (No. 1), 6.0—Talk: Jacques du Broeucq, a Belgian Sculptor. 6.15—Radio Orchestra. Conductor: Walpot. 6.30—Jacques Bertrand Centenary Pro-gramme.  
 BRUSSELS (No. 2), 6.0—For Chil-dren. 6.30—Dance Music. Harry Walls and his Blue Dandies. 6.40—Philharmonic Orchestra. Con-ductor: Dobnányi. Josef Hoff-mann (Pfte.). Overture, "Prometheus" (Beethoven). Fourth Symphony (Brahms). Feux follets (Liszt). Pianoforte Concerto in D minor (Rubinstein).  
 COLOGNE, 6.0—Weekly Review. 6.30—Chopin Recital by Grape (Pianoforte). 6.50—Records.  
 DEUTSCHLANDSENDER, 6.0—"The Basque Country" (contd. from 5.40). 6.30—Poem. 6.35—Quartet (Haydn) by the Wendling Quartet.  
 FRANKFURT, 6.0—Exchange; An-nouncements. 6.5—Orchestra (contd. from 5.45).  
 HAMBURG, 6.0—See Königsberg.  
 HILVERSUM, 6.0—Two Pianofortes. 6.10—Music Talk. 6.40—Literary Talk.  
 HUIZEN, 6.0—Ensemble (contd. from 4.40). 6.10—Letter-Box. 6.40—Announcements. 6.55—Records.  
 KALUNDBORG, 6.0—News. 6.30—Political Review.  
 KÖNIGSBERG, 6.0—Small Station Orchestra. Conductor: Wilken. Three Pieces (Cui). Selection, "La cena delle beffe" (Giordano). Dance Scene (Richter). Märchen aus Wien (Eiters). Humoresque (Sibelius). Valse lente (Merikanto-Burmester). Hungarian Rhapsody in D (Liszt).  
 LAHTI, 6.5—Talk. 6.25—Haipus (Violin). 6.45—Play (arr. Pertti).  
 LEIPZIG, 6.0—Light Music and Dance Music (contd. from 5.40). 6.50—Talk on Records: The new Wireless Book by Eugen Hadamov-sky.  
 MONTE CENERI, 6.45—News.  
 MUNICH, 6.0—Station Orchestra. Conductor: List. Overture, "Rü-bezahl" (Weber). La belle au bois dormant (Debussy). Scherzo in E minor (Brahms). Romance (Reger). Military March in D (Schubert). American Folk Song (Busch). Slav Dance (Dvořák). Selection, "Il Trovatore" (Verdi).  
 OSLO, 6.0—Book Review. 6.31—Talk: Emigration. 6.45—Review of Foreign Politics.  
 PARIS (Poste Parisien), 6.45—Exchange. 6.49—Records.  
 PARIS (PTT), 6.0—Economic Notes. 6.30—News.  
 PARIS (Radio-Paris), 6.20—An-nouncements; Exchange. 6.40—Book Review.  
 PRAGUE, 6.0—News. 6.10—Re-cords. 6.15—Russian. 6.30—Talk. 6.55—See Brno.  
 RADIO-NORMANDIE, 6.0—For Children. 6.30—Review. 6.50—News.  
 ROME, 6.0—Announcements. 6.15—News in Foreign Languages.  
 SOTTENS, 6.0—Radio Lausanne Orchestra. 6.30—Letter-Box. 6.40—Talk on Agriculture. 6.59—Weather.  
 STOCKHOLM, 6.0—Radio Report. 6.15—News. 6.30—Bach Recital. Elison (Pianoforte).  
 STRASBOURG, 6.0—Literary Talk. 6.15—Review. 6.30—Light Music. Conductor: Roskam.  
 STUTTGART, 6.0—"Viennese Melod-ies"—Potpourri by the Station Orchestra. Conductor: Görlich. 6.45—Local Review.  
 TURIN, 6.0—Announcements. 6.15—News in Foreign Languages.  
 VIENNA, 6.0—News. 6.20—Schrammel Music. Mizzi Starecek and Leopoldine Lauth (Songs).  
 WARSAW, 6.0—For Soldiers. 6.25—Social Notes. 6.30—Reading. 6.45—Announcements.

7 p.m.

ATHLONE, 7.0—Irish. 7.15—Talk: Commercial Fruit Products. 7.31—Irish Music. Station Orchestra. 7.50—Stan O'Brien (Songs).  
 BELGRADE, 7.0—To be announced. 7.30—Opera Relay from the National Theatre.  
 BERLIN, 7.0—News. 7.15—See Munich. 7.45—See Cologne.  
 BEROMÜNSTER, 7.0—Talk on the following Transmission. 7.15—Symphony Concert from the Ton-halle, Zürich.  
 BRESLAU, 7.0—News. 7.15—See Munich. 7.45—Beethoven Piano-forte Sonatas by Georg Dohrn. Sonata in C. Sonata in F.  
 BRNO, 7.0—"Saint Ludmilla"—Oratorio (Dvořák).  
 BRUSSELS (No. 1), 7.0—Legal Talk. 7.15—Selection, "Ramuntcho" (Pierne) on Records. 7.30—Theatre and Film Review.  
 BRUSSELS (No. 2), 7.0—Light Music. 7.15—Medical Talk. 7.30—News. 7.55—Theatre Review.  
 BUDAPEST, 7.0—Philharmonic Or-chestra (contd. from 6.40).  
 COLOGNE, 7.0—News. 7.15—See Munich. 7.45—Military Music. Cologne Male Voice Choir and Soloists; Labour Service Band.  
 DEUTSCHLANDSENDER, 7.0—Motto; News. 7.15—See Munich. 7.45—Quartet in E flat minor (Tchaikovsky) by the Wendling Quartet.  
 FRANKFURT, 7.0—News. 7.15—See Munich. 7.45—"Christoph Mahr, the Bell-Founder"—Play (Kluge-Ohlochkazer).  
 HAMBURG, 7.0—News. 7.15—See Munich. 7.45—Hugo Wolf Lieder by Ursula Lohse.  
 HILVERSUM, 7.0—Records. 7.15—Art Review. 7.40—Announcements. 7.43—Talk. 7.55—Residentie Or-chestra. Conductor: Anrooy. Stotijn (Oboe). Concerto (Bach). Oboe Concerto (Marcello). Minuet and Dance, "The Damnation of Faust" (Berlioz).  
 HUIZEN, 7.0—Records. 7.10—Letter-Box. 7.40—Records.  
 KALUNDBORG, 7.2—"The Hansen Family"—Sketch (Locher). 7.15—"Viennese Music, Old and New." Radio Orchestra. Conductor: Mahler. Overture, "Ipermestra" (Gluck). Suite, "Orpheus and Eurydice" (Deller). Entr'acte, "Rosamunde" (Schubert). Aquar-ellenwalzer (Strauss). March from the Bunte Suite (Tsch). Waltz, "Der Rosenkavalier" (Strauss). Minuet, "Le bourgeois Gentilhomme" (Strauss). Overture, "Donna Diana" (Reznicek).  
 KÖNIGSBERG, 7.0—News. 7.15—See Munich. 7.45—See Cologne.  
 LAHTI, 7.0—Play (contd. from 6.35). 7.15—Station Orchestra. 7.45—News.  
 LEIPZIG, 7.0—News. 7.15—See Munich. 7.45—Music of Kodaly, Zador, List, and Hubay. Leipzig Symphony Orchestra, from the Gewandhaus. Conductor: Weis-bach.  
 MONTE CENERI, 7.15—See Sottens.  
 MOSCOW (No. 1), 7.0—Concert Version, "The Merry Wives of Windsor"—Opera (Nicolai).  
 MUNICH, 7.0—News. 7.15—Trans-mission for all German Stations: Friedrich Nietzsche Anniversary Programme. The Station Orchestra and Soloists. Conductor: List. 7.45—Vocal and Instrumental. Elisabeth Hallstein (Coloratura-Soprano). Leonore Bernd (Con-tralto). Gruber-Bauer (Baritone). Schürgers (Cello). Dippner (Piano-forte) and Stuhlfauth (Violin). Pianoforte: (a) Two Spanish Dances (Albeniz). (b) Waltz, "Die Fleder-maus" (Strauss-Dohnányi). Four Gipsy Songs for Contralto (Brahms). "Cello and Pianoforte: (a) Serenade (Borodin). (b) Arab Melody (Glazunov). (c) The Flight of the Bumble-Bee (Rimsky-Korsakov). Four Songs for Baritone (Sobansky). Pianoforte Duets: Waltz Suite (Eisenmann). Coloratura-Soprano: (a) Amor (R. Strauss). (b) Tautzied-chen. Violin and Pianoforte: Ro-manian Folk Dances (Bela Bartok).  
 OSLO, 7.0—Review of Foreign Politics. 7.15—Philharmonic Or-chestra. Conductor: Dobrown. Symphony in E minor, from the New World (Dvořák). Rondo (Zador). The Enchanted Lake (Liadov). Kikimora (Liadov). Suite, "Romeo and Juliet" (Tchaikovsky).  
 PARIS (Poste Parisien), 7.0—Records. 7.10—News. 7.30—For Gardeners. 7.37—Records. 7.50—Strauss Waltz Records.  
 PARIS (PTT), 7.45—Aviation. 7.53—Social Insurance Societies Report.



7 p.m. (contd.)

PARIS (Radio-Paris), 7.5—Film Review. 7.10—Art Notes. 7.30—Topical Talk.  
 PRAGUE, 7.0—See Brno.  
 RADIO-NORMANDIE, 7.0—Request Music.  
 ROME, 7.0—News. 7.10—Records. 7.30—Government Notes. 7.45—See Turin.  
 RUYSELEDE, 7.45—News in French.  
 SOTTENS, 7.0—Tourist Talk. 7.15—Male Voice Choir, from Payerne.  
 STOCKHOLM, 7.0—Bach Recital (contd. from 6.30). 7.15—Medical Talk. 7.45—Finnish Music. Conductor: Nils Grevillius. Aune Holmqvist (Songs). Karelia Suite (Sibelius). Three Songs (Ranta). Suite, "Okon Fuococ" (Madoetja). Three Songs (Hannikainen). Rhapsody in F (Kajanus).  
 STRASBOURG, 7.0—Light Music. 7.30—News. 7.45—Records.  
 STUTTGART, 7.0—News. 7.15—See Munich. 7.45—"Antiquities"—Sequence with Records.  
 TOULOUSE (Radio-Toulouse), 7.0—Concert.  
 TURIN, 7.0—News; Records. 7.30—Government Notes. 7.45—Request Music.  
 VATICAN CITY, 7.0-7.15—Religious Information in Italian.  
 VIENNA, 7.0—To be announced. 7.40—German Opera Music. Volksoper Orchestra. Conductor: Auderith. Wanda Achsel (Soprano), Dorian (Tenor) and Schubert-Soldern (Bass-Baritone). Overture, "Oberon" (Weber). Agatha's Aria, "Der Freischütz" (Weber). Vampire's Aria, "Der Vampir" (Marschner). Overture and Trio, "Das Nachtlager von Granada" (Kreutzer). Hymn, "Alessandro Stradella" (Flotow). Undine's Aria, "Undine" (Lortzing). Overture and Duet, "Genoveva" (Schumann). Grail Recitative, "Lohengrin" (Wagner). Scene and Overture, "Der Cid" (Cornelius).  
 WARSAW, 7.0—Light Music. Station Orchestra. Conductor: Nawrot. Ballet Music on Themes from Nicolai's "The Merry Wives of Windsor" (Moniuszko). Chanson du soir (Brusselmanns). Waltz (Rust). The Musical Clock (Pick-Mangigalli). Overture, "Orpheus in the Underworld" (Offenbach). Spanish Dance (Moszkowski). March (Stelzig). 7.45—News.

8 p.m.

ALGIERS, 8.2—Request Records. 8.20—Sketch. 8.40—News. 8.45—Operetta Music.  
 ATHLONE, 8.0—Songs. 8.5—Irish Music. Station Orchestra. 8.15—Stone (Pianoforte). 8.35—E. Kelly (Soprano). 8.50—Revue (Fay Sargent-Ghan) by Fay Sargent and Company with Orchestra.  
 BELGRADE, 8.0—Opera (contd. from 7.30).  
 BERLIN, 8.0—See 7.45 Cologne.  
 BERLINGSBACH, 8.0 (approx.)—News. 8.10 (approx.)—Concert (contd. from 7.15).  
 BORDEAUX-LAFAYETTE, 8.0—Records. 8.30—Symphony Concert with Songs.  
 BRISLAU, 8.0—Beethoven Piano-forte Sonatas (contd. from 7.45). 8.25—"Huntsmen and Soldiers"—the Beuthen Boys' Choir.  
 BRNO, 8.0—"St. Ludmilla"—Oratorio (Dvořák) (contd. from 7.0).  
 BRUSSELS (No. 1), 8.0—"The Royal Hunt and Storm" (Berlioz), on Records. 8.10—Wireless Notes. 8.25—Lully Records. 8.30—"Love is the Best Doctor"—Comedy in Three Acts (Molière), with incidental Music by Lully.  
 BRUSSELS (No. 2), 8.0—Talk with Gramophone Illustrations: Ghent Humour.  
 BUDAPEST, 8.0—Philharmonic Orchestra (contd. from 6.40). 8.50—News.  
 COLOGNE, 8.0—Military Band (contd. from 7.45).  
 DEUTSCHLANDSENDER, 8.0—Quartet (Tchaikovsky) (contd. from 7.45). 8.30—Scenes from New Plays, with Commentary.  
 FRANKFURT, 8.0—Play (contd. from 7.45).  
 HAMBURG, 8.0—"The Ghost in Mordmühle"—Comedy (Brinkmann). Music by Erdlen.  
 HILVERSUM, 8.0—Residentie Orchestra (contd. from 7.55). 8.40—"The Hand"—Play (Patrick Thompson).

HUIZEN, 8.0—Records. 8.40—Talk.  
 JUAN-LES-PINS (Radio Côte d'Azur), 8.0—News. 8.30—Orchestra.  
 KALUNDBORG, 8.0—"Viennese Music, Old and New" (contd. from 7.15). 8.15—A Visit to Sönderjylland.  
 KÖNIGSBERG, 8.0—See 7.45 Cologne.  
 LEIPZIG, 8.0—Symphony Orchestra (contd. from 7.45).  
 LYONS (La Doua), 8.30—Bizet Concert.

VIENNA, 8.0—German Opera Music (contd. from 7.40). In the Interval at 8.40: Variety.  
 WARSAW, 8.0—Fifteenth Century Polish Music. Choir; Orchestra. 8.45—Talk.

9 p.m.

ALGIERS, 9.0—Operetta Music. In the Interval at 9.15: News. 9.55—News.  
 ATHLONE, 9.0—Revue (contd. from 8.50). 9.35—Traditional Music.



A picture from the Molière play "L'Amour Médecin," which Brussels No. 1 broadcasts at 8.30 p.m. this evening

MONTE CENERI, 8.0—Songs by the René Bersin Cabaret. In the Interval at 8.15: Sports Notes.  
 MOSCOW (No. 1), 8.0—Talk in German: The Seven-Hour Working Day. 8.55—Chimes.  
 MUNICH, 8.0—Vocal and Instrumental (contd. from 7.45).  
 OSLO, 8.0—Philharmonic Orchestra (contd. from 7.45). 8.40—News.  
 PARIS (Poste Parisien), 8.15-8.50—Humorous Programme by Max Régner and Company.  
 PARIS (PTT), 8.0—Records. 8.30—Chamber Music. Joseph Calvet Quartet. Elsa Ruhlmann (Songs). Quartet No. 1 (Haydn). Two Songs (Schumann). Quartet Op. 18 No. 5 (Beethoven). Songs (Weckerlin, Dupin). Quartet (Borodin).  
 PARIS (Radio-Paris), 8.0—"Don Quixote"—Opera in Five Acts (Massenet). In the Interval at 8.30: Press Review.  
 PRAGUE, 8.0—See 7.0 Brno.  
 RADIO-NORMANDIE, 8.0—Songs. 8.30—Talk by M. Vasse: Féecamp. 8.45—Light Music.  
 ROME, 8.0—See Turin. 8.45—Humorous Programme.  
 RUYSELEDE, 8.0—Records. 8.30—Records.  
 SOTTENS, 8.0—Male Voice Choir from Payerne. 8.15—News. 8.25—Variety.  
 STOCKHOLM, 8.0—Finnish Music (contd. from 7.45). 8.45—News.  
 STRASBOURG, 8.0—News in German. 8.30—Three One-Act Operettas (a) "Un conte... à dormir debout" (Poncin), (b) "Les leçons imprévues" (Colin), (c) "Poste à galène" (Gavel and Cools).  
 STUTTGART, 8.0—"Antiquities" (contd. from 7.45). 8.30—"Field Herbs"—Dialect Programme.  
 TOULOUSE (Radio-Toulouse), 8.0—Folk Music. 8.15—Orchestra.  
 TURIN, 8.0—Request Music. 8.45—Talk.

BELGRADE, 9.0—News. 9.10 (approx.)—Opera (contd. from 7.30).  
 BERLIN, 9.0—News. 9.20—The Genzel Quartet of Leipzig. Quartet in C minor (Schubert). Quartet in C sharp minor (Pfitzner).  
 BEROLINGEN, 9.0-9.15 (approx.)—Book Review.  
 BORDEAUX-LAFAYETTE, 9.0—Symphony Concert (contd. from 8.30).  
 BRISLAU, 9.0—News. 9.25—Dance Music.  
 BRNO, 9.0—"Saint Ludmilla"—Oratorio (Dvořák) (contd. from 7.0).  
 BRUSSELS (No. 1), 9.0—"Love is the Best Doctor" (Molière) (contd. from 8.30). 9.30—Franck Records.  
 BRUSSELS (No. 2), 9.0—Modern Flemish Music. Symphony Orchestra. Two Dances (Verhoeven). Selection, "Tyl" (Karel Albert). Hekensabbat (De Schrijver). Ballade (Pelemans). Extract, "Les sept péchés capitaux" (Candaël). Scherzo (Glazer). Bacchanal (Sternefeld). In the Interval: Modern Flemish Poetry.  
 BUDAPEST, 9.0—News. 9.10—Magyar Cigány Band.  
 COLOGNE, 9.0—News. 9.20—"From the Aim to the Sea"—Records.  
 DEUTSCHLANDSENDER, 9.0—News. 9.30—Topical Talk. 9.45—Weather.  
 FRANKFURT, 9.0—News. 9.30—Serenade in E flat for Wind Instruments (Mozart).  
 HAMBURG, 9.0—News. 9.20—Light Music.  
 HILVERSUM, 9.0—Residentie Orchestra (contd. from 7.55). The Eroica Symphony (Beethoven). 9.55—News.  
 HUIZEN, 9.0—Talk 9.10—Klock (Organ). Fantasia in C (Bach). Pavane (Byrd). Larghetto in C minor

(Boëly). Prelude in A (Boëly). 9.25—N.C.R.V. Choir. Conductor: Couvée. In the Interval: News.  
 JUAN-LES-PINS (Radio Côte d'Azur), 9.0—News. 9.15—"La Folle Journée"—One-Act Play (Mazand).  
 KALUNDBORG, 9.0—News. 9.15—String Quartet (Béla Bartók). 9.45—Reading (Michael Gold).  
 KÖNIGSBERG, 9.0—News. 9.25—See Breslau.  
 LEIPZIG, 9.0—News. 9.20—"Peter the Great and Alexis"—Play (Walter Savage Landor). 9.50—Light Classical Music. Reitz (Violin). Frida Sonntag (Soprano), Wunderlich (Guitar), Hentschel (Flute), Zeller and Richter-Haaser (Piano-fortes).  
 LYONS (La Doua), 9.0—Bizet Concert.  
 MONTE CENERI, 9.0-9.15—Songs (contd. from 8.0).  
 MORAVSKÁ-OSTRAVA, 9.50—Records.  
 MOSCOW (No. 1), 9.5—Talk in English: The Inhabitants of North Russia.  
 MUNICH, 9.0—News. 9.20—To be announced.  
 OSLO, 9.0—Topical Talk. 9.15—Variety.  
 PARIS (Poste Parisien), 9.5-9.35—Germaine Vernay and Bernadette Delprat (Duets). 9.45—Trio (Jean Cras).  
 PARIS (PTT), 9.0—Chamber Music (contd. from 8.30).  
 PARIS (Radio-Paris), 9.0—"Don Quixote" (Massenet) (contd. from 8.0). In the Interval: News; Review by Christophe.  
 PITTSBURGH, 9.0—Betty and Bob. 9.15—Gale Page. 9.30—Exchange. 9.45—Palmer Clark's Orchestra.  
 PRAGUE, 9.0—See 7.0 Brno. 9.35—News; Record. 9.55—Talk in German: This Winter's International Exhibitions in Czechoslovakia.  
 RADIO-NORMANDIE, 9.0—Request Concert.  
 ROME, 9.0—Variety.  
 RUYSELEDE, 9.0—News in Flemish.  
 SOTTENS, 9.0-9.15—Variety (contd. from 8.25).  
 STOCKHOLM, 9.0—Station Orchestra. Conductor: Grevillius.  
 STRASBOURG, 9.0—One-Act Operettas (contd. from 8.30). In the Interval at 9.30: Press Review.  
 STUTTGART, 9.0—News. 9.30—Julius Weismann Lieder, by Ludwig Kukuk.  
 TOULOUSE (Radio-Toulouse), 9.0—Popular Songs.  
 TURIN, 9.0—Virgilio Ranzato (Violin); Records.  
 VIENNA, 9.0—German Opera Music (contd. from 7.40). 9.30—News. 9.50—Operatic and Light Music. Vienna Symphony Orchestra. Conductor: Holzer.  
 WARSAW, 9.0—Music. 9.15—Sound Film Records.

10 p.m.

ATHLONE, 10.0—Variety. 10.30—News. 10.40—Records.  
 BERLIN, 10.0—The Geuzel Quartet (contd. from 9.20). 10.15-10.30—"Die grosse Forderung" (Nietzsche).  
 BORDEAUX-LAFAYETTE, 10.0—Symphony Concert (contd. from 8.30).  
 BRISLAU, 10.0—Dance Music.  
 BRUSSELS (No. 1), 10.0—News. 10.10—Alexis Dance Band.  
 BRUSSELS (No. 2), 10.0—News. 10.10—Dance Records.  
 BUDAPEST, 10.0—Magyar Cigány Band. 10.15—Hobszky Jazz Band.  
 COLOGNE, 10.0—Chamber Music of the Baroque Period, from Crefeld. Quinton and Thorough-Bass: (a) Sonata in C (Tommaso), (b) Sonata in D minor (Boeckker). Sonata in C for Cello and Thorough-Bass (P. E. Bach). Fantasia for Solo Violin (Telemann). Violin and Thorough-Bass: (a) Sonata in A (Veracini), (b) Sonata in E (Bach).  
 DEUTSCHLANDSENDER, 10.0—See 9.50 Leipzig.  
 FRANKFURT, 10.0—See 9.50 Leipzig.  
 HAMBURG, 10.0—Orchestra. Conductor: Rudolph. Prelude, "Die Loreley" (Bruch). Ständchen (Machbeth). Two Hungarian Dances (Brahms). Selection, "Chevalier Jean" (Joncières). Overture, "Der Bettelstudent" (Millöcker). Waltz (Blon). Humoresque (Dvořák). March (Fetrás).  
 HILVERSUM, 10.0—News. 10.10—Light Music. Conductor: Horst. 10.55—Dance Records.

MONDAY Oct. 15

HUIZEN, 10.0—N.C.R.V. Choir. Conductor: Couvée. 10.10—Klock (Organ). Serenade, (Jadassohn). Schlafliedchen (Mann). 10.40—Records.  
 KALUNDBORG, 10.0—Dance Music.  
 KÖNIGSBERG, 10.0—See Breslau.  
 LEIPZIG, 10.0—Light Classical Music (contd. from 9.50).  
 MADRID (EAQ), 10.15—News. 10.30—Spanish Music. 10.45—Wireless Notes.  
 MORAVSKÁ-OSTRAVA, 10.0-10.5—Records.  
 MOSCOW (No. 1), 10.0—Talk in Hungarian: Lenin and the Law.  
 MUNICH, 10.0—See Hamburg.  
 PARIS (Poste Parisien), 10.0—Trio (Jean Cras) (contd. from 9.45). 10.20—News. 10.30—Orchestra.  
 PARIS (PTT), 10.0—Chamber Music (contd. from 8.30). 10.15—News. 10.30—Charly's Boys' Dance Band.  
 PARIS (Radio-Paris), 10.0—"Don Quixote"—Opera (Massenet) (contd. from 8.0). 10.30—Dance Music.  
 PITTSBURGH, 10.0—Memories. 10.15—KDKA Kiddies' Klub. 10.30—The Singing Lady. 10.45—Orphan Annie.  
 PRAGUE, 10.0-10.15—Talk in German (contd. from 9.55).  
 RADIO-NORMANDIE, 10.0—Request Concert.  
 ROME, 10.0—News.  
 STRASBOURG, 10.0-10.30—One-Act Operettas (contd. from 8.30).  
 STUTTGART, 10.0—See Breslau.  
 TOULOUSE (Radio-Toulouse), 10.0—"Au caveau de dix heures"—Radio Fantasy. 10.15—News. 10.30—Cinema Organ.  
 TURIN, 10.0—News; Announcements in Spanish.  
 VIENNA, 10.0—Light Music (contd. from 9.50). 10.50—New Dance Records.  
 WARSAW, 10.0—Weather. 10.5—Dance Music.

11 p.m.

BARCELONA, 11.0—Dance Music.  
 FRANKFURT, 11.0—Schubert Records.  
 HILVERSUM, 11.0-11.40—Dance Records.  
 HUIZEN, 11.0-11.40—Records.  
 KALUNDBORG, 11.0—Chimes. 11.2-11.30—Dance Music.  
 MADRID (EAJ7), 11.0—Asturian Songs. 11.15—Dance Music. 11.45—News.  
 MADRID (EAQ), 11.0—Programme in Catalan.  
 PARIS (PTT), 11.0—Charly's Boys' Dance Band.  
 PITTSBURGH, 11.0—Dan and Sylvia. 11.15—United States Army Band. 11.30—Comedy Stars of Hollywood. 11.45—Lowell Thomas.  
 RADIO-NORMANDIE, 11.0—Records. 11.30—Light Music.  
 STUTTGART, 11.0—See Frankfurt.  
 TOULOUSE (Radio-Toulouse), 11.0—Concert.  
 VIENNA, 11.0—New Dance Records.

12 midnight

BARCELONA, 12.0—News.  
 FRANKFURT, 12.0—Schubert Records.  
 PITTSBURGH, 12.0—Amos 'n' Andy. 12.15—Plantation Echoes. 12.30—Red Davis. 12.45—Dangerous Paradise.  
 RADIO-NORMANDIE, 12.0—Dance Music.  
 SCHENECTADY, 12.25—Exchange.  
 STUTTGART, 12.0—See Frankfurt.  
 TOULOUSE (Radio-Toulouse), 12.0—News. 12.5—Massenet Opera Arias. 12.15-12.30—Argentine Band.  
 ZEESEN, 12.30—Orchestra. Conductor: Balay.

1 a.m. (Tuesday)

PARIS (Radio-Colonial), 1.0—Concert.  
 PITTSBURGH, 1.0-6.0—Popular Programme.  
 RADIO-NORMANDIE, 1.0—News. 1.10—Dance Music.  
 SCHENECTADY, 1.0-4.0—Popular Programme.



# TUESDAY Oct. 16

## PRINCIPAL EVENTS

### CONCERTS

- 2.0 p.m. Kalundborg: Radio Orchestra.
- 3.0 " Königsberg, Deutschlandsender: Light orchestral.
- 6.30 " Oslo: Operatic programme.
- 7.10 " Berlin: Symphony concert; Paul Juon.
- 7.10 " Breslau, Frankfurt: "Hutten's Last Days" (cantata) (Reuter).
- 7.10 " Stuttgart: Orchestral dances.
- 7.45 " Sottens: Popular orchestral.
- 7.55 " Hilversum: Symphony No. 5 (Schubert), Violin concerto (Bruch).
- 8.15 " Vienna, Turin: Light Viennese music.
- 8.30 " Paris PTT: French Opera and Ballet Music; Conductor: Inghelbrecht.
- 8.55 " Huizen: Symphony No. 4 (Mahler), etc.
- 9.0 " Brussels (No. 2): Symphony orchestra, Songs.
- 9.10 " Kalundborg: Czech orchestral music.
- 10.0 " Hamburg, Breslau, etc.: Popular programme.
- 10.0 " Radio-Paris: Wiener Sängerknaben.

### OPERAS AND OPERETTAS

- 7.0 p.m. Warsaw: "The Gipsy Baron" (Strauss).
- 7.10 " Hamburg: "Madam Lieselott" (Gerster).
- 7.10 " Leipzig: "Don Pasquale" (Donizetti).
- 8.10 " Poste Parisien: "La Princesse Jaune" (Saint-Saëns).

### CHAMBER MUSIC

- 6.30 p.m. Brussels (No. 1): Violin and pianoforte sonata (Beethoven).
- 9.15 " Oslo: Quartets (Mozart, Brahms).
- 9.20 " Berlin: Trio (Mozart).
- 10.0 " Munich: Quintets (Schobert, Dvofák).

### RECITALS

- 5.50 p.m. Budapest: Hungarian folk songs.
- 6.30 " Vienna: Edmund Eysler (vocal music).
- 7.0 " Stockholm: Pianoforte.
- 8.15 " Kalundborg: Mozart songs.
- 9.0 " Stockholm: Sacred organ, violin, and vocal.

### DANCE MUSIC

- 9.20 p.m. Budapest: Tango Band; 9.50, Vienna; 10.0, Kalundborg; 10.10, Brussels (No. 2); 10.30, Radio-Paris; 10.50, Hilversum.

### Hours of Transmission in Greenwich Mean Time

#### 6 a.m.

- BERLIN, 6.0—News. 6.10—See Hamburg.
- BRESLAU, 6.0—News. 6.15—See Leipzig.
- COLOGNE, 6.0—Hymn; News. 6.20—Records.
- DEUTSCHLANDSENDER, 6.0—News. 6.10—See Leipzig.
- FRANKFURT, 6.0—See Munich.
- HAMBURG, 6.0—News. 6.10—Military Band.
- KÖNIGSBERG, 6.0—News. 6.10—See Berlin.
- LEIPZIG, 6.0—News. 6.10—Orchestra.
- MUNICH, 6.0—Symphony Orchestra.
- PARIS (Radio-Paris), 6.45—Gym.
- SOTTENS, 6.0-6.15—Gym.
- STUTTGART, 6.0—See Munich.
- TURIN, 6.45—Gym.
- WARSAW, 6.7—Records.

#### 7 a.m.

- BERLIN, 7.0-7.20—Gym. 7.30—Announcements; Records.
- BRESLAU, 7.0—Records.
- COLOGNE, 7.0—Records. 7.20-7.35—Gym.
- FRANKFURT, 7.0-7.30—See Munich.
- HAMBURG, 7.0—Announcements; Records.
- HILVERSUM, 7.40—Records.
- HUIZEN, 7.40—Records.
- KALUNDBORG, 7.30—Service.
- KÖNIGSBERG, 7.0—Prayers. 7.30—Gym.
- LEIPZIG, 7.0—Gym. 7.20—Records.
- MUNICH, 7.0—Symphony Orchestra.
- PARIS (Poste Parisien), 7.10—Fanfare; Records; News.
- PARIS (Radio-Paris), 7.0—Records. 7.15—Press Review. 7.45—Gym.
- STUTTGART, 7.0—See 6.0 Munich. 7.30-7.45—Gym.
- TURIN, 7.0-7.15—News.

#### 8 a.m.

- BERLIN, 8.30—Talk: Norwegian Women and Broadcasting. 8.45—For Children.
- BRESLAU, 8.0—News.
- HUIZEN, 8.0—Records.
- KÖNIGSBERG, 8.0—English for Schools: An English Sunday.
- LEIPZIG, 8.0-8.20—For Women.
- PARIS (Poste Parisien), 8.0—Records; News. 8.45—Cookery.
- PARIS (Radio-Paris), 8.0—Records.

#### 9 a.m.

- BERLIN, 9.0-9.25—News.
- BRESLAU, 9.10-9.40—For Schools.
- COLOGNE, 9.0—News. 9.10—Gym. 9.30—Variety; Records.
- DEUTSCHLANDSENDER, 9.0—News. 9.15—Discussion: Japan. 9.45—For Children.
- FRANKFURT, 9.0—News. 9.10-9.45—For Schools.
- HAMBURG, 9.50—News.
- HILVERSUM, 9.40—Service. 9.55—Records.
- HUIZEN, 9.40—Records.
- KÖNIGSBERG, 9.40—News.
- LEIPZIG, 9.0—Exchange; Announcements. 9.15-9.45—Dialogue in French: Aviation.
- MUNICH, 9.15—English for Schools: A Halloween Party.
- PRAGUE, 9.5—News in German; Record. 9.15—Orchestra.
- STUTTGART, 9.0—News. 9.15—English for Schools. 9.45—Recital on Two Pianofortes.

#### 10 a.m.

- BERLIN, 10.25-10.30—Exchange.
- BRESLAU, 10.0—Records. 10.30—News.
- COLOGNE, 10.0—Variety; Records. 10.30—Announcements; Records.
- DEUTSCHLANDSENDER, 10.0-10.15—For Children. 10.40—Talk.
- FRANKFURT, 10.0—Concert. 10.30—Announcements; Exchange.
- HAMBURG, 10.0—Music for Schools. 10.45—Records.
- HILVERSUM, 10.0—Records. 10.10

## NATIONAL

- For Time Signals, see Monday
- 10.15 a.m. (Droitwich)—Service.
- 10.30 (Droitwich)—Weather forecast.
- 10.45—"How I keep House." By a Soldier's Wife.
- 11.0—To Unemployed Clubs: Your Club Activities.
- 11.20—Records.
- 11.30 (ex. Scottish)—For Schools: Peoples of the World—4.
- 11.30 (Scottish)—Records.
- 11.50—John Reynders' Orchestra. Janet Hamilton-Smith (Soprano).
- 1.0 p.m.—The Birmingham Hippodrome Orchestra.
- 2.0 (except Scottish)—Herring Fishing Bulletin.
- 2.0-4.30 (Scottish)—Regional Programme.
- 2.5-4.0 (ex. Scottish)—For Schools: Nature Study. 2.30—Music. 3.5—French. 3.35—Topic of the Week.
- 4.0 (ex. Scottish)—Records.
- 4.30—The British String Quartet. Norah Scott Turner (Mezzo-Soprano).
- 5.15—The B.B.C. Dance Orchestra.
- 6.0—"The First News."
- 6.30—"From Plainson to Purcell." The Foundations of English Music.
- 6.50—French: E. M. Stéphan.
- 7.20—Records.
- 7.30—"Freedom and Authority in the Modern World"—3. A Critical Discussion. John MacMurray.
- 8.0—The Wireless Singers.
- 8.30—An Ethel Smyth Programme. The B.B.C. Orchestra (Section D), conducted by Aylmer Buesst. Herbert Heyner (Baritone). Orchestra: Overture, The Boatswain's Mate. Herbert Heyner and Orchestra: Three Moods of the Sea. Orchestra: Ballet, Fête Galante; Overture, The Wreckers.
- 9.30—"The Second News."
- 10.0—"A Tour through Time and Space"—2. Sir James Jeans, F.R.S.: "Our Window into Space—the Sky."
- 10.20—The Leslie Bridgewater Quintet. Elena Danieli (Soprano). Quintet: Miniature Suite (Coates); Sylvan Dances, The Pool of Narcissus (Sylvan Scenes) (Fletcher); Valse de la Reine (Coleridge-Taylor). Elena Danieli: Nobil Signor (Les Huguenots) (Meyerbeer); Song of the Soul (Breil); My Heart is a lute, A Birthday (Woodman). Quintet: Mascarade (Reynolds); Song of Paradise (King); Waltz (The Blue Bird) (O'Neill); PUNCHINELLO (Bridge-water).
- 11.10—"A Famous Scene in the Old House," by Macaulay (letter). Read by Patric Curwen.
- 11.15-12.0—Dance Music. Lew Stone and his Band.

## REGIONAL

- For Time Signals, see Monday
- 10.15-10.45 a.m. (ex. Midland)—National.
- 10.45—The B.B.C. Northern Orchestra. Zerubbabel Leikin (Pianoforte).
- 12 noon—Joseph Muscant and the Troxy Grand Orchestra.
- 12.45 p.m.—Records.
- 1.15—Organ Recital.
- 2.0 (ex. Scottish)—The Tower Orchestra, Birmingham.
- 2.0 (Scottish)—Records.
- 2.35-4.0 (Scottish)—For Schools: Reception Test. 2.40—French. 3.10—English. 3.35—Topic of the Week.
- 3.0 (ex. Scottish, North till 4.0)—The Eastbourne Municipal Orchestra. Phyllis Sellick (Pianoforte).
- 4.0 (North)—Evensong from York Minster.
- 4.0 (Scottish)—See London, 3.0.
- 4.30 (North from 4.45)—The Scottish Studio Orchestra.
- 5.15—The Children's Hour.
- 6.0—"The First News."
- 6.30 (except Scottish and West)—"Songs from the Films"—3. Cast: Anona Winn. Reginald Purdell. Gordon Little. The B.B.C. Theatre Orchestra and Revue Chorus. At the Pianofortes Harry S. Pepper, and Doris Arnold.
- 6.30 (Scottish)—Gaelic Lesson.
- 6.30 (West)—Francis Russell (Tenor). Megan Lloyd (Violoncello). Mansel Thomas (Pianoforte).
- 6.50 (Scottish)—The Reel Players. Robert Burnett (Baritone). Heloise Russell-Fergusson (Clarsach).
- 7.30 (London and North)—The New Georgian Trio.
- 7.30 (Midland)—Dance Records.
- 7.30 (Belfast)—John Hartley (Cor Anglais). Tina Bonifacio (Harp).
- 7.45 (Belfast)—An explanation of Belfast's Water Supply.
- 7.45 (Scottish)—Scottish Poetry.
- 8.0 (except Midland and West)—B.B.C. Theatre Orchestra. Gwladys Naish (Soprano).
- 8.0 (Midland)—Short Story.
- 8.10 (West)—The St. Dennis Silver Band. Jesse George (Baritone).
- 8.20 (Midland)—"White Sails." A Musical Play.
- 9.0 (North)—"All for 'Love of a Lady." A Yorkshire Comedy.
- 9.10 (except North)—Two Plays. "Delayed Drop" by Alan Byrne. "Fours into seven—won't go" by Val Gielgud and Stephen King-Hall.
- 10.0—News Summary.
- 10.10 (North from 10.30)—Lew Stone and his Band.
- 10.10 (North)—The Care of Cars—3.
- 10.40—Dance Records.
- 11.0-12.0 (Midland till 11.15)—Lew Stone and his Band.

## EMPIRE SUMMARY

- For wavelengths, see S.W. List
- Transmission 1 (GSD, GSB)**
- 7.15 a.m.—Big Ben. Troise and his Mandoliers with Don Carlos (Tenor).\*
- 8.0—Sonata Recital. Margot Mac-Gibbon (Violin). Frederick Jackson (Pianoforte).
- 8.30—"Meet Hanaud," presented by his creator, A. E. W. Mason.\*
- 8.45—Novelty Instrumentalists.†
- 9.0—Empire News.
- 9.15—Close Down.
- Transmission 2 (11.0—12.30 GSG, GSF; 12.30—2.0 GSF, GSB)**
- 11.0 a.m.—Big Ben. The B.B.C. Northern Orchestra. Zerubbabel Leikin (Pianoforte).
- 11.45—(See 8.30 a.m.).\*
- 12 noon—John Reynder's Orchestra. Janet Hamilton-Smith (Soprano).
- 1.0 p.m.—The Birmingham Hippodrome Orchestra.
- 1.15—An Organ Recital.
- 1.45—Empire News.
- 2.0—Close Down.
- Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSF, GSB)**
- 2.15 p.m.—Big Ben. The Tower Orchestra, Birmingham.
- 3.0—Organ Recital by Maurice Vinden.
- 3.30—(See 8.30 a.m.).\*
- 3.45—Light Music.
- 4.30—The Wireless Singers.
- 5.0—Empire News.
- 5.15—The B.B.C. Dance Orchestra.
- 5.45—Close Down.
- Transmission 4 (GSD, GSB)**
- 6.0 p.m.—Big Ben. Empire News.
- 6.15—Celebrity Instrumentalists.†
- 6.30—"Songs from the Films"—3.
- 7.30—The New Georgian Trio.
- 8.0—The Wireless Singers.
- 8.30—An Ethel Smyth Concert. The B.B.C. Orchestra (Section D). Herbert Heyner (Baritone).
- 9.30—Dance Music played by British Bands.†
- 10.0—Talk by Sir James Jeans, F.R.S.
- 10.20—Empire News.
- 10.35—Dance Music.
- 10.40—Dance Music.†
- 10.45—Close Down.
- Transmission 5 (GSC, GSA)**
- 11.0 p.m.—Big Ben. "Babel Ballads." A Musical "At Home."
- 11.30—(See 8.0 a.m.).
- 12 midnight—Talk by Sir James Jeans, F.R.S.\*
- 12.20 a.m.—Marches and Waltzes.†
- 12.45—Empire News.
- 1.0—Close Down.

\* Electrical Recording  
† Gramophone Records.

- Cookery. 10.40—Elisabeth Glastra van Loon (Soprano); Hasselaar (Organ). Prelude and Fugue in G minor (Buxtehude). Aria, "The Seasons" (Haydn). Vom Namen Jesu (Schütz). O, Herre Gott (Reger). Maria Wiegenlied (Reyer). Pastorale (Franck). Bist du bei mir (Bach). Benedictus (Hasse). Song (Boulanger). Sch des Knaben Augen (Wolf). Pièce héroïque (Franck).
- HUIZEN, 10.0—Records. 10.10—Concert. 10.40—Records.
- KÖNIGSBERG, 10.5—Talk: Torsk Fishing. 10.30—Choral Records.
- LEIPZIG, 10.0—Announcements; Records. 10.30—News.
- MUNICH, 10.5—For Farmers. 10.15—News. 10.30—Concert; Records.
- PRAGUE, 10.5—Readings; Music. 10.50—Record; News.
- STUTTGART, 10.0—Recital on Two Pianofortes. 10.15—Announcements; Records.
- TURIN, 10.30—Records.
- VATICAN CITY, 10.0-10.15—Religious information in English.

#### 11 a.m.

- BERLIN, 11.0—Orchestra.
- BEROMÜNSTER, 11.0—Light Music.
- BRESLAU, 11.0—Orchestra. Conductor: Peter. Hilde Bosse (Harp).
- BUDAPEST, 11.5—Vocal Quintet. In the Interval at 11.30: News.
- COLOGNE, 11.0—Station Orchestra. Conductor: Kühn. Orthmann (Violin). 11.45—News.
- DEUTSCHLANDSENDER, 11.0—See Leipzig.
- FRANKFURT, 11.0—Records.
- HAMBURG, 11.0—Announcements. 11.15—See 11.0 Berlin.
- HILVERSUM, 11.0—Soprano and Organ (contd. from 10.40). 11.40—Light Music. Rembrandt Theatre Orchestra, Amsterdam. Conductor: Hartogs.
- HUIZEN, 11.0—Records. 11.10 Religious Address. 11.40—Police Notes. 11.55—K.R.O. Boys. Conductor: Lustenhouwer.

- KALUNDBORG, 11.0—Nielsen's String Ensemble.
- KÖNIGSBERG, 11.0—See Berlin.
- LEIPZIG, 11.0—"Musical Humour." Station Orchestra. Conductor: Weber. Wilhelm (Violin).
- MONTE CENERI, 11.0—News. 11.5—Orchestra. Weather in the Interval. 11.55—News.
- MUNICH, 11.0—See Breslau.
- PRAGUE, 11.10—Records; News. 11.35—Kostal Chamber Orchestra.
- SOTTENS, 11.30—News. 11.40—Records.
- STUTTGART, 11.0—Records.
- TURIN, 11.45—News.
- WARSAW, 11.0—Fanfare; News. 11.10—"Children in Music"—Sequence. 11.45—For Children.

#### 12 noon

- BERLIN, 12.0—Middy Echoes. 12.15—Folk Dance Records.
- BEROMÜNSTER, 12.0—Light Music. 12.25-12.40—Weather; Exchange.
- BRESLAU, 12.0—Orchestra (contd. from 11.0).
- BRUSSELS (No. 1), 12.0—Marches and Waltzes. Conductor: Walpot. 12.45—Suzanne Braconier (Songs).
- BRUSSELS (No. 2), 12.0—Records.
- BUDAPEST, 12.30—Band.
- COLOGNE, 12.0—Opera Music. Augmented Station Orchestra. Conductor: Kühn. Savelkous (Bass). 12.45—News.
- DEUTSCHLANDSENDER, 12.0—Records. 12.45—News.
- FRANKFURT, 12.0—News. 12.15—Orchestra.
- HAMBURG, 12.0—Exchange. 12.20—Light Music.
- HILVERSUM, 12.0—Light Music. Rembrandt Theatre Orchestra, Amsterdam. Conductor: Hartogs.
- HUIZEN, 12.0—K.R.O. Boys. 12.40—Records.
- KALUNDBORG, 12.0—Nielsen's String Ensemble.
- KÖNIGSBERG, 12.1—News. 12.5—Records.

- LEIPZIG, 12.0—News. 12.10—Records.
- MONTE CENERI, 12.5-12.30—Records.
- MUNICH, 12.0—See 11.0 Breslau. 12.15—News. 12.25—Records.
- OSLO, 12.0—Records.
- PARIS (Poste Parisien), 12.0—Exchange. 12.25—News. 12.35—Records.
- PARIS (PTT), 12.0—For Tourists. 12.15—Concert.
- PARIS (Radio-Paris), 12.0—Light Music. Conductor: André. Micheline Grandier (Soprano) and Diglard (Comic Songs).
- PRAGUE, 12.0—Kostal Chamber Orchestra. 12.35—Talk. 12.45—Records. 12.55—Exchange.
- SOTTENS, 12.0—Records. 12.10—Exchange. 12.15—Records.
- STOCKHOLM, 12.0—See Kalundborg.
- STUTTGART, 12.0—News. 12.15—See Frankfurt.
- TURIN, 12.0—Announcements. 12.5—Ferruzzi Orchestra. In the Interval: Records; Exchange.
- WARSAW, 12.0—News. 12.5-12.30—Orchestra.

#### 1 p.m.

- ATHLONE, 1.30—Exchange; Records.
- BERLIN, 1.0—News. 1.15—Operetta Records.
- BRESLAU, 1.5—Exchange. 1.10—Announcements; Records.
- BRUSSELS (No. 1), 1.0—News. 1.10—Light Music on Records.
- BRUSSELS (No. 2), 1.0—News. 1.10—Orchestra. Conductor: André.
- BUDAPEST, 1.0-1.40—Band.
- COLOGNE, 1.0-1.45—Station Quintet.
- FRANKFURT, 1.0—Orchestra. 1.15—News. 1.30—Industrial Review. 1.45—Exchange.
- HAMBURG, 1.0—Light Music. 1.15—News. 1.30—Opera and Operetta Records.
- HILVERSUM, 1.0—Light Music.



1 p.m. (contd.)

Rembrandt Theatre Orchestra, Amsterdam. Conductor: Hartogs. 1.25—The Hague Quartet. Quartet in G (Haydn). Records. Quartet in D (Beethoven). HUIZEN, 1.0—K.R.O. Orchestra. Conductor: van 't Woud. 1.40—For Women. KÖNIGSBERG, 1.0—News. 1.5—Records. LEIPZIG, 1.0—News; Exchange. 1.15—Light Classical Records. 1.45—Talk: Alfred Kindler. MUNICH, 1.0—News; Exchange. 1.20—Concert. Part I.—"Haydn's Vision"—Sequence (Pröll), by a String Quartet and the Author (Recitation). Part II.—Annie Karoline Dürnhöfer (Soprano). Songs (Grieg): (a) Zwei braune Augen, (b) Verborgene Liebe, (c) Abschied, (d) Der Jäger. 1.50—For Women. OSLO, 1.0—Records. 1.45—Exchange. PARIS (Poste Parisien), 1.5—Exchange; Records. PARIS (PTT), 1.0—News. 1.15—Concert. PARIS (Radio-Paris), 1.0—Light Music (contd. from 12.0). In the Interval at 1.20: Exchange. PRAGUE, 1.0-1.5—Exchange, in German. STOCKHOLM, 1.0—Reading. 1.25—Trio. 1.45—French for Schools. STUTTGART, 1.0-1.15—See Frankfurt. TURIN, 1.0—Ferruzzi Orchestra. 1.15-1.25—Exchange.

2 p.m.

ATHLONE, 2.0—Records. BERLIN, 2.0-2.20—Exchange. BEROMÜNSTER, 2.30—Italian Descriptive Music. BRESLAU, 2.10—Thea Fietzek (Soprano). 2.40—Report from Proskau Bird Sanctuary. COLOGNE, 2.15—Talk. 2.30—Exchange. 2.45—For Women. DEUTSCHLANDSENDER, 2.0—Exchange. 2.15—For Mothers. 2.40—Talk. FRANKFURT, 2.0—"An Old-Time Song"—Sequence (Overbeck). 2.50—Art Review. HAMBURG, 2.0—Exchange. 2.40—Shipping; Aviation. HILVERSUM, 2.0—"The Hague Quartet" (contd. from 1.25). 2.40—Dressmaking. KALUNDBORG, 2.0—Radio Orchestra. Conductor: Mahler. Overture, "Der Schauspielerdirektor" (Mozart). Dance Suite (Handel). Turkish March, "The Ruins of Athens" (Beethoven). Waltz (Strauss). Extracts, "The Taming of the Shrew" (Zilcher). Overture, "A Midsummer Night's Dream" (Mendelssohn). Overture, "La belle Hélène" (Offenbach). Extracts, "The Merchant of Venice" (Sulliván). Mazurka, "Polenbit" (Nedbal). Waltz, "Countess Maritza" (Kálmán). Bohemian Song and Dance (Weinberger). Overture, "Gipsy Love" (Lehár). In the Interval: Reading. HUIZEN, 2.0—For Women. KÖNIGSBERG, 2.0—Markets. 2.20—Book Review. 2.30—For Children. LEIPZIG, 2.15—For Children. 2.35—Exchange. MUNICH, 2.0—For Women. 2.30—Dialect Readings. PARIS (Poste Parisien), 2.0—Exchange. PARIS (PTT), 2.0—Records. 2.45—See Paris (Radio-Colonial). PARIS (Radio-Colonial), 2.45—Light Music. PRAGUE, 2.50—Exchange. 2.55—Orchestra. STUTTGART, 2.30—For Children. WARSAW, 2.30—News. 2.45—Light Music.

3 p.m.

BERLIN, 3.0—Light Music. Small Station Orchestra. Conductor: Steiner. In the Interval: "When your Husband doesn't come Home"—Sketch. BEROMÜNSTER, 3.0—See Sottens. BRESLAU, 3.0—Light Music. Conductor: Gielnik. BUDAPEST, 3.0—For Women. COLOGNE, 3.0—Small Station Orchestra. Conductor: Eysoldt. DEUTSCHLANDSENDER, 3.0—See Königsberg. FRANKFURT, 3.0—See Berlin. HAMBURG, 3.0—See Leipzig. HILVERSUM, 3.0-3.40—Dressmaking. 3.55—Records. HUIZEN, 3.0—Dressmaking. 3.40—Jewish Programme. KALUNDBORG, 3.0—Orchestra (contd. from 2.0). KÖNIGSBERG, 3.0—Station Light Orchestra. Conductor: Wileken. In the Interval: Talk: Excursions. LEIPZIG, 3.0—Orchestra. Conductor: Mannebeck. MONTE CENERI, 3.0—See Sottens.

MUNICH, 3.0—Station Orchestra. Conductor: List. Anny Welden-Kaminsky (Mezzo-soprano). PARIS (Poste-Parisien), 3.15—Exchange. PARIS (PTT), 3.0—See 2.45 Paris (Radio-Colonial). PARIS (Radio-Colonial), 3.0—Light Music. PARIS (Radio-Paris), 3.45—Exchange. PRAGUE, 3.0—Orchestra. 3.45—Reading. SOTTENS, 3.0—Small Radio-Lausanne Orchestra. Conductor: Moser. STOCKHOLM, 3.30—Tercentenary Celebrations of the Governorship of Stockholm, from the Blue Hall. Address by the present Governor. STUTTGART, 3.0—See Berlin. TURIN, 3.35—News. 3.45—For Children. WARSAW, 3.0—Light Music. 3.45—Letter-Box.

4 p.m.

BERLIN, 4.0—Light Music (contd. from 3.0). BEROMÜNSTER, 4.0—See 3.0 Sottens. BRESLAU, 4.0—Light Music (contd. from 3.0). 4.35—For Women. 4.55—Humorous Stories. BUDAPEST, 4.0—Talk. 4.35—Trio. COLOGNE, 4.0—Science Talk. 4.15—Contemporary Music by Wolf (Baritone) and Grape (Pianoforte). Choral im Grünen (Graener). Seven Lieder from the Eililand Saga (Fieltz). Wolken und Winde (Graener). 4.40—Readings. DEUTSCHLANDSENDER, 4.0—Wireless Notes. 4.10—See 4.0 Königsberg. FRANKFURT, 4.0—See 3.0 Berlin. HAMBURG, 4.0—See 3.0 Leipzig. 4.30—Book Review. HILVERSUM, 4.0—Records. 4.10—Children's Choir. Conductor: Hamel. 4.40—For Children. HUIZEN, 4.0—Jewish Programme. 4.50—K.R.O. Orchestra. Conductor: Gerritsen. Overture, "The Golden Cross" (Brütl). Selection, "Der liebe Augustin" (Fall). The Canary (Poliakín). Liszt Potpourri (Urbach). Records. Overture, "Rund um die Liebe" (O. Straus). The Cockney Lover (Ketelbey). Dance of the Merry Mascots (Ketelbey). Selection, "Monna Vanna" (Février). Invitation to the Dance (Weber). KALUNDBORG, 4.0—For Boys. 4.30—Exchange; Poem. 4.45—Religious Address. KÖNIGSBERG, 4.0—Orchestra. LEIPZIG, 4.0—Orchestra (contd. from 3.0). 4.30—Book Review on Records (Fritz Sauekel). MONTE CENERI, 4.0—See 3.0 Sottens. MUNICH, 4.0—Orchestra (contd. from 3.0). 4.30—Reading (Flex). 4.50—Station Choir. OSLO, 4.0—Records. PARIS (Poste Parisien), 4.50—Exchange. PARIS (Radio-Paris), 4.30—English. PRAGUE, 4.5—Records. 4.15—Talk. 4.25—Records. 4.35—German. 4.50—Hugo Wolf Lieder. ROME, 4.0—Exchange; Recitations. 4.15—Esperia Quintet. SOTTENS, 4.0—Orchestra (contd. from 3.0). STOCKHOLM, 4.0—Tercentenary Celebrations (contd. from 3.30). 4.45—Weather; Records. STUTTGART, 4.0—See 3.0 Berlin. TURIN, 4.0—For Children. 4.10—Orchestra. 4.55—Weather. WARSAW, 4.0—Woytowicz (Pianoforte). Sicilienne (Bach-Silotti). Sonata in F sharp (Beethoven). Rondo in A minor (Mozart). 4.25—Polish. 4.35—Wagner Records. 4.50—Technical Letter-Box.

5 p.m.

BERLIN, 5.0—Topical Talk. 5.5—A Play for Young People. 5.30—Popular Music by the Freundorfer Instrumental Quartet, Simlinger (Songs), and Reich (Accordion). BEROMÜNSTER, 5.0—Records. 5.30—Report from a Coppermith's. BRATISLAVA, 5.0—Hungarian Transmission. 5.45—Talk. BRESLAU, 5.0—Humorous Stories. 5.15—Concerto for Two Violins and Pianoforte (Zilcher). 5.50—Announcements. BRNO, 5.20—Records. 5.35—Weekly Review; Music. 5.50—For Housewives; News. BRUSSELS (No. 1), 5.0—Faures (Organ). Fantasia and Fugue in C minor (Bach). Choral (Bach). Choral in B (Franck). 5.30—For Children. BRUSSELS (No. 2), 5.0—Rimsky-Korsakov Records. 5.45—For Children. BUDAPEST, 5.0—Trio. 5.20—Talk. 5.50—Hungarian Folk Songs. Margit Utry, with Cigány Band. COLOGNE, 5.0—Talk: The Essen

Bird Sanctuary. 5.20—Talk: Electricity. 5.40—Topical Talk. 5.50—Exchange. DEUTSCHLANDSENDER, 5.0—For Young People. 5.20—Talk for Girls. 5.35—Political Press Review. 5.55—A Poem. FRANKFURT, 5.0—Italian. 5.15—Industrial Report. 5.30—Talk: German Economic Reconstruction, 1925-33. 5.45—Records; Announcements. HAMBURG, 5.0—Topical Talks. 5.45—Exchange. HILVERSUM, 5.0—For Children. 5.10—Protestant Programme. 5.40—A.V.R.O. Orchestra. Conductor: van Raalte. Overture, "Di Ballo" (Sullivan). Three Pieces (Elgar): (a) The Serious Doll, (b) The Sad Doll, (c) The Merry Doll. Ballet Music, "Henry VIII" (German). Records. Marche funebre d'une marionnette (Gounod). Three Pieces (Liadov): (a) Andantino, (b) Cradle Song, (c) Rondino. Farandole, "L'Arlesienne" (Bizet). Records. Nocturne (Schmidt). Overture, "Donna Diana" (Reznicek). HUIZEN, 5.0—K.R.O. Orchestra (contd. from 4.50). KALUNDBORG, 5.0—Religious Address. 5.15—German. 5.45—Announcements. KÖNIGSBERG, 5.0—Talk. 5.15—Markets. 5.25—For Girls. LEIPZIG, 5.0—Exchange. 5.10—Military Talk. 5.30—Records. MORAVSKÁ-OSTRAVA, 5.0—Local News. 5.5—Talk. 5.15—Record. MOSCOW (No. 1), 5.0—Talk. 5.30—Dramatic Programme. 5.55—For Collective Farmers. MUNICH, 5.0—Station Choir. 5.10—Talk: Our Neighbour, France. 5.30—Records. OSLO, 5.0—For Children. 5.30—For Women. PARIS (Radio-Colonial), 5.0—Orchestra. PRAGUE, 5.0—Hugo Wolf Lieder. 5.10—Exchange. 5.20—Talk; Variety, and News in German. RADIO-NORMANDIE, 5.0—Light Music. 5.30—Ketelbey Music. Extract from The Cockney Suite. Belts across the Meadows. Piece. The Clock and the Dresden Figures. Sanctuary of the Heart. Wedgwood Blue. ROME, 5.0—Corn Prices. 5.10-5.15—Atmospheric Signals. SOTTENS, 5.0—Literary Programme. 5.25—Small Radio-Lausanne Orchestra. STOCKHOLM, 5.0—Records. 5.45—French. STRASBOURG, 5.0—Orchestra. STUTTGART, 5.0—French. 5.15—Industrial Report. 5.30—Police Band and Accordion. TURIN, 5.0—For Farmers. VIENNA, 5.10—Talk: St. Florian. 5.35—French. WARSAW, 5.0—For Farmers. 5.10—Art Notes. 5.15—Light Music. 5.45—Reading.

6 p.m.

ATHLONE, 6.0—For Children. 6.45—News. BARI, 6.15—News in Foreign Languages. BERLIN, 6.0—Popular Music (contd. from 5.30). 6.15—A Discussion on the Arts: A Painter, an Architect, a Sculptor and a Designer at the Microphone. 6.40—Evening Echoes. BEROMÜNSTER, 6.0—Talk: The Broadcasts for Schools. 6.20—Talk: Jeronias Gotthelf. 6.50—Station Orchestra. BRATISLAVA, 6.10—Vilem Simek (Violin). 6.5—Russian Songs. BRESLAU, 6.0—Bruno Hanns Wittke reads. 6.20—Contemporary Music by Michel (Pianoforte). Sonata (Horn). Gavotte and Musette (Mraczak). Grottesque (Mraczak). Gavotte (Michel). BRNO, 6.10—Record. 6.15—Esperanto. 6.30—Records. BRUSSELS (No. 1), 6.5—Literary Review. 6.15—Debussy Records. 6.30—Violin and Pianoforte Sonata in F (Beethoven). BRUSSELS (No. 2), 6.0—For Children. 6.30—Orchestra. Conductor: Douliez. Gilman (Piccolo) and Ferari (Violin). BUDAPEST, 6.0—Folk Songs (contd. from 5.50). COLOGNE, 6.0—Radio Report. 6.25—Folk Humour and Music—Sequence (Böckenholt). 6.50—Snapshots. DEUTSCHLANDSENDER, 6.0—Records, with Commentary. FRANKFURT, 6.0—Records. 6.45—Topical Talk. HAMBURG, 6.0—Military Band. HILVERSUM, 6.0—Orchestra (contd. from 5.40). HUIZEN, 6.0—K.R.O. Orchestra (contd. from 4.50). 6.20—Esperanto. 6.40—Police Messages. 6.55—Religious Address.

7 p.m.

ATHLONE, 7.0—Irish Talk. 7.15—Talk. 7.30—Time. 7.31—Stanford and Harty Music. Station Orchestra. BELGRADE, 7.30—Quartet. BERLIN, 7.0—News. 7.10—Station Orchestra. Conductor: Frick-hoeffer. Paul Juon (Pianoforte). Suite for Orchestra and Pianoforte (Juon). Symphony No. 1 in B flat (Schumann). Overture, "Donna Diana" (Reznicek). Symphonic Fairy Tale Suite (Lobertz). Invitation to the Dance (Weber). Roses from the South (Strauss). BEROMÜNSTER, 7.0—Station Orchestra. 7.20—Guessing Competition. BORDEAUX-LAFAYETTE 7.30—News. 7.45—Records. BRATISLAVA, 7.15—Talk: San Marino. 7.30—Light Music. Conductor: Dyk. BRESLAU, 7.0—News. 7.10—"Hutten's Last Days"—Cantata for Baritone and Orchestra after Konrad Ferdinand Meyer (Reuter). The Station Orchestra. Conductor: Prade. Bertermann (Baritone). BRNO, 7.30—"Kuteisik" (Teshnolidek-Hefmanek). BRUSSELS (No. 1), 7.0—Wagner Records. 7.15—News. 7.30—Art Review. For Women. BRUSSELS (No. 2), 7.0—Talk. 7.15—Orchestra (contd. from 6.30). 7.30—News. 7.55—For Women. BUDAPEST, 7.0—Book Review. 7.40—Dances. Budapest Concert Orchestra, Conductor: Polgár.

TUESDAY Oct. 16

COLOGNE, 7.0—News. 7.10—A Conducted Tour through Sauerland. DEUTSCHLANDSENDER, 7.0—News. 7.15—Folk Songs. FRANKFURT, 7.0—News. 7.10—See Breslau. HAMBURG, 7.0—News. 7.10—"Madame Lieselott"—Three Act Opera (Gerster). HILVERSUM, 7.0—Orchestra (contd. from 5.40). 7.10—English. 7.40—News. 7.45—Talk. 7.55—Concert A.V.R.O. Orchestra. Conductor: van Raalte. Leydensdorff (Violin). Symphony in B flat (Schubert). Violin Concerto in G minor (Bruch). HUIZEN, 7.0—Religious Address (contd. from 6.55). 7.15—Records. 7.25—K.R.O. Boys. Conductor: Lustenhouwer. 7.55—Margie Morris and Else d'Heurenso (Songs). KALUNDBORG, 7.0—Folk Dances (arr. Gröndahl). 7.15—"Indian Summer"—Four-Act Play (Melitta Lange). KÖNIGSBERG, 7.0—News. 7.10—Quartet in F sharp minor (Reger) by the Zernick String Quartet. 7.50—History Talk. LAHTI, 7.0—Orchestra (contd. from 6.35). 7.45—News. LEIPZIG, 7.0—News. 7.10—"Don Pasquale"—Three-Act Opera (Donizetti). The Leipzig Symphony Orchestra, and the Station Choir. Conductor: Blumer. LYONS (La Doua), 7.40—Variety. MONTE CENERI, 7.0—Talk: Music at the Czar's Court. 7.15—Ignatiev (Balalaika). Polonaise (Oginsky). Coniavienne (Wieniawski). Tarantella and Variations (Lentz). Variations (Pogorelov). Variations (Ignatiev). 7.40—Talk: Tolstói's Favourite Composers. 7.50—Russian Music. Radio Orchestra. Conductor: Leopoldo Casella. Overture, "Russian and Ludmilla" (Glinka). Symphony No. 2 in C, "La mer" (Tchaikovsky). The Nutcracker Suite (Tchaikovsky). Russian Dance, "Boris Godunov" (Mussorgsky). MORAVSKÁ-OSTRAVA, 7.0—Orchestra (contd. from 6.55). MOSCOW (No. 1), 7.0—Songs, Light Music and Guitar. MUNICH, 7.0—News. 7.10—"Something for Everybody"—Variety. Part I. "Isar und Rhein"—by the Station Schrammel Quartet. In the interval, Dialogue: Our Listeners' Wishes. Part II. "Two Words Only"—The Small Station Orchestra, Mimi Thoma and Marius Andersen. In the interval, "Music hath charms—sometimes" (Schwerla). Part III. New Songs and Dance Music by the Station Dance Band and Soloists. OSLO, 7.0—Social Notes. 7.30—Station Orchestra. Edvardsen (Songs). Slav March (Tchaikovsky). Arias, "L'Africaine" (Meyerbeer) and "Manon Lescaut" (Puccini). Suite, "Sylvia" (Delibes). PARIS (Poste Parisien), 7.0—Opera and Operetta Records. 7.10—News. 7.30—Organ Records. 7.45—Sound Film Records. PARIS (PTT), 7.45—Science Talk. 7.53—Talk: Photography. PARIS (Radio-Paris), 7.0—Talk: Art. 7.30—Topical Talk. PRAGUE, 7.0—See 6.55 Moravská-Ostrava. 7.30—See Brno. RADIO-NORMANDIE, 7.0—Request Concert. ROME, 7.0—News. 7.10—Records. 7.30—Government Notes. 7.45—Patti (Flute); Tina Bari (Violin), Anna Linde (Harpisichord); Elda di Veroli (Soprano). Trio in C minor for Flute, Violin and Harpsichord (Handel). Arias, "The Messiah" (Handel), "La vergine del sole" (Cimarosa), and "The Magic Flute" (Mozart). Seven Old Dances for Harpsichord: Passo mezzo (Gabrieli); Corrente (Frescobaldi); Pavane (Bull); Allemande (Pearson); Sarabande (Rameau); Bourrée (Bach); Gigue (Galuppi). Aria, "Semiramide" (Rossini). RUSSELEDE, 7.45—News in French. SOTTENS, 7.0—"Dimanche"—Play in One Act (Maurette). 7.45—Station Orchestra. Conductor: Echenard. Overture and Dances, "Prometheus" (Beethoven). Suite "Peer Gynt" (Grieg). STOCKHOLM, 7.0—Betty Humby (Pianoforte), from the Concert House. Fantasia in C minor (Mozart). Sonata in D (Mozart). Fantasia (Beethoven). 7.45—Literary Review. STRASBOURG, 7.0—Wagner Concert (contd. from 6.30). 7.30—News. 7.45—Records. STUTTGART, 7.0—News. 7.10—



TUESDAY Oct. 16

7 p.m. (contd.)

"Dances of the Nations"—Station Orchestra. Conductor: Drost. Oswald (Violin). Two Pieces (Grainger): (a) Molly on the Shore, (b) Shepherd's Hey. Three Pieces (Mussorgsky). Mazurka (Glinka). Zigeunerweise (Sarasate). Hungarian Dance (Brahms). Polonaise (Tchaikovsky). Tarantella (Rossini). Two Pieces (Falla): (a) Spanish Dance, (b) Dance, "La vida breve." Valse des fleurs (Delibes). Arc en Ciel (Waldteufel).  
**TOULOUSE (Radio-Toulouse), 7.0—** Concert.  
**TURIN, 7.0—** News; Records. 7.30—Talk by Senator Davanzati. 7.45—Records.  
**VATICAN CITY, 7.0-7.15—** Religious Information in Italian.  
**VIENNA, 7.0—** Eysler Songs (contd. from 6.30). 7.15—"Austria in Song and Story"—Sequence.  
**WARSAW, 7.0—** "The Gipsy Baron"—Operetta in Three Acts (Strauss). Station Choir, Orchestra, and Soloists. Conductor: Gorzynski. In the Intervals: News; Light Music.

8 p.m.

**ALGIERS, 8.0—** Time. 8.2—Records. 8.30—News. 8.35—"Chartres... cinq Minutes d'arret"—One Act Comedy (Chaulas).  
**ATHLONE, 8.0—** Stanford Songs by P. J. Duffy (Baritone). 8.10—Stanford and Harty Music. Station Orchestra. 8.35—Harty Songs by P. J. Duffy (Baritone). 8.45—Comedy by Mary O'Hea and Company.  
**BELGRADE, 8.0—** Records. 8.20—Popular Songs. 8.50—Time; News.  
**BERLIN, 8.0—** Orchestra (contd. from 7.10).  
**BEROMÜNSTER, 8.0—** News. 8.10—"Musik zu einem Ritterballett" (Beethoven), by the Station Orchestra. Conductor: Gilbert. 8.20—Scenes from the Lives of Composers.  
**BORDEAUX-LAFAYETTE, 8.0—** Records. 8.30—See Paris (PTT).  
**BRATISLAVA, 8.0—** Light Music (contd. from 7.30).  
**BRESLAU, 8.0—** Station Orchestra. Conductor: Rischka. Comedy Overture (Reznicek). Selection, "André Chenier" (Giordano). Morgenblätter (Strauss). March (Koschat). Old Styrian Dances (Pachernegg). Selection, "The Merry Widow" (Lehár).  
**BRNO, 8.0—** "Kuteisik" (Těsnohlídek-Hermanek), (contd. from 7.30).  
**BRUSSELS (No. 1), 8.0—** Operetta Music. Orchestra. Conductor: Walpot. Mme. Deligny (Songs). Selection, "La mascotte" (Audran). Song, "The Drum-Major's Daughter" (Offenbach). Selection, "Hans, the Flute Player" (Ganne). Vilja's Song, "The Merry Widow" (Lehár). Selection, "A Waltz Dream" (Strauss). Song, "Frasquita" (Lehár). Selection, "New Moon" (Romberg). Songs, "La fille de Madame Angot" (Lecocq). "Véronique" (Messager). Selection, "Monsieur Beaucaire" (Messager).  
**BRUSSELS (No. 2), 8.0—** Records; Sketch.  
**BUDAPEST, 8.0—** Dances (contd. from 7.40).  
**COLOGNE, 8.0—** A Conducted Tour through Sauerland. 8.30—Records.  
**DEUTSCHLANDSENDER, 8.0—** "Schwarzmann und die Magd"—Folk Play (Schäfer).  
**FRANKFURT, 8.0—** See Breslau. 8.30—"Captains of the Highway"—Sequence (Laven).  
**HAMBURG, 8.0—** "Madame Lieselott"—Opera (Gerster) (contd. from 7.10). 8.40—Schrüter (Pianoforte) and Eva Förster and Pündter (Monologues) Humoresque (Reger). Legende von den Säcker (Bröger). Die Freunde (Busch). Vivace and Gavotte from the Tagebuch (Reger). Das Mädchen mit den hellen Augen (Storm). Der Liebesbrief (Seidel). Capriccio (Brahms).  
**HILVERSUM, 8.0—** Concert (contd. from 7.55). 8.40—"Don Quixote"—Play after Cervantes.  
**HUIZEN, 8.0—** Margie Morris and Else d'Heureuse (Songs). 8.5—Records. 8.10—News. 8.15—Film Review. 8.30—Songs (contd.). 8.40—Records. 8.55—Symphony No. 4 in G (Mahler). K.R.O. Symphony Orchestra. Conductor: Goudoever. Mlle. Heymans (Soprano).  
**JUAN-LES-PINS (Radio Côte d'Azur), 8.0—** Amusement Guide;

Exchange; Racing Results; News. 8.10—For Farmers. 8.20—Topical Talk. 8.35—Orchestra. Scenes Pittoresques (Massenet). Suite No. 1, "Peer Gynt" (Grieg).  
**KALUNDBORG, 8.0—** "Indian Summer"—Play (contd. from 7.15). 8.15—Mozart Songs by Ellen Laub. Zufriedenheit. Trennungslid. Warnung. Un moto di gioia. 8.30—Reading. 8.55—News.  
**KÖNIGSBERG, 8.0—** Variety from Auerburg. Chamber Orchestra and Soloists.  
**LAHTI, 8.0—** News in Swedish.  
**LYONS (La Doua), 8.30—** Concert.  
**MONTE CENERI, 8.0—** Russian Music (contd. from 7.50). 8.40—Records: Russian Folk Songs.  
**MOSCOW (No. 1), 8.0—** "The Russian Revolution"—Sketch in German. 8.55—Chimes from the Kremlin.  
**MÜNICH, 8.0—** "Something for Everybody"—Variety (contd. from 7.10).  
**OSLO, 8.0—** Orchestra (contd. from 7.30). 8.10—Talk: South Norway. 8.40—News.  
**PARIS (Poste Parisien), 8.10—** "La princesse jaune"—One-Act Opera (Saint Saëns).  
**PARIS (PTT), 8.0—** Song Records. 8.30—French Opera and Ballet from the Conservatoire. The National Orchestra and Soloists. Conductor: Inghelbrecht. Ballet, "La Korrigane" (Widor). Garden Scene, "Faust" (Gounod). Ballet, "Impressions de Music-Hall" (Pierné).  
**PARIS (Radio-Paris), 8.0—** "My Sweetheart"—Play (Howard). In the Interval: Press Review.  
**RADIO-NORMANDIE, 8.0—** Topical Talk. 8.15—Talk. 8.30—Opera Music. Extracts, "The Barber of Seville" (Rossini), "The Prophet" (Meyerbeer) and "William Tell" (Rossini). Verdi Potpourri. Aria, "Hérodiade" (Massenet).  
**ROME, 8.0—** Flute, Violin, Harpsichord and Soprano (contd. from 7.45).  
**RUYSSELEDE, 8.0—** Records.  
**SOTTENS, 8.0—** Viennese Music. Station Orchestra. (contd. from 7.45). 8.15—News. 8.25—Station Orchestra. Conductor: Echenard. Overture, "Prince Methusalem" (Strauss). Waltz (Strauss). Potpourri (Leopold). Selection, "Die schöne Galathée" (Suppé).  
**STOCKHOLM, 8.0—** Literary Review. 8.15—Cabaret. 8.45—News.  
**STRASBOURG, 8.0—** News in German. 8.30—See Paris (PTT).  
**STUTTGART, 8.0—** "Dances of the Nations" (contd. from 7.10). 8.10—"1934"—Variety.  
**TOULOUSE (Radio-Toulouse), 8.0—** Sound-Film Music. 8.15—Instrumental Ensemble. 8.30—Humorous Sketches.  
**TURIN, 8.0—** Records. 8.15—See Vienna.  
**VIENNA, 8.0—** Sequence (contd. from 7.15). 8.15—Vienna Philharmonic Orchestra. Conductor: Holzner. Soloist: Schulhof (Pianoforte). Overture, "Die schöne Galathée" (Suppé). Künstlerleben (Strauss). March Potpourri (Komzak). Two Pieces for Pianoforte and Orchestra: (a) Josef Strauss Waltz Paraphrase. (b) Perpetuum mobile on Josef Strauss Themes. Overture, "Das Veilchenmädel" (Hellasberger).  
**WARSAW, 8.0—** "The Gipsy Baron" (Strauss) (contd. from 7.0).

9 p.m.

**ALGIERS, 9.0—** Chamber Music 9.40—News. 9.45—Dance Music. 9.55—News.  
**ATHLONE, 9.0—** Comedy (contd. from 8.45). 9.15—Mary Dempster O'Neill (Songs). 9.30—Traditional Fiddle. 9.45—Pipes.  
**BELGRADE, 9.0—** News. 9.5—Station Orchestra.  
**BERLIN, 9.0—** News. 9.20—Divertimento in E flat for Violin, Viola, and Cello (Mozart), by the Eweler Trio.  
**BEROMÜNSTER, 9.0—** The Lives of the Composers (contd. from 8.20). 9.25-9.35—News of Switzerland.  
**BORDEAUX-LAFAYETTE, 9.0—** See 8.30 Paris (PTT).  
**BRATISLAVA, 9.15—** News in Hungarian. 9.30-9.45—Records.  
**BRESLAU, 9.0—** News. 9.20—Talk for Short-Wave Amateurs. 9.35—See 9.20 Hamburg.  
**BRUSSELS (No. 1), 9.0—** Talk. 9.15—English Music. Orchestra. Conductor: Walpot.  
**BRUSSELS (No. 2), 9.0—** Symphony Orchestra. Lambrechts (Songs). Overture, "The Caliph of Bagdad" (Boieldieu). Aria, "The Fair Maid of Perth" (Bizet). Selection, "Benvenuto Cellini" (Diaz). Aria, "Robert le Diable" (Meyerbeer). Three Dances, "Nell Gwyn" (German). Le cor (Flegier). Scènes Alsaciennes (Massenet).

**BUDAPEST, 9.0—** News. 9.20—Bianco Argentine Tango Band.  
**COLOGNE, 9.0—** News. 9.20—Spanish. 9.30—Talk: Spanish History.  
**DEUTSCHLANDSENDER, 9.0—** News. 9.30—Talk on Records: The Origin of the Discus and the Boomerang.  
**FRANKFURT, 9.0—** News. 9.30—Palatinat Folk Music and Dance Music.  
**HAMBURG, 9.0—** News. 9.20—Light Music.  
**HILVERSUM, 9.0—** "Don Quixote"—Play (contd. from 8.40). 9.15—Kovacs Lajos Orchestra and the A.V.R.O. Girls. 9.55—Light Music.  
**HUIZEN, 9.0—** Symphony in G (Mahler) (contd. from 8.55). 9.40—Records.  
**JUAN-LES-PINS (Radio Côte d'Azur), 9.0—** News. 9.15—Concert.  
**KALUNDBORG, 9.0—** News. 9.10—Czech Music: Radio Orchestra. Conductor: Gröndahl. Overture, "Sakuntala" (Goldmark). Dance (Kodály). From the Fields and Groves of Bohemia (Smetana). Slav Dance (Dvořák).  
**KÖNIGSBERG, 9.0—** News. 9.30—Concert Relay.  
**LEIPZIG, 9.0—** News. 9.20—Quartet in E flat (Reger), by the Mildner String Quartet.  
**LYONS (La Doua), 9.0—** Concert.  
**MOSCOW (No. 1), 9.5—** Talk in French: The Soviet Penal Code.  
**MÜNICH, 9.0—** News; Exchange. 9.20—To be announced.  
**OSLO, 9.0—** Topical Talk. 9.15—The Dresden String Quartet. Quartet in G (Mozart). Quartet in A minor (Brahms).  
**PARIS (Poste Parisien), 9.0—** "La princesse jaune"—Opera (Saint-Saëns) (contd. from 8.10).  
**PARIS (PTT), 9.0—** French Opera and Ballet Music (contd. from 8.30).  
**PARIS (Radio-Paris), 9.0—** Play (contd. from 8.0). In the Interval at 9.15: News; Sports.  
**PITTSBURGH, 9.0—** Betty and Bob. 9.15—Singing Stranger. 9.30—Exchange. 9.45—Palmer Clark Orchestra.  
**PRAGUE, 9.0-9.45—** News; Records; News in English.  
**RADIO-NORMANDIE, 9.0—** M. Frilley (Organ), Mme. Costy (Violin), from St. Peter's Church, Caen.  
**ROME, 9.0—** Light Music and Dance Music. In the Interval: Talk: Literature and the Arts.  
**RUYSSELEDE, 9.0—** News in Flemish.  
**SOTTENS, 9.0-9.15—** Viennese Music (contd. from 8.25).  
**STOCKHOLM, 9.0—** Sacred Music. Lottie Andreason (Violin). Svanholm (Songs), and Ahlén (Organ). Toccata, Adagio and Fugue in C (Bach). Recitative and Aria, "The Messiah" (Handel). Violin Sonata (Haas). Aria (André). Organ Solos (David). Partita sopra (Carlman).  
**STRASBOURG, 9.0—** See 8.30 Paris (PTT).  
**STUTTGART, 9.0—** News. 9.30—Dance Records.  
**TOULOUSE (Radio-Toulouse), 9.0—** "William Tell"—Opera (Rossini) (Concert Version). 9.30—Military Music.  
**TURIN, 9.0—** Play in One Act; Records.  
**VIENNA, 9.0—** Walter (Organ). Chaconne (Pachelbel). Popule meus, quid feci tibi? (Maleingreau). Toccata in F (Bach). 9.30—News; Announcements. 9.50—Totzauer Dance Band. Hauk (Songs).  
**WARSAW, 9.0—** "The Gipsy Baron" (Strauss) (contd. from 7.0). 9.30—Debussy Records. 9.45—Talk in a Foreign Language.

10 p.m.

**ALGIERS, 10.0-10.45—** Oriental Music  
**ATHLONE, 10.0—** Variety. 10.30—News. 10.40—Records.  
**BERLIN, 10.0—** Records.  
**BORDEAUX-LAFAYETTE, 10.0—** See 8.30 Paris—PTT.  
**BRESLAU, 10.0—** See Hamburg.  
**BRUSSELS (No. 1), 10.0—** News. 10.10—Request Records. 10.55—Christus Vincit (Liszt).  
**BRUSSELS (No. 2), 10.0—** News. 10.10—Dance Records.  
**BUDAPEST, 10.0—** Bianco Argentine Tango Band. 10.20—Bachmann Quintet.  
**DEUTSCHLANDSENDER, 10.0—** Records.  
**FRANKFURT, 10.0—** See Hamburg.  
**HAMBURG, 10.0—** Orchestra. Conductor: von Sosen. Gipsy March (Gyldmark). Overture, "Zampa" (Hérold). Rocco Gavotte (Pataky). Frühlingstag in Garmisch (Löhrl). Intermezzo (Baldamus). Mazurka, "Polenblut" (Nedbal). Extracts, "The Merry Widow" (Lehár). Piece (Kubat). A Fête in Aranjuez (Demersmann). Träumende Glocken (Krome). Hungarian Triumphal March (Fučík).

**HILVERSUM, 10.0—** Light Music. 10.10—Kovacs Lajos Orchestra, with Topy Glerum (Songs). 10.40—News. 10.50—Dance Records.  
**HUIZEN, 10.0—** Record. 10.5—News. 10.10—K.R.O. Symphony Orchestra. Conductor: Goudoever. Mlle. Heymans (Soprano). Overture, "Mignon" (Thomas). Suite, Jeux d'enfants (Bizet). Aria, "L'enfant prodigue" (Debussy). Suite, "Sylvia" (Delibes). 10.55—Record.  
**KALUNDBORG, 10.0—** Petersen's Dance Band.  
**KÖNIGSBERG, 10.0—** Concert Relay.  
**LEIPZIG, 10.0—** See Hamburg.  
**MADRID (EAQ), 10.15—** News. 10.30—Spanish Music. 10.45—Wireless Notes.  
**MOSCOW (No. 1), 10.5—** Talk in Dutch: The Peasants and Collective Farms.  
**MÜNICH, 10.0—** The South German Quintet. Pianoforte Quintet in F minor (Johann Schobert). Pianoforte Quintet in A (Dvořák).  
**PARIS (Poste Parisien), 10.20—** News; Exchange.  
**PARIS (PTT), 10.0—** French Opera and Ballet Music (contd. from 8.30); News.  
**PARIS (Radio-Paris), 10.0—** Concert by the Wiener Sängerknaben. Part I.—Sacred Music: O sacrum convivium (Croce). Motet for Holy Thursday (Palestrina). Ascendit Deus (Gallus). Pueri concinite (Gallus). Hodie Christus natus est (Nanini). Part II.—Secular: Three Folk Songs: (a) Vogelhochzeit, (b) Von meinen Bergen. (c) Im Gamsberg. 10.30—Dance Music.  
**PITTSBURGH, 10.0—** Stanleigh Molotte. 10.15—K.D.K.A Kiddies' Klub. 10.30—The Singing Lady. 10.45—Orphan Annie.  
**RADIO-NORMANDIE, 10.0—** Violin and Organ (contd. from 9.0).  
**ROME, 10.0—** News.  
**STRASBOURG, 10.0—** See 8.30 Paris (PTT). 10.30—Press Review.  
**STUTTGART, 10.0—** See Hamburg.  
**TOULOUSE (Radio-Toulouse), 10.0—** Concert.  
**TURIN, 10.0—** News. 10.10—News in Spanish.  
**VIENNA, 10.0—** Dance Music.  
**WARSAW, 10.5—** Light Music.

11 p.m.

**BARCELONA, 11.0—** Station Orchestra; Records.  
**FRANKFURT, 11.0—** See Stuttgart.  
**HAMBURG, 11.0-11.30—** Orchestra (contd. from 10.0).  
**HILVERSUM, 11.0-11.40—** Records.

**HUIZEN, 11.0-11.40—** Records.  
**KALUNDBORG, 11.0-11.30—** Petersen's Dance Band.  
**LEIPZIG, 11.0—** See 10.0 Hamburg.  
**MADRID (EAJ7), 11.0—** Play.  
**MADRID (EAQ), 11.0—** Orchestra. 11.45—Light Music.  
**PARIS (Radio-Paris), 11.0—** Dance Music.  
**PITTSBURGH, 11.0—** Dan and Sylvia. 11.15—Waldorf-Astoria Orchestra. 11.30—Horacio Zito's Orchestra. 11.45—Lowell Thomas.  
**RADIO-NORMANDIE, 11.0—** Light Music.  
**STUTTGART, 11.0—** Concert. In the Interval: (a) Quartet in B flat. (Haydn), (b) Quartet No. 2 in F (Schumann).  
**TOULOUSE (Radio-Toulouse), 11.0—** Variety Concert.  
**VIENNA, 11.0—** The Sieberth Quartet. March, Servus Wien (Eysler). Waltz (Fall). Wiener Lied (Stolz). Viennese Song Potpourri (Muuss). Grossmütterchen (Langer). Bilderbuch aus Biedermeiertagen (Arnold). Wenn die Abendglocken leise tönen (Lehár). Singen, lachen, tanzen (Ziehrer). Feuerfest (Josef Strauss). Wiener Lied (Kerpen). Vom Sekt sind die Geigen berauscht (Wolf). Waltz Idyll (Domany-Roll). March Song (Kronegger).

12 midnight

**BARCELONA, 12.0—** News.  
**FRANKFURT, 12.0—** See 11.0 Stuttgart.  
**MADRID (EAJ7), 12.0—** Play.  
**MADRID (EAQ), 12.0—** Variety.  
**PITTSBURGH, 12.0—** Amos n' Andy 12.30—Household Musical Memories.  
**RADIO-NORMANDIE, 12.0—** Dance Music.  
**SCHENECTADY, 12.25—** Exchange.  
**STUTTGART, 12.0—** Concert (contd. from 11.0).  
**TOULOUSE (Radio-Toulouse), 12.0—** News. 12.5—"Au Caveau de Minuit"—Radio Fantasy. 12.15-12.30—Opera Music.

1 a.m. (Wednesday)

**MADRID (EAJ7), 1.0—** Dance Music  
**PARIS (Radio-Colonial), 1.0—** (Wednesday)—Concert.  
**PITTSBURGH, 1.0-6.0—** Popular Programme.  
**RADIO-NORMANDIE, 1.0—** News. 1.10—Dance Music.  
**SCHENECTADY, 1.0-3.0—** Popular Programme.  
**ZEESEN, 1.30—** Schubert and Schumann Music by Walter Bernel (Pianoforte).



The story of Don Quixote and Sancho Panza is to be presented in dramatic form from Hilversum at 8.40 this evening; Massenet's opera, "Don Quixote," was given from Radio-Paris yesterday



NATIONAL

For Time Signals, see Monday

- 10.15 a.m. (Droitwich)—Service.
10.30 (Droitwich)—Weather Forecast.
10.45—"Household Talks heard Abroad." Cicely Hamilton.
11.0—Records.
11.30 (except Scottish)—For Schools: French Dialogue—2.
11.30 (Scottish)—Variety Records.
11.45—Cinema Organ (Quentin Maclean).

REGIONAL

For Time Signals, see Monday

- 10.15-10.45 a.m. (except Midland)—National.
10.45 (Scottish till 11.30)—The Scottish Studio Orchestra.
11.30 (Scottish)—French for Schools.
11.45—Records.
12.30 p.m.—B.B.C. Midland Orchestra.
1.30—Organ Recital.
2.0 (except Scottish)—The Trocadero Cinema Orchestra.
2.5-3.45 (Scottish)—For Schools: Reception Test. 2.10—History. 2.35—Science. 3.0—Concert for Secondary Schools.

EMPIRE SUMMARY

For wavelengths, see S.W. List

- Transmission 1 (GSD, GSB)
7.15 a.m.—Big Ben. Chamber Music. †
7.40—Talk by Sir James Jeans, F.R.S.\*
8.0—Variety.\* Wullie Lindsay (Comedian), Margaret Allan (Soprano), Alastair Blair Kerr (Violin), Janet Clark (Syncopated Pianist), Ella Allan (Recitations).
8.30—Robert Edwards (Pianoforte).
9.0—Empire News.
9.15—Close Down.
Transmission 2 (11.0—12.30 GSF GSG; 12.30—2.0 GSF, GSB)
11.0 a.m.—Big Ben. The Scottish Studio Orchestra.
11.30—Talk by Sir James Jeans, F.R.S.\*
11.50—Cinema Organ (Quentin Maclean).
12.30 p.m.—Charles Manning and his Orchestra.
1.15—Variety.\*
1.45—Empire News.
2.0—Close Down.
Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSE, GSB)
2.15 p.m.—Big Ben. The Trocadero Cinema Orchestra.
2.30—Speeches in connexion with the Youth Hostels Association.
2.45—The Scottish Studio Orchestra. Alexander Hanna (Baritone).
3.30—Talk: "Under Big Ben," Mr. Howard Marshall.
3.45—The Bournemouth Municipal Orchestra. Harold Fairhurst (Violin).
4.30—A Violin Recital by Leila Hermitage.
5.0—Empire News.
5.15—B.B.C. Dance Orchestra.
5.45—Close Down.
Transmission 4 (GSD, GSB)
6.0 p.m.—Big Ben. Empire News.
6.15—English Variety. †
6.30—"The Princess." Quartet for four voices and songs by Stanford.
7.0—The Wireless Military Band. Aubrey Millward (Baritone).
7.45—A String Orchestral Concert.
8.45—Talk.\* (See 3.30 p.m.)
9.0—B.B.C. Orchestra (Section D).
9.30—Olive Bloom (Pianoforte).
10.0—Empire News.
10.15—Dance Music. †
10.30—Dance Music.
10.45—Close Down.
Transmission 5 (GSC, GSA)
11.0 p.m.—Big Ben. A Welsh Programme. The Western Studio Orchestra. Haydn Adams (Tenor).
12 midnight—Talk.\* (See 3.30 p.m.)
12.15 a.m.—Variety.\*
12.45—Empire News.
1.0—Close Down.
\* Electrical Recording.
† Gramophone Records.

WEDNESDAY Oct. 17

PRINCIPAL EVENTS

CONCERTS

- 3.0 p.m. Frankfurt, Stuttgart: Bach, Gluck, Haydn.
3.0 " Hamburg, Deutschlandsender: Popular orchestral.
5.0 " Brussels No. 1: César Franck programme.
6.30 " Strasbourg: Gounod anniversary.
7.0 " Oslo: Norwegian music.
7.5 " Vienna: Symphony concert; Josef Hofmann (pianoforte).
8.0 " Brussels No. 2: Brahms programme; French music (9 p.m.).
8.0 " Kalundborg: Aalborg Philharmonic Orchestra.
8.0 " Prague: Fibich, Dvořák (fourth Symphony).
8.0 " Stuttgart: Symphony concert.
8.10 " Beromünster, Sottens: Swiss programme.
8.30 " Paris PTT: Gala charity programme.
9.10 " Huizen: Dittersdorf, Boccherini.
9.20 " Berlin: Orchestral serenade.
10.0 " Budapest: Goldmark, Tchaikovsky.

OPERAS, OPERETTAS

- 7.45 p.m. Rome, etc.: "Debora e Jaele" (Pizzetti).
8.0 " Brussels No. 1: "La belle Hélicne" (Offenbach).
8.30 " Turin, etc.: "Signorina Jazz" (Papanti).
8.40 " Radio-Paris: "Fragonard" (Pierné).

CHAMBER MUSIC

- 12.10 p.m. Huizen: Chamber orchestra.
6.30 " Brussels No. 2: Wind instruments.

RECITALS

- 7.10 p.m. Leipzig: Liszt (pianoforte).
8.0 " Warsaw, Königsberg, Turin: Chopin.
8.10 " Budapest: Japanese songs.
8.40 " Beromünster: Sacred organ music.

PLAY AND TALKS

- 7.50 p.m. Hilversum: "Peer Gynt" (Ibsen) with Grieg's music.
8.0 " Radio-Paris: Reading from Pierre Loti.
9.0 " Sottens: Talk on the League of Nations.

DANCE MUSIC

- 5.0 p.m. Brussels No. 2; 7.30, Deutschlandsender; 8.0, Leipzig, Breslau; 9.0, Stockholm; 9.20, Cologne; 9.30, Frankfurt; 9.45, Oslo; 10.0, Kalundborg; 10.5, Warsaw; 10.10, Brussels Nos. 1 and 2; 10.30, Paris PTT.

Hours of Transmission in Greenwich Mean Time.

6 a.m.

- BERLIN, 6.0—News. 6.10—See Königsberg.
BRESLAU, 6.0—News. 6.15—Military Band.
COLOGNE, 6.0—News. 6.15—Orchestra.
DEUTSCHLANDSENDER, 6.0—News. 6.10—See Königsberg.
FRANKFURT, 6.0—Military Band.
HAMBURG, 6.0—News. 6.10—See Königsberg.
KÖNIGSBERG, 6.0—News. 6.10—Police Band.
LEIPZIG, 6.0—News. 6.15—See Breslau.
MUNICH, 6.0—Italian. 6.20—See 6.0 Frankfurt.
PARIS (Radio-Paris), 6.45—Gym.
PRAGUE, 6.0-6.30—Music; News.
SOTTENS, 6.0-6.15—Gym.
STUTTART, 6.0—See Frankfurt.
WARSAW, 6.0—Gym. 6.7—Records; News.

7 a.m.

- BERLIN, 7.0—Gym. 7.35—Records; Announcements.
BRESLAU, 7.0—Hymn; Motto. 7.10—Military Band.
COLOGNE, 7.0—Orchestra. 7.15—Announcements. 7.20—Gym. 7.35-7.45—Talk.
FRANKFURT, 7.0-7.30 — Military Band.
HAMBURG, 7.0-7.40—Announcements; Records.
HILVERSUM, 7.40—Records.
HUIZEN, 7.40—Bible Reading; Prayer. 7.55—Records.
KALUNDBORG, 7.30—Cathedral Service.
KÖNIGSBERG, 7.0—Service. 7.30—Gym.
LEIPZIG, 7.0—Gym. 7.20—Records.

- MUNICH, 7.0—See Frankfurt.
PARIS (Poste Parisien), 7.10 — Fanfare; Records; News.
PARIS (Radio-Paris), 7.0—Records; Press Review. 7.45—Gym.
STUTTART, 7.0—See Frankfurt. 7.30—Gym.

8 a.m.

- BERLIN, 8.50—News.
DEUTSCHLANDSENDER, 8.40 — Gym.
HILVERSUM, 8.0—Records.
HUIZEN, 8.0—Records.
KÖNIGSBERG, 8.5—For Schools.
LEIPZIG, 8.45—Announcements.
PARIS (Poste Parisien), 8.0—Records. 8.45—Cookery.
PARIS (Radio-Paris), 8.0—Records.

9 a.m.

- BERLIN, 9.0—Exchange. 9.10—See Breslau.
BRESLAU, 9.10 — "Wallenstein" — Dramatic Poem (Schiller).
COLOGNE, 9.0—News. 9.10—See Breslau.
DEUTSCHLANDSENDER, 9.0— News. 9.10—See Breslau.
FRANKFURT, 9.0—News. 9.10— See Breslau.
HAMBURG, 9.10—See Breslau.
HILVERSUM, 9.0 — Records. 9.10 — Dietetics. 9.40—Religious Programme. 9.55—For Night Workers; Talk; Orchestra; Recitations; Records.
HUIZEN, 9.0-9.10—Records.
KÖNIGSBERG, 9.10—See Breslau.
LEIPZIG, 9.10—See Breslau.
MUNICH, 9.10—See Breslau.
PRAGUE, 9.5—News in German. 9.10—Records. 9.50—Talk.
STUTTART, 9.0—News. 9.10— See Breslau.

10 a.m.

- BERLIN, 10.0-10.10—See 9.10 Breslau. 10.25—Exchange.
BRESLAU, 10.0 — "Wallenstein" (Schiller) (contd. from 9.10).
10.10—Records. 10.30—News.
COLOGNE, 10.0—See 9.10 Breslau. 10.15—Announcements; Records. 10.45—Talk.
DEUTSCHLANDSENDER, 10.0- 10.10—See 9.10 Breslau.
FRANKFURT, 10.0—See 9.10 Breslau. 10.10—Concert. 10.30—News.
HAMBURG, 10.0—See 9.10 Breslau. 10.10—News. 10.30—Records.
HILVERSUM, 10.0—For Night Workers (contd. from 9.55).
HUIZEN, 10.0—Religious Programme. 10.40—Gebhart (Cello) and Mlle. Viool (Pianoforte). Sonata in F (de Fesch). Calm Night (Bosmans). Minore (Gebhart). Records. Largo (Boccherini). Two Minuets (Bach). Sarabande and Gavotte (Popper).
KALUNDBORG, 10.10—Fish Prices. 10.15—The Jutland Festival—Report for Schools.
KÖNIGSBERG, 10.0 — See 9.10 Breslau. 10.10 — News. 10.30 — Classical Records.
LEIPZIG, 10.0—See 9.10 Breslau. 10.10—Announcements; Records. 10.30—News.
MUNICH, 10.0-10.10—See 9.10 Breslau. 10.30—Announcements; Records.
OSLO, 10.50—Exchange.
PRAGUE, 10.0—Records. 10.5— Orchestra. 10.55—For Farmers.
STUTTART, 10.0—See 9.10 Breslau. 10.10—Announcements; Records; News.
TURIN, 10.30—Trio.
VATICAN CITY, 10.0-10.15—Religious Information in Spanish.

11 a.m.

- BERLIN, 11.0—Light Orchestra Music.
BEROMÜNSTER, 11.0 — Records. 11.30—News. 11.40—Records.

- BRESLAU, 11.0—Station Orchestra. Conductor: Rischka.
BUDAPEST, 11.5—Sovánka Cigány Band. In the Interval, News.
COLOGNE, 11.0—Records. 11.45 —News.
DEUTSCHLANDSENDER, 11.0— See Munich.
FRANKFURT, 11.0—See Stuttgart.
HAMBURG, 11.0—Announcements. 11.15—See 11.0 Berlin.
HILVERSUM, 11.0—For Night Workers (contd. from 9.55). 11.40 —Records. 11.55—Orchestra. Conductor: Wins.
HUIZEN, 11.0—Cello and Pianoforte (contd. from 11.0). 11.40—Police Notes; Records.
KALUNDBORG, 11.0—Chimes; Andersen String Ensemble.
KÖNIGSBERG, 11.0—See Berlin.
LEIPZIG, 11.0—See Berlin.
MONTE CENERI, 11.0—Announcements. 11.15—Orchestra.
MUNICH, 11.0—Station Orchestra. Conductor: List. Academic Festival Overture (Brahms). Intermezzo and Lullaby (Juon). Egyptian Dance "Djamileh" (Bizet). Japanese Carnival (Basque). Overture, "Semiramis" (Rossini). Serenata notturna (Mozart). Polish National Dance (Scharwenka). Gallop (Bizet).
PRAGUE, 11.0—For Farmers: Records; News. 11.35—Orchestra from Moravská-Ostrava.
SOTTENS, 11.30—News. 11.40—Records.
STUTTART, 11.0—Karlsruhe Philharmonic Orchestra. March (Blon). Overture, Mignon (Thomas). Es flüster die Liebe (Lindemann). Dolorosa (Lindemann). Selection, "Aida" (Verdi). In lauschiger Nacht (Ziehrer).
TURIN, 11.0—Trio. 11.30—Records. 11.45—News.
WARSAW, 11.0—Fanfare; News. 11.10—Dance Music.

12 noon

- BERLIN, 12.0—Midday Echoes. 12.15 —Records of Folk Music.
BEROMÜNSTER, 12.0 — Records. 12.25-12.40—Weather; Exchange.
BRESLAU, 12.0—Station Orchestra. Conductor: Rischka.
BRUSSELS (No. 2), 12.0—Orchestra. Conductor: Gason. Overture, "Si j'étais roi" (Adam). Valse des brunes (Gannes). The Clock and the Dresden Figures (Ketelbey). Selection, "Miss Decima" (Audran). Canzonetta (d'Ambrosio). Chevalier Song Potpourri (Salabert). Waltz Potpourri (Robrecht). March (Sousa).
BUDAPEST, 12.0—Sovánka Cigány Band. 12.30—Concert.
COLOGNE, 12.0—Station Chamber Orchestra. Conductor: Hartmann. 12.45—News.
DEUTSCHLANDSENDER, 12.0— Records. 12.45—News.
FRANKFURT, 12.0—News. 12.15 —See Stuttgart.
HILVERSUM, 12.0—Orchestra. 12.40 —V.A.R.A. Ensemble. Sketches (Petre). Réve (Debussy). Havanaiso (Paladilhe). Li-o-Ting (Staub). Marechiaro (Tosti). Goodbye (Tosti). Rocco Serenade (Meyer-Helmund). In the Teahouse of a Hundred Steps (Yoshitomo). In the Sunny South (Bodewalt-Lampe). Selection, "The Dollar Princess" (Fall).
HAMBURG, 12.0—Exchange. 12.20 —Light Music.
HUIZEN, 12.0—Records. 12.10 —Chamber Orchestra. Conductor: Pas. Brandenburg Concerto No. 3 (Bach). Concerto for Two Flutes (Loeillet). Sinfonia tragica (Locatelli). Variations on Mein junges Leben hat ein End (Sweetinck). Adagio (Donk). Soprano Song (Andriessen). Divertimento (Gordon).



## WEDNESDAY Oct. 17

## 12 noon (contd.)

**KALUNDBORG**, 12.0—Andersen's String Ensemble.  
**KÖNIGSBERG**, 12.5—The Opera House Orchestra. Conductor: Brückner. Overture, "Alessandro Stradella" (Flotow). Suite (Rameau-Zilcher). Selection, "Dalibor" (Smetana). Roses from the South (Strauss). Selection, "The Arabian Nights" (Strauss).  
**LEIPZIG**, 12.0—News. 12.10—Records.  
**MONTE CENERI**, 12.5—Records.  
**MUNICH**, 12.0—Orchestra (contd. from 11.0). 12.15—News. 12.25—"Flowers"—Records.  
**OSLO**, 12.0—Records.  
**PARIS (Poste Parisien)**, 12.0—Exchange. 12.5—Records: "La Vie Parisienne" (Offenbach). 12.25—News. 12.35—Humorous Records. 12.45—Station Jazz Band. Conductor: Romans, with Caro King and the Vocal Trio.  
**PARIS (PTT)**, 12.0—Tourist Talk. 12.15—National Orchestra. Conductor: Ernest Georis. Mlle. Carrus (Songs). Overture, "Le petit Duc" (Lecocq). Waltzes (Dvořák). Feuilles d'Album (Lévađ). Ballet, "The Prophet" (Meyerbeer). Two Pieces (Filipucci). Suite algérienne (Saint-Saëns). Rondo (Desportes). Suite espagnole (Vieux). Overture, "Les Dragons de Villars" (Maillart).  
**PARIS (Radio-Paris)**, 12.0—Talk. 12.15—Goldy's Orchestra. Jean Sorbier (Song Refrains).  
**PRAGUE**, 12.25—Legal Talk. 12.35—Labour Exchange. 12.45—Labour Exchange in German. 12.55—Exchange.  
**SOTTENS**, 12.0—Records; Exchange.  
**STOCKHOLM**, 12.0—A Visit to a Sugar Factory. 12.30—Two Pianofortes. 12.45—Natural History Talk.  
**STUTTIGART**, 12.0—News. 12.15—Request Records.  
**TURIN**, 12.0—Announcements. 12.5—Orchestra. In the Interval. Records; Exchange.  
**WARSAW**, 12.0—News. 12.5-12.30—Puccini Records.

## 1 p.m.

**ATHLONE**, 1.30—Time; Exchange; Weather; Records.  
**BERLIN**, 1.0—News. 1.15—Request Records.  
**BRESLAU**, 1.5—Exchange; Announcements; Records.  
**BRUSSELS (No. 1)**, 1.0—News. 1.10—Orchestra.  
**BRUSSELS (No. 2)**, 1.0—News; Records.  
**BUDAPEST**, 1.0—Concert.  
**COLOGNE**, 1.0-1.45—Chamber Orchestra (contd. from 12.0).  
**FRANKFURT**, 1.0—See Stuttgart. 1.15—News. 1.30—Industrial Review. 1.45—Exchange.  
**HAMBURG**, 1.0—Light Music. 1.15—News. 1.30—Loewe Ballad Records.  
**HILVERSUM**, 1.0—V.A.R.A. Ensemble (contd. from 12.40). 1.55—Dressmaking.  
**HUIZEN**, 1.0—Chamber Orchestra (contd. from 12.10). 1.40—Records.  
**KALUNDBORG**, 1.30—Discussion for Women.  
**KÖNIGSBERG**, 1.0—News. 1.5—Opera House Orchestra (contd. from 12.5). 1.30—Announcements; Records.  
**LEIPZIG**, 1.0—News. 1.15-1.25—Art Review. 1.50—Talk.  
**MUNICH**, 1.0—News; Exchange. 1.20—Vocal and Instrumental. 1.50—Talk: Nürnberg To-day.  
**PARIS (Poste Parisien)**, 1.0—Jazz (contd. from 12.45). In the intervals at 1.5 and 1.30: Exchange.  
**PARIS (PTT)**, 1.0—News.  
**PARIS (Radio-Paris)**, 1.0—Goldy's Orchestra. Jean Sorbier (Song Refrains). In the interval at 1.20: Exchange.  
**PRAGUE**, 1.0-1.5—Exchange; Weather in German.  
**STOCKHOLM**, 1.0—Light Music.  
**STUTTIGART**, 1.0-1.15—Request Records.  
**TURIN**, 1.0—Orchestra. In the interval: Exchange.

## 2 p.m.

**ATHLONE**, 2.0-2.30—Records.  
**BERLIN**, 2.0-2.20—Exchange.  
**BEROMÜNSTER**, 2.30—For Women.  
**BRESLAU**, 2.10—Book Review. 2.30—A Visit to a Toy Exhibition.  
**COLOGNE**, 2.0—For Young People. 2.30—Exchange. 2.50—Topical Talk.

**DEUTSCHLANDSENDER**, 2.0—Exchange. 2.15—Children's Songs. 2.40—Herbert Böhme reads.  
**FRANKFURT**, 2.15—Zither Music from Trier. Report from the Hasel Stäbche. Caves, from Freiburg. Popular Music from Kaiserslautern.  
**HAMBURG**, 2.0—Exchange. 2.40—Shipping; Aviation.  
**HILVERSUM**, 2.0—Dressmaking. 2.40—For Children.  
**HUIZEN**, 2.0—Records. 2.40—Reading.  
**KALUNDBORG**, 2.0—Petersen's Orchestra.  
**KÖNIGSBERG**, 2.0—Exchange. 2.30—Programme for Girls.  
**LEIPZIG**, 2.0—Talk. 2.10—Elisabeth Meinel (Soprano). Margarete Vörckel (Violin) and Friedbert Sammler (Pianoforte). 2.40—Exchange.  
**MUNICH**, 2.0—Talk (contd. from 1.50). 2.10—Pianoforte Lesson. 2.30-2.50—Songs and Music by Girls.  
**PARIS (Poste Parisien)**, 2.0—Exchange. **PARIS (PTT)**, 2.0—Records. 2.30—Concert. In the interval, "Le Plat du Chef"—One-Act Comedy.  
**PARIS (Radio - Colonial)**, 2.45—Station Octet. Selection, "Phèdre" (Massenet). Minuet (Bolzoni). Petite Suite (d'Ollone). Czardas (Monti). Sigurd (Reyer). Waltz (Messenger). Selection, "Lahaut" (Yvain).  
**PRAGUE**, 2.50—Exchange; Dance Music.  
**STUTTIGART**, 2.30—Talk: Flowers.  
**WARSAW**, 2.30—News; Theatre Notes.

## 3 p.m.

**BERLIN**, 3.0—See Frankfurt.  
**BEROMÜNSTER**, 3.0—Slav and Hungarian Music. 3.45—The early Works of Famous Composers.  
**BRESLAU**, 3.0—Military Band.  
**BUDAPEST**, 3.0—For Students.  
**COLOGNE**, 3.0—See Hamburg.  
**DEUTSCHLANDSENDER**, 3.0—See Hamburg.  
**FRANKFURT**, 3.0—Station Orchestra. Conductor: Belker. Kurt Friedrich (Cello). Part I. Symphony in B flat (J. C. Bach). Cello Concerto (P. E. Bach). Ballet Suite No. 2 (Gluck). Symphony No. 30 in C (Haydn). Part II, Old Dance Music.  
**HAMBURG**, 3.0—Popular Orchestral Music. Conductor: Eibenschütz.  
**HILVERSUM**, 3.0—For Children.  
**HUIZEN**, 3.0—Reading. 3.10-3.25—Records. 3.40—Parker (Organ).  
**KALUNDBORG**, 3.0—Petersen's Orchestra.  
**KÖNIGSBERG**, 3.0—Danzig State Theatre. Orchestra. Conductor: Kallipke. March (Blon). Overture, "The Black Domino" (Auber). Fantasia on Themes of Friedemann Bach (Graener). Waltz, in lauschiger Nacht (Ziehrer). March (Souza). Selection, "Prince Methusalem" (Strauss). Norwegian Rhapsody (Svendsen). Schumann Pot-pourri (arr. Schreiner). March, "Boccaccio" (Suppé). In the interval: Topical Talk.  
**LEIPZIG**, 3.0—Leipzig Symphony Orchestra. Conductor: Blumer. Sammler and Burgert (Pianoforte). Minuet and Finale presto from The Schoolmaster Symphony (Haydn). Extracts from Children's Corner (Debussy). Selection, "Hansel and Gretel" (Humperdinck). Pianoforte Duets, "The Swineherd" (Reinecke). Overture, "The Brave Little Tailor" (Hanel).  
**MONTE CENERI**, 3.0—See Beromünster.  
**MUNICH**, 3.0—Variety. The Leo Schneider Orchestra and Soloists.  
**PARIS (Poste Parisien)**, 3.15—Exchange.  
**PARIS (PTT)**, 3.0—Concert (contd. from 2.30).  
**PARIS (Radio - Colonial)**, 3.0—Octet (contd. from 2.45).  
**PARIS (Radio - Paris)**, 3.45—Exchange.  
**PRAGUE**, 3.0—Dance Music. 3.45—Play for Children (Davenport).  
**SOTTENS**, 3.0—See Beromünster.  
**STUTTIGART**, 3.0—See Frankfurt.  
**TURIN**, 3.35—News. 3.45—For Children.  
**WARSAW**, 3.0—Music Talk. 3.45—For Children.

## 4 p.m.

**BERLIN**, 4.0—See 3.0 Frankfurt. 4.40—Sports Talk. 4.50—Talk: Sports Personalities.  
**BEROMÜNSTER**, 4.0—Early Works of Famous Composers (contd. from 3.45).

**BRESLAU**, 4.0—Military Band. 4.35—Hans Schwarz reads.  
**BUDAPEST**, 4.0—Talk. 4.30—Records.  
**COLOGNE**, 4.0—Book Review. 4.15—Sonata for Violin and Pianoforte (Brahms). 4.40—Geological Talk.  
**DEUTSCHLANDSENDER**, 4.0—See 3.0 Hamburg. 4.30—Schubert and Mozart. Recital by Gerda Reichert (Violin) and Ludwig Kuckuck (Songs).  
**FRANKFURT**, 4.0—Orchestra (contd. from 3.0).  
**HAMBURG**, 4.0—Orchestra (contd. from 3.0). 4.30—Talk: Food Poisoning. 4.50—Dialect Poems and Songs (De Vries).  
**HUIZEN**, 4.0—Parker (Organ). 4.40—For Children.  
**KALUNDBORG**, 4.0—Records. 4.30—Exchange. 4.45—Talk: The Moscow Theatre Festival.  
**KÖNIGSBERG**, 4.0—Orchestra (contd. from 3.0). 4.50—Talk.  
**LEIPZIG**, 4.0—Book Review. 4.20—Records of Beniamino Gigli (Tenor). 'A Canzone e Napule (de Curtis). Lucia, Luci (de Curtis). Maria Mari (de Capua). Funiculi-Funicula (Denza). Notte Lunare (Doda). Se (Danza). Mandulinata a Napule (Murolo-Tagliareri). Triste Maggio (Crescenzo). Santa Lucia. 4.50—Exchange.  
**MONTE CENERI**, 4.0—See 3.45 Beromünster.  
**MUNICH**, 4.0—Variety (contd. from 3.0). 4.30—Music for Children. 4.50—Richard Strauss Lieder, by Anni Wagner (Soprano) and Rudolf Schenkli (Baritone).  
**OSLO**, 4.0—Concert.  
**PARIS (Poste Parisien)**, 4.50—Exchange.  
**PARIS (PTT)**, 4.0—Concert (contd. from 2.30).  
**PRAGUE**, 4.0—Play for Children (contd. from 3.45). 4.30—Records. 4.40—Book Review. 4.50—Records. 4.55—Industrial Review.  
**SOTTENS**, 4.0—See 3.45 Beromünster.  
**STOCKHOLM**, 4.5—Accordion. 4.30—Talk. 4.45—Records.  
**STUTTIGART**, 4.0—See 3.0 Frankfurt. 4.30—Concert by Students of the School of Music. Polonaise in A for Violin and Pianoforte (Wieniawski). Trios (Mozart): (a) Ecco quel fiero istante, (b) Mi laghero tacendo, (c) Più non si trovano.  
**TURIN**, 4.0—For Children. 4.10—Chamber Music.  
**VIENNA**, 4.25—Louis Dité Songs. Paul Lorenzi (Baritone). The Composer at the Pianoforte.  
**WARSAW**, 4.0—Peter (Songs). 4.25—For Women. 4.35—Records. 4.50—Sports.

## 5 p.m.

**BERLIN**, 5.0—Announcements. 5.10—For Mothers. 5.30—Vocal and Instrumental.  
**BEROMÜNSTER**, 5.0—For Children. 5.30—Talk for Women.  
**BRATISLAVA**, 5.0—Hungarian Transmission: Talk; Violin and Pianoforte Sonata in C sharp minor (Dobnanyi); Reading. 5.45—For Workers.  
**BRESLAU**, 5.5—Brahms and Frickhoffer Songs by Johanna Elisabeth Hoppe (Contralto). Part I. Brahms. Dämmerung senkte sich von oben. O kübler Wald. Wenn mein Herz beginnt zu klingen. Part II. Frickhoffer. Fromm. Liebesode. Sturmlied. Eine Melodie singt mein Herz. Wie wenn Gott winkt. Es bebten Berg' und Täler. Dir fern und ferner. 5.30—To be announced. 5.50—Announcements.  
**BRNO**, 5.0—Songs. 5.25—Telegraphy. 5.40—News. 5.45—For Worker.  
**BRUSSELS (No. 1)**; 5.0—César Franck Concert. Symphony Orchestra. Suzanne Van de Walle (Pianoforte). Symphony in D minor. Symphonic Variations.  
**BRUSSELS (No. 2)**, 5.0—Lionel's Club Dance Band.  
**BUDAPEST**, 5.0—Records. 5.15—Italian. 5.45—Saxophone.  
**COLOGNE**, 5.0—Talk: The Raw Materials Problem. 5.20—German for Germans. 5.40—News. 5.50—Exchange.  
**DEUTSCHLANDSENDER**, 5.0—Book Review: The Correspondence between Cosima Wagner and Houston Stewart Chamberlain. 5.20—Records of Finnish Music. 5.40—A Poem. 5.45—Variety.  
**FRANKFURT**, 5.0—Talk: The Yucca. 5.15—Topical Talk. 5.45—Orchestra. Conductor: Bachmann. Overture, "Le naçon" (Auber). Paraphrase on the Song, "Aus der Jugendzeit" (Friedemann). Waltz (Fetras). Overture,

"Marinarella" (Pořik). Selection, "Der Obersteiger" (Zeller). Dance Fantasia, Spiel der Wellen (Robert).  
**HAMBURG**, 5.0—Dialect Poems and Songs (De Vries). 5.30—Records. 5.45—Exchange.  
**HILVERSUM**, 5.10—Orchestra. Conductor: Van der Horst. de Booy (Songs).  
**HUIZEN**, 5.0—For Children. 5.40—For Farmers.  
**KALUNDBORG**, 5.0—Talk (contd. from 4.45). 5.15—French. 5.45—Announcements.  
**KÖNIGSBERG**, 5.0—Talk. 5.15—Prices. 5.25—For Young People.  
**LAHTI**, 5.15—Levin (Violin). 5.40—Talk.  
**LEIPZIG**, 5.0—Natural History Talk. 5.20—Variety. 5.35—"Fahrt nach Glückswinkel"—Play (Keimberg-Neubert).  
**LYONS (La Doua)**, 5.0—Concert.  
**MOSCOW (No. 1)**, 5.0—Opera Relay.  
**MUNICH**, 5.0—Richard Strauss Lieder (contd. from 4.50). 5.10—Play for Young People (Schwerla).  
**OSLO**, 5.0—For Children. 5.30—French.  
**PARIS (PTT)**, 5.0—Concert (contd. from 2.30).  
**PARIS (Radio-Colonial)**, 5.15—Dramatic Programme.  
**PRAGUE**, 5.5—Records. 5.10—For Workers. 5.20—Talk and News in German.  
**RADIO - NORMANDIE**, 5.0—Light Music. 5.30—Records.  
**SOTTENS**, 5.0—For Children. 5.30—Esperanto. 5.40—Opera Records. 5.50—Chess.  
**STOCKHOLM**, 5.0—Records. 5.45—German.  
**STRASBOURG**, 5.0—Orchestra.  
**STUTTIGART**, 5.0—Morse. 5.15—An Interview. 5.30—Variety.  
**TURIN**, 5.0-5.10—Corn Prices.  
**VIENNA**, 5.0—Medical Talk. 5.25—Science Talk. 5.35—For Workers.  
**WARSAW**, 5.0—Farmers' Letter-Box. 5.10—Art Notes. 5.15—Lidia Kmita (Violin). 5.45—Economics Talk.

## 6 p.m.

**ATHLONE**, 6.0—For Children. 6.45—News.  
**BELGRADE**, 6.0—Records. 6.10—Announcements. 6.20—Chopin Music.  
**BERLIN**, 6.0—Vocal and Instrumental. 6.40—Evening Echoes.  
**BEROMÜNSTER**, 6.0—Weather; Market Prices. 6.20—Talk: Air Defence. 6.50—"The Precipice"—Play (Hermann Kesser).  
**BRATISLAVA**, 6.0—For Workers. 6.10—Records. 6.15—Talk. 6.30—Orchestra. Conductor: Haier.  
**BRESLAU**, 6.0—"Tally Ho!"—Hunting Sequence with Records.  
**BRNO**, 6.10—Saxophone. 6.30—Talk. 6.40—Moravian Literary and Musical Programme.  
**BRUSSELS (No. 1)**, 6.0—Talk: Social Hygiene. 6.15—Chopin Records. 6.30—Lecture Recital: The Montoise Folk Song.  
**BRUSSELS (No. 2)**, 6.0—Records. 6.30—Wind Instrument Music.  
**BUDAPEST**, 6.0—Saxophone. 6.15—Travel Stories. 6.45—Light Music. Bertha Orchestra.  
**COLOGNE**, 6.0—"Political Satires and Jokes"—Variety Sequence (Fritzsche). 6.45—Talk: The Reopening of the Old Bochalt Guildhall.  
**DEUTSCHLANDSENDER**, 6.0—Variety. 6.30—Italian.  
**FRANKFURT**, 6.0—Exchange; Announcements. 6.5—Orchestra (contd. from 5.45). 6.45—Topical Talk.  
**HAMBURG**, 6.0—Swedish Folk Songs and Music (on Records). 6.40—Scandinavian Records.  
**HILVERSUM**, 6.0—Orchestra. 6.10—Talk. 6.40—Sports Notes.  
**HUIZEN**, 6.0—For Farmers (contd. from 5.40). 6.10—To be announced. 6.40—Announcements. 6.55—Records.  
**KALUNDBORG**, 6.0—News. 6.30—For Farmers.  
**KÖNIGSBERG**, 6.0—Talk: Kolbenheyer's New Play, "Gregor und Heinrich." 6.20—Organ.  
**LAHTI**, 6.45—Dance Records.  
**LEIPZIG**, 6.0—Play (contd. from 5.35). 6.35—Talk: Arterial Roads in the Past. 6.55—Announcements.  
**MORAVSKÁ - OSTRAVA**, 6.10—Czech Songs. Marie Vojtkova (Soprano). 6.35—Records.  
**MOSCOW (No. 1)**, 6.0—Opera (contd. from 5.0).  
**MUNICH**, 6.0—"Rendezvous of Old and New"—Concert on Old and New Instruments by the Small

Station Orchestra. Conductor: Kloss.  
**OSLO**, 6.0—Book Review. 6.15—News. 6.40—Theatre Review.  
**PARIS (Poste Parisien)**, 6.25—Jewish Programme. 6.45—Exchange. 6.49—Wagner Records.  
**PARIS (PTT)**, 6.0—For Children. 6.30—News.  
**PARIS (Radio-Colonial)**, 6.0—Dramatic Programme (contd. from 5.15).  
**PARIS (Radio-Paris)**, 6.20—Announcements; Exchange. 6.45—Medical Talk.  
**PRAGUE**, 6.0—News. 6.10—Records. 6.15—Talk: Printing Errors. 6.30—Records. 6.40—See Brno.  
**RADIO - NORMANDIE**, 6.0—For Children. 6.30—Theatre Review. 6.50—News.  
**ROME**, 6.0—Announcements. 6.15—News in Foreign Languages.  
**SOTTENS**, 6.0—Chess. 6.10—Science Talk. 6.40—News. 6.59—Weather.  
**STOCKHOLM**, 6.0—Records. 6.15—News. 6.30—Talk: Astronomy.  
**STRASBOURG**, 6.0—Talk: Madagascar. 6.15—Talk: The Rhone Valley. 6.30—Gounod Anniversary Concert. Conductor: De Villers. Dramatic Overture. Spanish Dance and Italian Dance. "Le Tribut de Zamora." Two Sacred Songs: (a) Ave Maria, (b) D'un Coeur qui t'aime. Ballet and Air, "The Queen of Sheba." Symphonic Fragments, "Phlémon et Baucis."  
**STUTTIGART**, 6.0—Variety. 6.30—Boys' Choir.  
**TOULOUSE (Radio-Toulouse)**, 6.15—Concert.  
**TURIN**, 6.15—News in Foreign Languages. 6.0—Announcements.  
**VIENNA**, 6.0—News. 6.20—Light Music. Conductor: Rakosnik.  
**WARSAW**, 6.0—Songs. 6.20—Topical Talk. 6.30—Jazz Records. 6.45—Announcements.

## 7 p.m.

**ATHLONE**, 7.0—Irish. 7.15—German. 7.30—Gebler Instrumental Quartet.  
**BELGRADE**, 7.0—To be announced. 7.30—Concert from Ljubljana.  
**BERLIN**, 7.0—News. 7.10—Station Choir. 7.35—See Breslau.  
**BEROMÜNSTER**, 7.0—"The Precipice"—Play (contd. from 6.50).  
**BORDEAUX-LAFAYETTE**, 7.30—News. 7.40—Aviation Notes.  
**BRATISLAVA**, 7.0—Act III. "The Romanticists"—Play (Gregor-Tajovsky).  
**BRESLAU**, 7.0—News. 7.10—Kinderzonen (Schumann), on Records. 7.35—"The Seven Years War"—Sequence.  
**BRNO**, 7.0—Moravian Literary and Musical Programme.  
**BRUSSELS (No. 1)**, 7.0—Chopin Records. 7.30—Talk: Hygiene.  
**BRUSSELS (No. 2)**, 7.0—Wind Instrument Music. 7.15—Protestant Address. 7.30—News. 7.55—Gardening.  
**BUDAPEST**, 7.0—Light Music (contd. from 6.45). 7.50—Review of Foreign Politics.  
**COLOGNE**, 7.0—Announcements. 7.10—See Stuttgart. 7.35—See Breslau.  
**DEUTSCHLANDSENDER**, 7.0—Motto; News. 7.10—See Stuttgart. 7.30—Dance Music.  
**FRANKFURT**, 7.0—News. 7.10—See Stuttgart. 7.35—See Breslau.  
**HAMBURG**, 7.0—Announcements. 7.10—Dialect Readings (Walter). 7.35—See Breslau.  
**HILVERSUM**, 7.0—Mlle. Sluys (Soprano). 7.20—Talk for Farmers. 7.40—S O S Messages. 7.43—News. 7.50—"Peer Gynt"—Play (Ibsen). Music by Grieg.  
**HUIZEN**, 7.0—Records. 7.10—Technical Talk. 7.40—N.C.R.V. Orchestra. Conductor: Hurk. A. v. Elst (Flute). Fantasia on Sacred Songs (Godron). Five Songs: (a) Herz und Herz vereint zusammen, (b) Jesu, der Du bist alleine, (c) Reicht euch die Hand, geliebte Brüder, (d) Stärk uns, Mittler, Dein sind wir, (e) Wer sind meine Brüder. Onzen Onroep met den Bijbel. Door het luchtroep heen Nocturne (Chopin). Two Songs, without Words (Mendelssohn). Weber Pot-pourri (Urbach).  
**KALUNDBORG**, 7.0—"Versailles Music of Olden Times." Conductor: Reesen. Overture and Dance, "Armide" (Lully). Dance Suite, "Dardanus" (Rameau). 7.30—Talk: Aviation.  
**KÖNIGSBERG**, 7.0—News. 7.10—Songs to the Lute. 7.35—See Breslau.  
**LAHTI**, 7.0—Dance Records. 7.45—News.



7 p.m. (contd.)

LEIPZIG, 7.0—News. 7.10—Liszt Recital by Siegfried Grundeis (Pianoforte). 7.35—See Breslau. MONTE CENERI, 7.0—For Farmers. 7.15—Hans Haug Concert. Conductor: The Composer. MOSCOW (No. 1), 7.0—Opera (contd. from 5.0). MUNICH, 7.0—News. 7.10—"Rendezvous of Old and New"—Concert (contd. from 6.0). 7.35—See Breslau. OSLO, 7.0—Norwegian Music. Station Orchestra. Conductor: Kramm. Norwegian Suite (Ulfrstad). Exotic Suite (Hurum). Minuet (Kristoferson). Piece (Reidarson). 7.30—Talk: Gold and Finance. PARIS (Poste Parisien), 7.0—Wagner Records. 7.10—News. 7.30—Topical Talk. 7.45—Records. PARIS (PTT), 7.45—Tourist Talk. PARIS (Radio-Paris), 7.0—Talk:

BRUSSELS (No. 2), 8.0—Brahms Concert. Orchestra. Dubois (Violin). Academic Festival Overture. Violin Concerto in D. 8.45—Recitations. BUDAPEST, 8.0—Review of Foreign Politics. 8.10—Japanese Songs. Mitschiko Meim-Tanaka and Kinoshita. COLOGNE, 8.0—"Through the Haze"—Humorous Programme for Smokers (arr. Rockenbach), with Music. Conductor: Kauffmann. DEUTSCHLANDSENDER, 8.0—Dance Music. FRANKFURT, 8.0—Variety. Station Orchestra and Weiss Ferdi. HAMBURG, 8.0—See Cologne. HILVERSUM, 8.0—"Peer Gynt" (contd. from 7.50). HUIZEN, 8.5—Talk. 8.15—Orchestra (contd. from 7.40). 8.40—Talk. JUAN-LES-PINS (Radio Côte d'Azur), 8.0—News. 8.10—For Cyclists. 8.20—Press Review. 8.30—Orchestra.

(Haydn). Variations on a Theme of Mozart (Adam). Serenade (Trunk). Overture, "Donna Diana" (Reznick). TOULOUSE (Radio-Toulouse), 8.0—Talk. 8.15—Cello. 8.30—Humorous Sketches. TURIN, 8.0—See Warsaw. 8.45—"La Signorina Jazz"—Operetta (Papanti). VIENNA, 8.0—Vienna Symphony Orchestra (contd. from 7.5). WARSAW, 8.0—Chopin Music. Turczynski (Pianoforte). Polonaise in C minor. Twelve Preludes. Ballad in F. 8.40—Concert.

LYONS (La Doua), 9.0—Concert. MOSCOW (No. 1), 9.5—Talk in English: John Reed. MUNICH, 9.0—News. 9.20—To be announced. OSLO, 9.0—Topical Talk. 9.15—Accordion Duets. 9.45—Dance Records. PARIS (Poste Parisien), 9.0-9.35—Sketches and Songs. 9.50—Dance Music. PARIS (PTT), 9.0—Benefit Programme (contd. from 8.30). PARIS (Radio-Paris), 9.0—"Fragonard" (Pierne) (contd. from 8.40). In the Interval at 9.15: News; Fashion Notes. PITTSBURGH, 9.0—Betty and Bob. 9.15—Karen Fladoes. 9.30—Exchange. 9.45—Palmer Clark Orchestra. PRAGUE, 9.0—News. 9.15—Records. 9.30—News in French. RADIO-NORMANDIE, 9.0—Concert.

9 p.m.

ALGIERS, 9.0—Opera Music. In the Interval. 9.55—News. ATHLONE, 9.0—Songs in Irish. 9.15—Irish Music by a Quartet. 9.30—Irish Songs by T. J. O'Flionn. 9.45—Stella Seavers (Accordion). BELGRADE, 9.0—Time; News. 9.15

Records. BERLIN, 9.0—News. 9.20—Orchestral Serenade. Conductor: Steiner. Senta Wagemann (Soprano). Karnevals-Episode (Blumer). Song, Der Vogel im Walde (Taubert). Serenade in G minor (Reinecke). Rhapsody (Lalo). Blumen aus Spanien (Ailbout). Trio for Three Bassoons (Weissenborn). Song, "Die Fledermaus" (Strauss). Humoresque. Die Mär vom tapferen Schneiderlein (Zimmer). Song, "The Arabian Nights" (Strauss). Waltz, Nachtfalter (Strauss). BEROMÜNSTER, 9.0—Protestant Choral (contd. from 8.40). 9.15-9.20—Tourist Report. BORDEAUX-LAFAYETTE, 9.0—See 8.30 Paris (PTT). BRESLAU, 9.0—Announcements. 9.20—See 8.0 Leipzig. BRUSSELS (No. 1), 9.0—"La belle Hélène"—(contd. from 8.0). BRUSSELS (No. 2), 9.0—French Music. Overture, "Gwendoline" (Chabrier). Prelude à l'après-midi d'un faune (Debussy). Viennese Rhapsody (Schmitt). Le tombeau de Couperin (Ravel). Ballet, "Marouf" (Rabaud). BUDAPEST, 9.0—News. 9.20—Racz Cigany Band. COLOGNE, 9.0—News. 9.20—Light Music and Dance Music. DEUTSCHLANDSENDER, 9.0—News. 9.30—Wireless Hints. FRANKFURT, 9.0—News. 9.30—Dance Music. HAMBURG, 9.0—News. 9.20—Popular Music. HILVERSUM, 9.0—"Peer Gynt" (contd. from 7.50). 9.55—News. HUIZEN, 9.0—Talk. 9.10—N.C.R.V. Orchestra. Symphony (von Dittersdorf). Symphony (Boccherini). Pieces (Felderhof), conducted by the Composer: (a) Five Dances, (b) Suite 1933 for Flute. Spanish Suite (Albeniz). In the Interval at 9.40: News. JUAN-LES-PINS (Radio Côte d'Azur), 9.0—News; Orchestra. KALUNDBORG, 9.0—News. 9.15—Opera Music. Station Orchestra. Conductor: Reesen. Overture, "Semiramis" (Rossini). Ballet Music, "The Demon" (Rubinstein). Selection, "Eugene Onegin" (Tchaikovsky). Polka and Furiant, "The Bartered Bride" (Smetana). Overture, "Le cheval de bronze" (Auber). KÖNIGSBERG, 9.0—News. 9.30—See Frankfurt. LEIPZIG, 9.0—News. 9.20—Dance Music (contd. from 8.0).



Versailles in the olden times, where Lully's and Rameau's music was first heard (Kalundborg, 7.0 p.m.)

Fifty Years on the Stage. 7.15—Press Review. 7.30—Topical Talk. PRAGUE, 7.0—See Brno. 7.30—Talk: Art. RADIO-NORMANDIE, 7.0—Request Programme. ROME, 7.0—Announcements. 7.10—Records. 7.30—Government Notes. 7.45—"Deborah and Jael"—Biblical Opera in Three Acts (Pizzetti). Conductors: Marinuzzi and Casolari. In the Intervals: Talk: The Charm of Athens; Theatre Review. RUYSSSELEDE, 7.45—News in French. SOTTENS, 7.0—"Un soir à la cabane"—Sketch (Frague). STOCKHOLM, 7.0—Liedbergius (Songs). 7.15—"Mary III"—Comedy (Rachel Crothers). STRASBOURG, 7.0—Gounod Concert (contd. from 6.30). 7.30—News. 7.45—For Children. STUTTGART, 7.0—News. 7.10—Local Review. 7.35—See Breslau. TOULOUSE (Radio-Toulouse), 7.0—Concert. TURIN, 7.0—Announcements; Records. 7.30—Government Notes. 7.45—Records. VATICAN CITY, 7.0-7.15—Religious Information in Italian. VIENNA, 7.5—Vienna Symphony Orchestra. Conductor: Jochum. Josef Hofmann (Pianoforte). Leonora Overture No. 3 (Beethoven). Piano-forte Concerto in E minor (Chopin). Symphony No. 4 in E flat (Bruckner). WARSAW, 7.0—Light Music. Adam-ska-Grossman Orchestra. Faliszewski (Songs). 7.45—News.

8 p.m.

ATHLONE, 8.0—Viani Music. BELGRADE, 8.0—Concert from Ljubljana. BERLIN, 8.0—Wind Band. 8.40—Report from Friedrichswald, where Clogs are made. BEROMÜNSTER, 8.0—News. 8.10—Swiss Music. 8.40—Protestant Chorals. Ernst Isler (Organ); Arthur Köst (Baritone). BORDEAUX-LAFAYETTE, 8.0—For Farmers. 8.15—News. 8.30—See Paris (PTT). BRESLAU, 8.0—See Leipzig. BRUSSELS (No. 1), 8.0—"La belle Hélène"—Operetta (Offenbach). Radio Orchestra. Conductor: André.

KALUNDBORG, 8.0—"The Crusaders"—Cantata (Gade), by the Aalborg Philharmonic Orchestra and Choirs. Conductor: Høeberg. Ingeborg Steffensen, Høeberg and Stephensen (Solos). KÖNIGSBERG, 8.0—See Warsaw. 8.30—Dance Music with Song Refrains and Commentary. LEIPZIG, 8.0—Dance Music. The Station Orchestra, the EMDE Orchestra, a Ländler and a Schrammel Band. Conductor: Schrötter. LYONS (La Doua), 8.30—Concert. MONTE CENERI, 8.0—Houg Concert (contd. from 7.15). 8.10—See Beromünster. 8.40—Song Records. MOSCOW (No. 1), 8.0—Literary Programme in Czech. 8.55—Chimes from the Kremlin. MUNICH, 8.0—See Berlin. 8.30—Modern Bavarian Dance Music by the Station Dance Band. Conductor: Aulich. OSLO, 8.0—Station Orchestra. Conductor: Kramm. March (Hanssen). Overture, Berlin wie es weint und lacht (Conradi). Musical Souvenirs (Lindemann). The Nigger's Dream (Myddleton). Waltz, "Faust" (Gounod). 8.40—News. PARIS (Poste Parisien), 8.10—Talk. 8.15—Concert. 8.40—Exchange; Talk. PARIS (PTT), 8.0—Records. 8.30—Gala Charity Concert for the Home at Pont-aux-Dames. PARIS (Radio-Paris), 8.0—Reading: "Madame Chrysantheme" (Pierre Loti). 8.30—Press Review. 8.40—"Fragonard" Opera (Pierne), from the Porte-Saint-Martin Theatre. PRAGUE, 8.0—Station Orchestra. Conductor: Jeremias. Overture, "A Night at Karlstein" (Fibich). Symphony No. 4 in G (Dvořák). RADIO-NORMANDIE, 8.0—Light Music and Opera Music. ROME, 8.0—"Deborah and Jael"—Opera (Pizzetti) (contd. from 7.45). RUYSSSELEDE, 8.0—See Brussels No. 2. 8.45—Records. SOTTENS, 8.0—News. 8.10—See Beromünster. 8.40—"The Horse" Readings. STOCKHOLM, 8.0—"Mary III"—Comedy (contd. from 7.15). 8.45—News. STRASBOURG, 8.0-8.15—News in German. 8.45—Variety. Station Orchestra and Soloists. STUTTGART, 8.0—Symphony Concert from Karlsruhe. Conductor: Adam. Mary Esselsgroth (Coloratura-Soprano). Military Symphony

—Popular Songs. 9.45—Dance Records. BERLIN, 9.0—News. 9.20—Orchestral Serenade. Conductor: Steiner. Senta Wagemann (Soprano). Karnevals-Episode (Blumer). Song, Der Vogel im Walde (Taubert). Serenade in G minor (Reinecke). Rhapsody (Lalo). Blumen aus Spanien (Ailbout). Trio for Three Bassoons (Weissenborn). Song, "Die Fledermaus" (Strauss). Humoresque. Die Mär vom tapferen Schneiderlein (Zimmer). Song, "The Arabian Nights" (Strauss). Waltz, Nachtfalter (Strauss). BEROMÜNSTER, 9.0—Protestant Choral (contd. from 8.40). 9.15-9.20—Tourist Report. BORDEAUX-LAFAYETTE, 9.0—See 8.30 Paris (PTT). BRESLAU, 9.0—Announcements. 9.20—See 8.0 Leipzig. BRUSSELS (No. 1), 9.0—"La belle Hélène"—(contd. from 8.0). BRUSSELS (No. 2), 9.0—French Music. Overture, "Gwendoline" (Chabrier). Prelude à l'après-midi d'un faune (Debussy). Viennese Rhapsody (Schmitt). Le tombeau de Couperin (Ravel). Ballet, "Marouf" (Rabaud). BUDAPEST, 9.0—News. 9.20—Racz Cigany Band. COLOGNE, 9.0—News. 9.20—Light Music and Dance Music. DEUTSCHLANDSENDER, 9.0—News. 9.30—Wireless Hints. FRANKFURT, 9.0—News. 9.30—Dance Music. HAMBURG, 9.0—News. 9.20—Popular Music. HILVERSUM, 9.0—"Peer Gynt" (contd. from 7.50). 9.55—News. HUIZEN, 9.0—Talk. 9.10—N.C.R.V. Orchestra. Symphony (von Dittersdorf). Symphony (Boccherini). Pieces (Felderhof), conducted by the Composer: (a) Five Dances, (b) Suite 1933 for Flute. Spanish Suite (Albeniz). In the Interval at 9.40: News. JUAN-LES-PINS (Radio Côte d'Azur), 9.0—News; Orchestra. KALUNDBORG, 9.0—News. 9.15—Opera Music. Station Orchestra. Conductor: Reesen. Overture, "Semiramis" (Rossini). Ballet Music, "The Demon" (Rubinstein). Selection, "Eugene Onegin" (Tchaikovsky). Polka and Furiant, "The Bartered Bride" (Smetana). Overture, "Le cheval de bronze" (Auber). KÖNIGSBERG, 9.0—News. 9.30—See Frankfurt. LEIPZIG, 9.0—News. 9.20—Dance Music (contd. from 8.0).

ROME, 9.0—"Deborah and Jael"—Opera (Pizzetti) (contd. from 7.45). RUYSSSELEDE, 9.0—News in Flemish. SOTTENS, 9.0-9.15—Talk: The Work of the League of Nations. STOCKHOLM, 9.0—Dance Music. STRASBOURG, 9.0—Variety (contd. from 8.45). 9.45—Press Review. 9.55—Chopin Records. STUTTGART, 9.0—News. 9.30—Talk: Kolbenheyer's New Play, "Gregor und Heinrich." 9.45—See 8.0 Leipzig. TOULOUSE (Radio-Toulouse), 9.0—Sérénade aux étoiles—Radio Fantasy. 9.30—Military Music. TURIN, 9.0—Operetta (contd. from 8.45). VIENNA, 9.0—Vienna Symphony Orchestra (contd. from 7.5). 9.10—Topical Talk. 9.30—News. 9.50—Talk in Esperanto. WARSAW, 9.0—Light Music. 9.15—Records. 9.35—Dance Music.

10 p.m.

ATHLONE, 10.0—Variety. 10.30—News. 10.40—Records. BARCELONA, 10.0—News. 10.15—"Los Hijos Artificiales"—Comedy in Three Acts (Abati Reparaz). BERLIN, 10.0—Orchestra (contd. from 9.20). BORDEAUX-LAFAYETTE, 10.0—See 8.30 Paris (PTT). BRESLAU, 10.0—News. 10.20—See 8.0 Leipzig. BRUSSELS (No. 1), 10.0—News. 10.10—Alexys Dance Band. BRUSSELS (No. 2), 10.0—News. 10.10—See Brussels No. 1. BUDAPEST, 10.0—Opera House Orchestra. Conductor: Fleischer. Prelude, "A Folk Tale" (Goldmark). Symphony No. 5 in E minor (Tchaikovsky). COLOGNE, 10.0—Light Music and Dance Music. DEUTSCHLANDSENDER, 10.0—See 8.0 Leipzig. FRANKFURT, 10.0—Dance Music. HAMBURG, 10.0—Stettin Concert Orchestra. Conductor: Plato. Overture, "The Frog King" (Rust). Selection, "The Merry Wives of Windsor" (Nicolai). Blumen-Polka (Ziehrer). Selection, "Halloh die grosse Revue!" (Lincke). Frühling am Mühlbach (Zimmer). Quadrille, "Boccaccio" (Suppé). E. Strauss). Swabian March (Lindemann). HILVERSUM, 10.0—Accordion and Pianoforte. 10.10—Marches. V.A.R.A. Orchestra. Conductor: de Groot. Radetzky March (Joh. Strauss). Barataria (Sullivan-

WEDNESDAY Oct. 17

Kozmak). Marche lorraine (Ganne). Alte Treue (Holzmann). Marche de pierrat (Bosc). Immer vorwärts (Teessling). The Juggler (Rosey). The Gladiators' Farewell (Blankenburg). The Stars and Stripes (Souza). 10.40—Dance Records. HUIZEN, 10.0—Orchestra (contd. from 9.10). 10.10—Records. KALUNDBORG, 10.0—Johansen Dance Band. KÖNIGSBERG, 10.0—See Frankfurt. LEIPZIG, 10.0—Dance Music (contd. from 8.0). MADRID (EAO), 10.15—News. 10.30—Spanish Music. 10.45—Wireless Notes. MOSCOW (No. 1), 10.5—Request Programme in German. MUNICH, 10.0—See Frankfurt. OSLO, 10.0-10.30—Dance Records. PARIS (Poste Parisien), 10.0—Dance Music. 10.20—News; Exchange. PARIS (PTT), 10.0—Benefit Programme (contd. from 8.30); News. 10.30—Dance Music. PARIS (Radio-Paris), 10.0—"Fragonard" (Pierne) (contd. from 8.40). 10.30—Dance Music. PITTSBURGH, 10.0—Memories. 10.15—KDKA Kiddies' Klub. 10.30—The Singing Lady. 10.45—Orphan Annie. RADIO-NORMANDIE, 10.0—Concert. ROME, 10.0 (approx.)—News. STRASBOURG, 10.0—Chopin Records. 10.30—Orchestra. STUTTGART, 10.0—See 8.0 Leipzig. TOULOUSE (Radio-Toulouse), 10.0—"Au caveau de dix heures"—Radio Fantasy. 10.15—News. 10.30—Sound-Film Music. TURIN, 10.0—"La Signorina Jazz"—Operetta (contd. from 8.45). VIENNA, 10.0—Orchestra. Conductor: Eichinger. Franz Horak ("Cello"). Overture, "I Guarany" (Gomez). Valse triste (Sibelius). Perlen der Liebe (Strauss). Cello: Elégie (Fauré) (Selection). "Di toten Augen" (d'Albert). Kiss Serenade (de Micheli). Hellnesberger Potpourri (Ischpold). Song, "Der singende Traum" (Taubert). Waldviertler Festmarsch (Geyer). WARSAW, 10.5—Dance Music.

11 p.m.

BARCELONA, 11.0—"Los Hijos Artificiales"—Comedy (Abati-Reparaz) (contd. from 10.15). DEUTSCHLANDSENDER, 11.0—See 8.0 Leipzig. FRANKFURT, 11.0—Light Classical Records. HILVERSUM, 11.0-11.40—Dance Records. HUIZEN, 11.0-11.10—Records. KALUNDBORG, 11.0-11.30—Chimes; Johansen Dance Band. LEIPZIG, 11.0—Dance Music (contd. from 8.0). MADRID (EAO), 11.0—Guitar. 11.15—Dance Music. 11.45—News. MADRID (EAO), 11.0—Spanish Music. 11.45—Light Music. PARIS (PTT), 11.0—Dance Music. PARIS (Radio-Paris), 11.0—Dance Music. PITTSBURGH, 11.0—Dan and Sylvia. 11.15—To be announced. 11.30—Comedy Stars of Hollywood. 11.45—Lowell Thomas. RADIO-NORMANDIE, 11.0—Light Music. 11.30—Dance Music. STRASBOURG, 11.0-11.30—Orchestra. STUTTGART, 11.0—See Frankfurt. TOULOUSE (Radio-Toulouse), 11.0—Concert. VIENNA, 11.0—Orchestra (contd. from 10.0). 11.30—Records.

12 midnight

BARCELONA, 12.0—News. FRANKFURT, 12.0—Light Classical Records. PITTSBURGH, 12.0—Amos 'n' Andy. 12.15—Plantation Echoes. 12.30—Red Davis. 12.45—Dangerous Paradise. RADIO-NORMANDIE, 12.0—Dance Music. SCHENECTADY, 12.25—Exchange. STUTTGART, 12.0—See Frankfurt. TOULOUSE (Radio-Toulouse), 12.0—News. 12.5-12.30—Concert. ZEESEN, 12.30—Old and Modern Music for Chamber Orchestra. Conductor: Hasse.

1 a.m. (Thursday)

BARCELONA, 1.0—Variety. PARIS (Radio-Colonial), 1.0—Concert. PITTSBURGH, 1.0-6.0—Popular Programme. RADIO-NORMANDIE, 1.0—News. 1.10—Dance Music. SCHENECTADY, 1.0-4.0—Popular Programme.



# THURSDAY Oct. 18

## PRINCIPAL EVENTS

### CONCERTS

- 11.30 a.m. Warsaw: Relay from Conservatoire.
- 3.0 p.m. Königsberg, Deutschlandsender: Light orchestral.
- 5.30 " Leipzig: Operetta music.
- 6.30 " Deutschlandsender: German folk-songs (choir).
- 7.10 " Kalundborg: Orchestra; Horowitz (pianoforte).
- 7.10 " Munich: Vocal and orchestral.
- 7.15 " Deutschlandsender: Chopin commemoration.
- 7.15 " Sottens: Haydn Symphony, etc.
- 7.55 " Hilversum: Tito Schipa at the Concertgebouw.
- 8.0 " Brussels No. 2: Radio Orchestra.
- 8.10 " Cologne: Excerpts from Boieldieu's operas.
- 8.25 " Königsberg: The Station Choir.
- 8.30 " Strasbourg: Haydn Symphony and Méhul commemoration.
- 8.50 " Budapest: Opera House Orchestra.
- 11.0 " Hamburg, Zeesen: Orchestral Suites.

### OPERAS, OPERETTAS

- 7.30 p.m. Frankfurt, Stuttgart: "The Opera Ball" (Heuberger).
- 7.45 " Turin, etc., Prague, Vienna, Warsaw: "The Barber of Seville" (Rossini).
- 8.10 " Sottens: "Carmen" (Bizet); Act II.
- 8.30 " Paris PTT: "La Diva" (Offenbach).
- 10.10 " Brussels No. 2: "La Bohème" (Puccini) (gramophone).

### CHAMBER MUSIC

- 8.5 p.m. Stockholm: Septet (Beethoven).
- 9.30 " Frankfurt: Quartet (Beethoven).
- 10.0 " Hamburg: Quartets (Schubert, Haydn).

### RECITALS

- 7.0 p.m. Beromünster: Pianoforte.
- 7.30 " Oslo: Brahms pianoforte music.
- 8.0 " Radio-Paris: Berlioz, Gounod, Massenet.
- 9.30 " Breslau: Bach organ music.
- 10.10 " Budapest: István Kovács (pianoforte).

### PLAYS

- 5.0 p.m. Radio-Paris: "La Farce de Maître Patelin."
- 7.30 " Königsberg: "Amber" (Greiser).
- 8.20 " Poste Parisien: "Prenez garde à la peinture" ("The late Christopher Bean") (Fauchois).

### DANCE MUSIC

- 7.10 p.m. Berlin; 9.20, Berlin, Cologne; 9.45, Kalundborg; 10.0, Munich, Stuttgart, Frankfurt; 10.30, Paris PTT, Radio-Paris; 10.40, Vienna.

## NATIONAL

- For Time Signals, see Monday
- 10.15 a.m. (Droitwich)—Service.
- 10.30 (Droitwich)—Weather Forecast.
- 10.45—"At Home To-day."
- 11.5—Records.
- 11.30 (except Scottish)—For Schools: "Districts of England"—4.
- 11.30 (Scottish)—News for Unemployed Clubs.
- 11.50—The Rutland Square and New Victoria Orchestra.
- 1.0 p.m.—Records.
- 2.0 (except Scottish)—Herring Fishing Bulletin.
- 2.0-3.0 (Scottish)—Regional Programme.
- 2.5-3.0 (except Scottish)—For Schools: History. 2.30—Biology.
- 3.0—Evensong from Westminster Abbey.
- 3.50—Records: Symphony Concert.
- 4.45—Organ Recital by Laurence Crosthwaite. Toccata (for double organ) (Blow). Prelude and Fugue No. 14 (Buxtehude). Rhapsody, Op. 17, No. 3 (Howells). Two Bourrées (Wood). Fanfare (Whitlock).
- 5.15—The Broadhurst Septet.
- 6.0—"The First News."
- 6.25—Interlude.
- 6.30—"From Plainsong to Purcell." The Foundations of English Music.
- 6.50—German Talk: Max Kroemer.
- 7.20—Records.
- 7.30—"The Child, the Parent, and the Teacher"—3. "Is my child normal?" Cyril-Burt.
- 8.0—Two Plays. "Delayed Drop," by Alan Byrne. "Fours into Seven won't Go," by Val Gielgud and Stephen King-Hall.
- 8.50—The Wireless Military Band. Grand March, Spirit of Pageantry (Fleicher). Nautical Overture, Plymouth Hoe (Ansell). The Londonderry Air (arr. O'Connor Morris). Suite, From Meadow to Mayfair (Coates).
- 9.30—"The Second News."
- 10.0—Mid-Week Service conducted by the Rev. W. H. Elliott, relayed from St. Michael's, Chester Square.
- 10.15—The B.B.C. Orchestra (Section E). Francis Russell (Tenor). Orchestra: Overture to a Marionette play (Weinberger). Francis Russell and Orchestra: Spirit so fair (La Favorita) (Donizetti). Orchestra: Three Dances from the Ballet, The Three-Cornered Hat (Fallá). Francis Russell and Orchestra: Erik's Cavatina (The Flying Dutchman) (Wagner). Orchestra: Nanie, Op. 67 (Liadov); Ballade, Op. 2 (Liapounov).
- 11.10—"The Snake," by D. H. Lawrence, read by Patric Curwen.
- 11.15-12.0—Dance Music. The B.B.C. Dance Orchestra, directed by Henry Hall.

## REGIONAL

- For Time Signals, see Monday
- 10.15-10.45 a.m. (except Midland)—National.
- 10.45—Bath Pump Room Orchestra.
- 11.45 (West till 12.10)—Records.
- 12.10 p.m. (West)—Opening of the New Guildhall, Victoria Park, Swansea, by H.R.H. Prince George.
- 12.20 (except West)—The Belfast Wireless Orchestra.
- 1.20—Alice Ehlers (Harpsichord). Marietta and Martha Amstad (Sopranos).
- 2.0 (except Scottish)—The Western Studio Orchestra.
- 2.0-3.0 (Scottish)—For Schools: Reception Test. 2.5—History. 2.30—Music.
- 3.0 (London, Midland, Belfast)—Karl Caylus Players. Carmen del Rio (Mezzo-Soprano).
- 3.0 (Scottish)—Records.
- 3.5 (West and North)—For Schools.
- 3.25 (West and North)—London.
- 3.30 (Scottish)—Mid-week Service.
- 4.0—"Pleasure on Parade"—Variety.
- 4.45—Records.
- 5.15—The Children's Hour.
- 6.0—"The First News."
- 6.0 (ex. Midland and Scottish)—The B.B.C. Dance Orchestra.
- 6.30 (Midland)—"For Farmers."
- 6.30 (Scottish)—Recital by Catherine Stewart (Contralto).
- 6.50 (Midland)—Pianoforte Recital.
- 7.0 (Midland)—Cinema Organ.
- 7.0 (Scottish)—The Business Male Choir.
- 7.30 (except North)—The Chateau de Madrid Orchestra.
- 7.30-9.30 (North)—The Hall's Orchestra, conducted by Georg Szell. (Interval at 8.25 approx.)
- 8.15 (London, Midland, Scottish)—The London Philharmonic Orchestra. Conductor, Sir Thomas Beecham. Myra Hess (Pianoforte). Overture, Cockaigne (Elgar). Incidental Music, The Tempest (Sibelius). Concerto No. 4 (Beethoven).
- 8.15 (West)—Studio Orchestra.
- 8.15 (Belfast)—Salvation Army Belfast No. 1 Citadel Band.
- 8.25 (West)—Act II of Wagner's "Tannhäuser," performed by the Carl Rosa Opera Company.
- 9.0 (Belfast)—Poets and Poetry.
- 9.20 (Belfast)—Variety.
- 9.25 (West)—Studio Orchestra.
- 9.30 (North)—Records.
- 9.35 (London, Scottish)—"During the Interval."
- 9.35 (Midland)—Organ and Choral Recital.
- 9.50 (London, Scottish, Belfast)—Philharmonic Orchestra (contd.). Suite Rossiniana (arr. Respighi).
- 10.0 (West and North)—Talk.
- 10.20—News Summary.
- 10.30-12.0 (Midland till 11.15)—The B.B.C. Dance Orchestra.

## EMPIRE SUMMARY

- For wavelengths, see S.W. List
- Transmission 1 (GSD, GSB)**
- 7.15 a.m.—Big Ben. Dance Music.†
- 7.30—Talk\*: "Under Big Ben." Mr. Howard Marshall.
- 7.45—An Orchestral Concert.†
- 8.30—"Babel Ballads." A Musical "At Home."
- 9.0—Empire News.
- 9.15—Close Down.
- Transmission 2 (11.0—12.30 GSP, GSG; 12.30—2.0 GSF, GSB)**
- 11.0 a.m.—Big Ben. The Pump Room Orchestra, Bath.
- 11.45—(See 8.30 a.m.)
- 12.15 p.m.—The Rutland Square and New Victoria Orchestra.
- 12.45—Talk\*: (See 7.30 a.m.)
- 1.0—Gramophone Records.
- 1.45—Empire News.
- 2.0—Close Down.
- Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSW, GSB)**
- 2.15 p.m.—Big Ben. The Western Studio Orchestra. Gladys Courtland (Mezzo-Soprano).
- 3.0—Evensong relayed from Westminster Abbey.
- 3.45—Cinema Organ (Reginald Foot). 4.15—Talk by Sir James Jeans, F.R.S.\*
- 4.35—Interlude.†
- 4.45—Organ Recital.
- 5.0—Empire News.
- 5.15—The Broadhurst Septet.
- 5.45—Close Down.
- Transmission 4 (GSD, GSB)**
- 6.0 p.m.—Big Ben. Empire News.
- 6.15—(See 8.30 a.m.)
- 6.45—The B.B.C. Dance Orchestra.
- 7.30—"The Chateau de Madrid" Orchestra. A Gala Night of the Spanish Song and Dance. First Appearance of the New Orquesta Hispanica.
- 8.15—The London Philharmonic Orchestra. Conductor, Sir Thomas Beecham. Myra Hess (Pianoforte).
- 9.0—The Wireless Military Band.
- 9.30—"Meet Hanau," presented by his creator, A. E. W. Mason.\*
- 9.45—Dance Music.†
- 10.0—Empire News.
- 10.15—The B.B.C. Orchestra (Section E). Francis Russell (Tenor).
- 10.45—Close Down.
- Transmission 5 (GSC, GSA)**
- 11.0 p.m.—Big Ben. Troise and his Mandoliers Carlos with Don (Tenor).\*
- 11.45—Sports Talk.\*
- 12 midnight—Orchestral Concert.†
- 12.45 a.m.—Empire News.
- 1.0—Close Down.

\* Electrical Recording.  
† Gramophone Records.

### Hours of Transmission in Greenwich Mean Time

#### 6 a.m.

- BERLIN, 6.0—News. 6.10—Orchestra.
- BRESLAU, 6.0—News. 6.20—See Cologne.
- COLOGNE, 6.0—Hymn; News. 6.20—Records.
- DEUTSCHLANDSENDER, HAMBURG, KÖNIGSBERG AND LEIPZIG, 6.0—News. 6.10—See Berlin.

#### 7 a.m.

- BERLIN, 7.0-7.20—Gym.
- BRESLAU, 7.0—Hymn; Motto; Records.
- COLOGNE, 7.0—Records. 7.20-7.35—Gym.
- DEUTSCHLANDSENDER, 7.45—Gym.
- HAMBURG, 7.0—Talk. 7.10-7.40—Announcements; Records.
- HILVERSUM, 7.40—Records.
- HUIZEN, 7.40—Records.
- KALUNDBORG, 7.30—Service.
- KÖNIGSBERG, 7.0-7.30—Service.
- LEIPZIG, 7.0—Gym. 7.20—Records.
- MUNICH, 7.0—Records.
- PARIS (Poste Parisien), 7.10—Records; News.
- PARIS (Radio-Paris), 7.0—Records. 7.15—Press Review. 7.45—Gym.
- STUTTART, 7.0—Records. 7.30—Gym. 7.45—For Women.
- TURIN, 7.0-7.15—News.

#### 8 a.m.

- BERLIN, 8.45—For Children.
- BRESLAU, 8.0—News.
- HILVERSUM, 8.0—Records. 8.40—Orchestra.
- HUIZEN, 8.0—Records.
- KÖNIGSBERG, 8.35—For Housewives. 8.50—Gym.
- MUNICH, 8.50—Talk.

- PARIS (Poste Parisien), 8.0—Records. 8.45—Cookery Hints.
- PARIS (Radio-Paris), 8.0—Records.
- PRAGUE, 8.50—News.

#### 9 a.m.

- BERLIN, 9.0—News. 9.30—Records.
- BRESLAU, 9.15—See Deutschlandsender. 9.45—Records.
- COLOGNE, 9.0—News. 9.15—See Deutschlandsender. 9.45—Book Review.
- DEUTSCHLANDSENDER, 9.0—News. 9.15—Folk Songs. 9.45—Gym.
- FRANKFURT, 9.0—News. 9.15—See Stuttgart. 9.45—For Housewives.
- HAMBURG, 9.50—News.
- HILVERSUM, 9.0—Orchestra. 9.41—Daily Service. 9.55—Records.
- HUIZEN, 9.40—Records. 9.55—Religious Programme.
- KÖNIGSBERG, 9.10—Poetry Reading. 9.40—News.
- LEIPZIG, 9.0—Exchange; News. 9.15-9.45—See Deutschlandsender.
- MUNICH, 9.15—Talk.
- PRAGUE, 9.5—News; Record; Orchestra.
- STUTTART, 9.0—News. 9.15—Folk Songs. 9.45—Elisabeth Brunner (Soprano), Farbach (Tenor), Lenz (Tenor).

#### 10 a.m.

- BERLIN, 10.25-10.30—Exchange.
- BRESLAU, 10.0—Records. 10.30—News.
- COLOGNE, 10.30—Announcements; Records.
- DEUTSCHLANDSENDER, 10.30—See Königsberg.
- FRANKFURT, 10.0—Records. 10.30—Announcements; Exchange.
- HAMBURG, 10.0—Political Report. 10.30—See Königsberg.

- HILVERSUM, 10.0—Records. 10.10—Orchestra. 10.40—Records; Recitations.
- HUIZEN, 10.0—Religious Programme. 10.25—Records.
- KALUNDBORG, 10.0—Weather. 10.10—Fish Prices. 10.15—The Jutland Festival—Report for Schools.
- KÖNIGSBERG, 10.30—Opera House Orchestra. Conductor: Brückner.
- LEIPZIG, 10.0—Records. 10.30—News.
- MUNICH, 10.15—News. 10.30—Records.
- OSLO, 10.50—Exchange.
- PRAGUE, 10.0—Records. 10.5—Police Band.
- STUTTART, 10.0—Soprano and Tenor (contd. from 9.45). 10.15—Post Office Programme. 10.45—Weather; For Fruit-Growers.
- TURIN, 10.30—String Orchestra.
- VATICAN CITY, 10.0-10.15—Religious Information in French.

#### 11 a.m.

- BERLIN, 11.0—See 10.30 Königsberg.
- BEROMÜNSTER, 11.0—Richard Strauss Concert.
- BRESLAU, 11.0—Light Music. Conductor: Rischka. Maria Kindler (Harp).
- COLOGNE, 11.0—See 10.30 Königsberg. 11.45—News.
- DEUTSCHLANDSENDER, 11.0—See Breslau.
- FRANKFURT, 11.0—See Stuttgart.
- HAMBURG, 11.0—Announcements. 11.15—See 10.30 Königsberg.
- HILVERSUM, 11.0—Records; Recitations. 11.40—Kovacs Lajos Orchestra.
- HUIZEN, 11.0—Records. 11.10—Religious Address. 11.40—Police Messages. 11.55—K.R.O. Orchestra. Conductor: van 't Woud.
- KALUNDBORG, 11.2—Bendix String Ensemble.

- KÖNIGSBERG, 11.0—Orchestra (contd. from 10.30).
- LEIPZIG, 11.0—See Breslau.
- MONTE CENERI, 11.5—Orchestra.
- MUNICH, 11.0—Records.
- PRAGUE, 11.10—Records. 11.25—News. 11.35—Dance Music.
- SOTTENS, 11.30—News. 11.40—Records. 11.55—Fridolin and his Partner.
- STUTTART, 11.0—Records.
- TURIN, 11.0—String Orchestra. 11.30—Records. 11.45—News.
- WARSAW, 11.5—Press Review. 11.10—For Children. 11.30—Philharmonic Orchestra, from the Conservatoire. Conductor: Wolfstal. Mme. Familier-Hepner (Pianoforte), and Czapicki (Baritone). Overture, "Oberon" (Weber). Scherzo, "A Midsummer Night's Dream" (Mendelssohn). Pianoforte: (a) Waldesrauschen (Liszt) (b) Mazurka in B flat (Chopin), (c) Waltz in E minor (Chopin), (d) Allegro molto (Zarembski). Four Songs. Pianoforte: (a) Prelude in D flat (Chopin-Noskowski), (b) Waltz in C sharp minor (Chopin-Noskowski). Dance of the Brigands (Zelenski).

#### 12 noon

- BERLIN, 12.0—Midday Echoes. 12.15—Sound Film Music on Records.
- BEROMÜNSTER, 12.0—Richard Strauss Concert (contd. from 11.0). 12.25—Exchange.
- BRESLAU, 12.0—Light Music (contd. from 11.0). In the Interval, News.
- BRUSSELS (No. 1), 12.0—Records.
- BRUSSELS (No. 2), 12.0—Orchestra. Conductor: Walpot. Schell (Tenor) Prelude for Pianoforte and String Quintet (Vidal). Trio, Bucoliques (Chillemont). Canon (Schumann). Three Songs. Russian Dance (Tchaikovsky). Lamento for Violin (Rozapark). Nocturne (Chopin).
- BUDAPEST, 12.30—Concert.

- COLOGNE, 12.0—Tenors on Records. 12.45—News.
- DEUTSCHLANDSENDER, 12.0—Waltz Records. 12.45—News.
- FRANKFURT, 12.0—News. 12.15—See Stuttgart.
- HAMBURG, 12.0—Exchange. 12.20—Light Music.
- HILVERSUM, 12.0—Kovacs Lajos Orchestra.
- HUIZEN, 12.0—Orchestra (contd. from 11.55).
- KALUNDBORG, 12.0—Bendix String Ensemble.
- KÖNIGSBERG, 12.5—Records.
- LEIPZIG, 12.0—News. 12.10—Johann Strauss Records.
- MONTE CENERI, 12.5—Sports Notes. 12.15-12.30—Records.
- MUNICH, 12.0—Records. 12.15—News. 12.25—Bruno Lüling Music. Small Station Orchestra. Conductor: Kloss. Romantic Suite. Strandwellen. Schlummerliederchen. Old German Gavotte. Indian Suite.
- OSLO, 12.0—Records. 12.45—Exchange.
- PARIS (Poste Parisien), 12.0—Exchange. 12.5—Military Music on Records. 12.15—Kito the Clown. 12.25—News. 12.35—Concert.
- PARIS (PTT), 12.0—Tourist Report. 12.15—Records.
- PARIS (Radio-Paris), 12.0—Protestant Address. 12.30—Pascal's Orchestra.
- PRAGUE, 12.0—Dance Music. 12.25—Industrial Review. 12.45—Records. 12.55—Exchange.
- SOTTENS, 12.0—Fridolin and his Partner (contd. from 11.55). 12.10—Exchange. 12.15—Records.
- STOCKHOLM, 12.0—For Schools. 12.30—Light Music.
- STUTTART, 12.0—Local Review; News. 12.15—Light Music. Orchestra. Conductor: Hanker.
- TURIN, 12.0—Announcements. 12.5—Fashion Review. 12.10—Doreno Orchestra. 12.30—Records; Exchange. 12.45—Doreno Orchestra.
- WARSAW, 12.0—News; Exchange. 12.10—Philharmonic Orchestra (contd. from 11.30).



THURSDAY Oct. 18

1 p.m.

ATHLONE, 1.30—Exchange; Records. BERLIN, 1.0—News. 1.15—Records. DRESLAU, 1.5—Exchange. 1.10—Post Office Programme: Records. 1.35—Greetings. 1.40—Markets. BRUSSELS (No. 1), 1.0—News. 1.10—Saint-Saens Concert. Conductor: Gason. Selection, "Etienne Marcel" Danse macabre. "Cello Concerto. Symphonic Poem, La jeunesse d'Hercule. Allegro appassionata. Ballet Music, "Ascanio." BRUSSELS (No. 2), 1.0—News. 1.10—Records. Interlude: Schell (Tenor). BUDAPEST, 1.0-1.40—Concert. COLOGNE, 1.0-1.45—Station Chamber Quintet. FRANKFURT, 1.0—See 12.15 Stuttgart. 1.15—News. 1.30—Industrial Review. 1.45—Exchange. HAMBURG, 1.0—Light Music; Records. 1.15—News. 1.30—Pianoforte Concerto in A minor (Grieg). HILVERSUM, 1.0—Kovacs Lajos Orchestra. 1.40—Veelo (Pianoforte). HUIZEN, 1.0—Orchestra (contd. from 11.55). 1.40—Handicrafts. KALUNDBORG, 1.40—Cradle Songs by Esther Laessöe Müller. KÖNIGSBERG, 1.0—News; Records. 1.30—Exchange. LEIPZIG, 1.0—News. 1.15-1.45—Pianoforte Concerto in D minor (Mozart) on Records. MUNICH, 1.0—News. 1.20—Maria Wolf (Soprano). Lürer (Pianoforte). Nettie Nye (Soprano). Five Hugo Wolf Songs. Sonata in G minor (Lürer), the Composer at the Piano-forte. Two Songs (Deliuss). Four Songs (Reger). PARIS (Poste Parisien), 1.5—Exchange. 1.15—Records. 1.30—Exchange 1.35—Records. PARIS (PTT), 1.0—Records. 1.15—Orchestra. PARIS (Radio-Paris), 1.0—Pascal's Orchestra (contd. from 12.30). In the Interval at 1.20: Exchange. PRAGUE, 1.0-1.5—Exchange; Weather in German. STOCKHOLM, 1.0—Light Music. 1.20—Talk. 1.40—Kyneld (Violin). STUTTGART, 1.0-1.15—Light Music (contd. from 12.15). TURIN, 1.0—Doreno Orchestra. 1.15-1.25—Exchange.

2 p.m.

ATHLONE, 2.0-2.30—Records. BERLIN, 2.0-2.20—Exchange. BEROMÜNSTER, 2.30—Records. BRESLAU, 2.10—Talk: Autumn with a Camera. 2.30—Play for Children. BUDAPEST, 2.0—For Women. COLOGNE, 2.0—For Young People. 2.15—Talk: Upbringing and Heredity. 2.30—Exchange. 2.50—Topical Talk. DEUTSCHLANDSENDER, 2.0—Exchange. 2.15—Animal Talk and Fairy Tale for Children. 2.40—Wolfram Brockmeier readings. FRANKFURT, 2.15—Reading for Children. HAMBURG, 2.0—Exchange. 2.40—Shipping; Aviation. HILVERSUM, 2.0—Pianoforte. 2.10—Records. 2.40—Dressmaking. HUIZEN, 2.0—Handicrafts. 2.40—For Women. KALUNDBORG, 2.0—"Autumn in German Poetry"—Reading. 2.30—Rydahl Instrumental Ensemble. Ester Laessöe Müller (Songs). KÖNIGSBERG, 2.0—Markets. 2.10—Book Review. 2.30—Eurhythms. LEIPZIG, 2.20—Book Review. 2.40—Exchange. MUNICH, 2.0—Reading. 2.30—For Women. 2.50—For Farmers. PARIS (Poste Parisien), 2.0—Exchange. PARIS (PTT), 2.0—Pianoforte and Recitations. 2.30—Records. PARIS (Radio-Colonial), 2.45—"L'Anniversaire de Gustave"—Play. PRAGUE, 2.50—Exchange; Weather. 2.55—Orchestra from Moravská-Ostrava. STUTTGART, 2.30—Talk; Women's Prisons. WARSAW, 2.30—Announcements; Exchange. 2.45—Dance Music.

3 p.m.

BERLIN, 3.0—See Munich. BEROMÜNSTER, 3.0—See Sottens. BRESLAU, 3.0—See Königsberg. BUDAPEST, 3.45—News. COLOGNE, 3.0—Small Station Orchestra. Conductor: Eysoldt.

DEUTSCHLANDSENDER, 3.0—See Königsberg. FRANKFURT, 3.0—See Munich. HAMBURG, 3.0—See Munich. HILVERSUM, 3.0-3.25—Dressmaking. 3.40—For Hospitals. HUIZEN, 3.0—For Women. 3.10—Records. 3.40—Bible Reading. KALUNDBORG, 3.0—Orchestra (contd. from 2.30). KÖNIGSBERG, 3.0—Station Light Orchestra. Conductor: Wilcken. In the Interval: Talk: Industrial Problems. LEIPZIG, 3.0—See Cologne. MONTE CENERI, 3.0—See Sottens. MUNICH, 3.0—Light Music. Station Orchestra. Conductor: Kloss. Fricke (Tenor). PARIS (Poste Parisien), 3.15—Exchange. PARIS (Radio-Colonial), 3.0—"L'Anniversaire de Gustave"—Play. PRAGUE, 3.0—Orchestra from Moravská-Ostrava. 4.45—Talk: Politics. 3.55—Folk Songs and Dances. SOTTENS, 3.0—Station Orchestra. Conductor: Echenard. 3.45—Records. STUTTGART, 3.0—See Munich. TURIN, 3.35—News. 3.45—For Children. WARSAW, 3.0—Dance Music. 3.45—French.

4 p.m.

BERLIN, 4.0—See 3.0 Munich. 4.30—Dance Records. BEROMÜNSTER, 4.0—See Sottens. BRESLAU, 4.0—See 3.0 Königsberg. 4.30—Weather; Markets. 4.35—For Mothers. 4.55—Erna Hanke (Pianoforte). BUDAPEST, 4.0—For Farmers. 4.35—Berend Chamber Orchestra. COLOGNE, 4.0—Poetry Reading (Sistig). 4.15—Haydn and Mozart Recital by Lilli Krämer (Soprano) and Else Schmitz-Wesselmann (Pianoforte). 4.40—Talk. DEUTSCHLANDSENDER, 4.0—See 3.0 Königsberg. 4.15—Wilhelm Stross Violin Records. FRANKFURT, 4.0—See 3.0 Munich. 4.30—Hanck-Reichert Dance Band. HAMBURG, 4.0—See 3.0 Munich. 4.30—Talk: Dierich Graf. 4.45—Talk: The Youth Exhibition. HILVERSUM, 4.0—For Hospitals. 4.10—Records. 4.25—For Children. HUIZEN, 4.0—Organ and Baritone. 4.40—Handicrafts for Children. KALUNDBORG, 4.0—Orchestra (contd. from 2.30). 4.30—Exchange. 4.42—A Poem. 4.45—Talk: The East China Railway. KÖNIGSBERG, 4.0—Orchestra (contd. from 3.0). 4.50—For Girls. LEIPZIG, 4.0—Talk: Ferdinand v. Richthofen, the Geographer. 4.20—Alfred Heuss Memorial Programme of Songs. Margarete Feiseler-Schmutzler (Soprano). Sammler (Pianoforte). Introductory Talk by Dr. Hitzig. 4.50—Exchange. MONTE CENERI, 4.0—See Sottens. MOSCOW (No. 1), 4.30—"Don Giovanni"—Opera in Three Acts (Mozart). MUNICH, 4.0—Light Music (contd. from 3.0). 4.30—Talk: Incandescent Light. 4.50—String Quartet in D minor (Schubert), by the Wendling Quartet. OSLO, 4.0—Records. PARIS (Poste Parisien), 4.50—Exchange. PARIS (PTT), 4.0—Records. PRAGUE, 4.0—Folk Songs and Dances. 4.20—Reading. 4.40—Records. 4.45—Talk: Agriculture in Holland and Belgium. 4.55—German Transmission: "The Gold Bug"—Play after Edgar Allan Poe (Itten). ROME, 4.0—Martorana (Cello); Romani (Baritone); Zagonara (Tenor); Giselda Bonitatibus (Soprano). 'Cello Solos: (a) Canto d'amore (Martucci), (b) Capriccio (Goltermann). Baritone Aria, "Mephisto" (Carelli). Prologue, "Faust" (Gounod). 'Cello Solos: (a) Prayer (Bloch), (b) Tarantella (Oliveri). Soprano Aria, "Fra Diavolo" (Auber). Soprano and Tenor Duet, "Manon" (Massenet). SOTTENS, 4.0—Records. 4.15—Light Music. Station Orchestra. Conductor: Echenard. STOCKHOLM, 4.5—Service. 4.30—For Children. 4.45—Records. STUTTGART, 4.0—See 3.0 Munich. 4.30—Dance Records. TURIN, 4.0—For Children. 4.10—Malatesta Chamber Orchestra. WARSAW, 4.0—Play (J. Meissner). 4.50—The Letter-Box.

5 p.m.

ATHLONE, 6.0—For Children. 6.45—News. BERLIN, 6.0—"Serenades." Schlenker (Flute), Käte Grandt (Violin), Müller (Viola). Serenade in D (Weber). Serenade in G (Reger). 6.40—Evening Echoes. BEROMÜNSTER, 6.0—Announcements. 6.5—League of Nations Report from Geneva. 6.25—Records. 6.45—Talk: Photography. BRESLAU, 6.0—See Cologne. BRUSSELS (No. 1), 6.0—Cookery. 6.15—Delibes Concert. Conductor: Walpot. Ballet Music, "La source." Le pas des fleurs. Selection, "Lakmé." Ballet Music, "Sylvia." BRUSSELS (No. 2), 6.0—For Children. 6.30—Trio for Pianoforte, Oboe and Bassoon (Poulenc), on Records. 6.45—"De overval"—Play (Rammelt). BUDAPEST, 6.5—Erika Rokyta (Songs). 6.45—"Singing Bird"—Fairy Play (Tamási). COLOGNE, 6.0—Folk Music. Conductor: Kneip. Rudolf Rauher (Announcer). 6.45—Discussion: Industrial Training.

5 p.m.

BERLIN, 5.0—Announcements. 5.5—Talk: Wireless Experiences. 5.30—"The Gallant Tin Soldier"—Report from the Berlin and Potsdam Collections. BEROMÜNSTER, 5.0—Song Records. 5.30—Talk: Economic Defence Measures. BRESLAU, 5.0—Pianoforte (contd. from 4.55). 5.30—Poems (Schöfer). 5.50—Announcements. BRUSSELS (No. 1), 5.0—Waltz Records. 5.30—For Children. BRUSSELS (No. 2), 5.0—Music for Old Instruments (on Records). 5.45—For Children. BUDAPEST, 5.0—Berend Chamber Orchestra. 5.30—Talk. COLOGNE, 5.0—Young People's Report. 5.20—Talk: The National Theatre Movement. 5.40—Topical Talk. 5.50—Exchange; Sports Notes. DEUTSCHLANDSENDER, 5.0—Poems in Dialect. 5.30—Topical Report. 5.50—"The Baptism of Fire"—Play (Werner). FRANKFURT, 5.0—See Stuttgart. 5.15—Book Review. 5.25—Poetry Talk: Albert Schramm. 5.35—A Grammar Catechism. 5.45—Light Music. Cassel Landes-Orchestra. Conductor: Maurick. HAMBURG, 5.0—Talk. 5.45—Exchange. HILVERSUM, 5.0—For Children. 5.10—Light Music. A.V.R.O. Orchestra. Conductor: Treep. HUIZEN, 5.0—Handicrafts. 5.10—Koning (Bass). An die ferne Geliebte (Beethoven). Records. Songs (Schubert): (a) Gute Nacht, (b) Der Wegweiser, (c) Das Wirtshaus. Records. Songs (Loewe): (a) Spirito Santo, (b) Die Uhr, (c) Tom der Reimer. KALUNDBORG, 5.0—Talk (contd. from 4.45). 5.15—English. 5.45—Weather. 5.54—Announcements. KÖNIGSBERG, 5.0—For Girls. 5.15—Markets. 5.25—For Farmers. LEIPZIG, 5.0—Talk: Rochlitz, Saxony—October 18, 1813. 5.30—Operetta Music. Station Orchestra. Conductor: Weber. MOSCOW (No. 1), 5.0—"Don Giovanni"—Opera (Mozart) (contd. from 4.30). MUNICH, 5.0—String Quartet (Schubert) (contd. from 4.50). 5.30—Talk: Painting. 5.50—For Farmers. OSLO, 5.0—Talk. 5.30—Service. PARIS (PTT), 5.0—Records. 5.30—Esperanto. PARIS (Radio-Colonial), 5.0—Concert. PARIS (Radio-Paris), 5.0—"La farce de Maitre Patelin". PRAGUE, 5.0—German Transmission (contd. from 4.55). 5.55—News in German. ROME, 5.0—Corn Prices. 5.10—Educational Talk. SOTTENS, 5.0—For Women. 5.30—Bridge. 5.45—For Mountaineers. STOCKHOLM, 5.0—Records. 5.45—English. STRASBOURG, 5.0—Orchestra. STUTTGART, 5.0—Spanish. 5.15—Talk. 5.30—"Baluchistan"—Travel Impressions. TURIN, 5.0-5.10—Corn Prices. VIENNA, 5.0—Talk, arranged by the Chamber of Commerce. 5.25—Ethnological Talk: The Indo-Germanic Tribes. 5.50—Theatre Review. WARSAW, 5.0—Talk. 5.15—Pictures from an Exhibition (Mussorsky-Ravel) on Records. 5.45—Reading.

6 p.m.

ATHLONE, 6.0—For Children. 6.45—News. BERLIN, 6.0—"Serenades." Schlenker (Flute), Käte Grandt (Violin), Müller (Viola). Serenade in D (Weber). Serenade in G (Reger). 6.40—Evening Echoes. BEROMÜNSTER, 6.0—Announcements. 6.5—League of Nations Report from Geneva. 6.25—Records. 6.45—Talk: Photography. BRESLAU, 6.0—See Cologne. BRUSSELS (No. 1), 6.0—Cookery. 6.15—Delibes Concert. Conductor: Walpot. Ballet Music, "La source." Le pas des fleurs. Selection, "Lakmé." Ballet Music, "Sylvia." BRUSSELS (No. 2), 6.0—For Children. 6.30—Trio for Pianoforte, Oboe and Bassoon (Poulenc), on Records. 6.45—"De overval"—Play (Rammelt). BUDAPEST, 6.5—Erika Rokyta (Songs). 6.45—"Singing Bird"—Fairy Play (Tamási). COLOGNE, 6.0—Folk Music. Conductor: Kneip. Rudolf Rauher (Announcer). 6.45—Discussion: Industrial Training.

DEUTSCHLANDSENDER, 6.0—"The Baptism of Fire"—Play (contd. from 5.30). 6.25—Poem. 6.30—German Folk Songs. The Station Chamber Choir. Conductor: Görner.

FRANKFURT, 6.0—Light Music (contd. from 5.45). In the Interval: Exchange; Announcements. 6.45—Topical Report. HAMBURG, 6.0—"Death comes to Friesland"—Ballad of the 1634 Storm Tide (Leuchsenring), with Music by Scheffler. Station Orchestra and Choir. Conductors: Gartz and Gregor (Organ). HILVERSUM, 6.0—Light Music (contd. from 5.10). 6.10—Sports Talk. 6.40—A.V.R.O. Orchestra. Conductor: Treep. Overture "The Italian Girl in Algiers" (Rossini). Two Spanish Dances (Moscowsky). Sous ta fenêtre (Lachaux). Die launische Yveite (Schmalstich). Wiener Praterleben (Translatour). HUIZEN, 6.0—Bass Songs (contd. from 5.10). 6.25—Talk. 6.40—Police Messages; Religious Notes. 6.55—Records. KALUNDBORG, 6.0—News. 6.15—Talk: The Church and Anti-Religious Movements. 6.45—Talk: Danish Place Names. KÖNIGSBERG, 6.0—Programme from Darkehmen, Memel. LEIPZIG, 6.0—Operetta Music (contd. from 5.30). 6.35—Talk: Maritime Power in Scandinavian History. MONTE CENERI, 6.45—News. MORAVSKÁ - OSTRAVA, 6.10—Records. 6.15—Reading. MOSCOW (No. 1), 6.0—"Don Giovanni"—Opera (Mozart) (contd. from 4.30). MUNICH, 6.0—Variety. OSLO, 6.0—Book Review. 6.15—News. 6.30—Norwegian Folk Music. PARIS (Poste Parisien), 6.45—Exchange. 6.49—Light and Schubert Records. PARIS (PTT), 6.0—Art Notes. 6.30—News. PARIS (Radio-Paris), 6.20—Announcements; Exchange. 6.45—Art Notes. PRAGUE, 6.0—News. 6.10—Record. 6.15—Russian Lesson. 6.30—Herman Schrammel Quartet. 6.55—Talk: Russia. RADIO - NORMANDIE, 6.0—Symphony Music. 6.50—News; Racing Results. ROME, 6.0—Tourist Talk: Dopolavoro Notes. 6.15—News in Foreign Languages. SOTTENS, 6.0—Violin. Sonatina (Wilner). Berceuse (Gretchaninov). 6.15—Music Talk. 6.40—Wireless Notes. STOCKHOLM, 6.0—English. 6.15—News. 6.30—Stockholm Madrigal Choir. Conductor: Saul. STRASBOURG, 6.0—Talk in German: America To-day. 6.15—History Talk. 6.30—Mme. Tchichmichian-Biellmann (Songs), and Bour (Pianoforte). STUTTGART, 6.0—"Red Pepper!"—Gyenes Hungarian Orchestra. TOULOUSE (Radio-Toulouse), 6.15—Opera Music. 6.30—For Children. TURIN, 6.0—Tourist Talk: Dopolavoro Notes. 6.15—News in Foreign Languages. VIENNA, 6.0—News. 6.20—Albert von Trentini Memorial Programme—Reading and Address. 6.50—Old Viennese Folk Music. Vienna Symphony Orchestra. Conductor: Holzer. WARSAW, 6.0—Organ. 6.20—Topical Talk. 6.30—Records. 6.45—Announcements. 6.50—Sports.

7 p.m.

ATHLONE, 7.0—French. 7.15—Gardening. 7.30—Time. 7.31—Variety. T. Madden and Company, with Orchestra. BELGRADE, 7.30—Philharmonic Orchestra. BERLIN, 7.0—News. 7.10—Variety. Dance Band and Soloists. Conductor: Steiner. BEROMÜNSTER, 7.0—Elly Katzigheras (Pianoforte). 7.35—Talk: Chinese Trading Methods. BORDEAUX-LAFAYETTE, 7.30—News; Exchange. 7.40—Labour Exchange. 7.55—News. BRESLAU, 7.0—Announcements. 7.10—See Munich. BRNO, 7.10—"At the Castle of Kromeriz"—Play, with Music (Chalupa-Vetterl). BRUSSELS (No. 1), 7.0—Delibes Concert (contd. from 6.15). 7.15—For Workers. 7.30—Sports Notes. BRUSSELS (No. 2), 7.0—"De over-

val"—Play (Rammelt) (contd. from 6.30). 7.15—Talk. 7.30—News. BUDAPEST, 7.0—"Singing Bird"—Fairy Play (contd. from 6.45). COLOGNE, 7.0—News; Local Review. 7.15—Suite in A minor for four Violas and Harpsichord (Teleman), by the Cologne Viola Ensemble and Hans Haas (Harpsichord). 7.30—"Lanzelot und Sanderein"—Old Flemish Play (arr. Huebner-Sistig). DEUTSCHLANDSENDER, 7.0—Motto; Announcements. 7.15—Chopin Anniversary Concert. Berlin Philharmonic Orchestra. Conductor: Lindner. Hansen (Pianoforte). Pianoforte Concerto in F minor. Talk by Walther Abendroth: Chopin and the German Romantics. Pianoforte Solos: (a) Barcarolle, (b) Nocturne in E flat, (c) Two Etudes, (e) Waltz in C sharp minor, (e) Waltz in G flat, (f) Polonaise in A flat. FRANKFURT, 7.0—News. 7.10—See Stuttgart. 7.30—"Der Opernball"—Operetta in Three Acts (Heuberger). Station Orchestra and Soloists. Conductor: Rosbaud. HAMBURG, 7.0—News. 7.10—Station Dance Band and Soloists. Conductor: Bolt. HILVERSUM, 7.0—Orchestra (contd. from 6.40). 7.10—English. 7.45—News. 7.45—Records. 7.55—The Concertgebouw Orchestra, from Amsterdam. Conductor: Cooper. Tito Schipa (Tenor). Overture, "William Tell" (Rossini). Songs: (a) Nina (Pergolesi), (b) Largo (Handel), (c) Les violettes (Scarlatti). Spanish Caprice (Rimsky-Korsakov). Arias from (a) "Weather" (Massenet), (b) "Elisir d'amore" (Donizetti), (c) "Rigoletto" (Verdi). Interlude. Ballet, "Petroushka" (Stravinsky). Neapolitan Folk Songs. HUIZEN, 7.0—Records. 7.10—Press Review. 7.40—Programme for the Anniversary of the Separation of the Netherlands, from St. Peter's Church, Leyden. The Halleluja Mixed Choir. Conductor: Mlle. Leening. Leo Mens (Organ). KALUNDBORG, 7.0—Talk (contd. from 6.45). 7.10—Concert. Radio Symphony Orchestra. Conductor: Malko. Horowitz (Pianoforte). Symphonic Poem, Stenka Rasin (Glazunov). Symphony in F minor (Schostakowitsch). Interval. Pianoforte Concerto in B flat minor (Tchaikovsky). Prelude, "The Mastersingers" (Wagner). KÖNIGSBERG, 7.0—News. 7.10—Gipsy Bands on Records. 7.30—"Amber"—Play (Greiser). LEIPZIG, 7.0—News. 7.10—See Munich. MONTE CENERI, 7.0—Music by Swiss Composers. 7.45—Talk: The Canton of Bellinzona. MOSCOW (No. 1), 7.0—"Don Giovanni"—Opera (Mozart) (contd. from 4.30). MUNICH, 7.0—News. 7.10—"Voice Magicians." Station Orchestra and Choir. Conductor: Winter. Erna Sack (Coloratura Soprano), Müller (Tenor), Ducure (Bass). OSLO, 7.0—For Farmers. 7.30—Brahms Pianoforte Recital by Reimar Riefling. Choral Prelude. Four Intermmezzi. Three Waltzes. 7.50—Talk: Vocations. PARIS (Poste Parisien), 7.0—Liszt and Schubert Records. 7.10—News. 7.30—For Children. PARIS (PTT), 7.45—Hygiene Talk. 7.53—Talk: Astronomy. PARIS (Radio-Paris), 7.0—Talk: A French Hero. 7.15—Review of the German Press. 7.30—Topical Talk. PRAGUE, 7.0—Talk (contd. from 6.55). 7.10—"Cello and Pianoforte Sonata (Sin). 7.35—Introductory Talk to the following Transmission. 7.45—See Turin. RADIO-NORMANDIE, 7.0—Variety. ROME, 7.0—News. 7.10—Records. 7.30—Government Notes. 7.45—The Madami Quartet. Nicola Melnikov (Baritone). Aria, with Variations (Martini). Rondo, Soeur Monique (Couperin). Baritone Songs (Glinka). Canzonetta (Mendelssohn). Minuetto per Isabella (Breschi). Baritone Aria, "Prince Igor" (Borodin). RUYSELEDE, 7.45—News in French. SOTTENS, 7.0—Talk: Sinai. 7.15—Station Orchestra. Conductor: Echenard. Hugues Cuénod (Tenor). Two Intradas (Hassler). Cantata No. 159 (Bach). Symphony, "La Reine" (Haydn).



## THURSDAY Oct. 18

## 7 p.m. (contd.)

**STOCKHOLM**, 7.0—Literary Talk: Hjalmar Bergman, 7.30—Janine Moreau (Harp), 7.45—Reading.  
**STRASBOURG**, 7.0—Songs and Piano-forte (contd. from 6.30). 7.30—News, 7.45—Records.  
**STUTTGART**, 7.0—News; Local Review, 7.30—See Frankfurt.  
**TOULOUSE (Radio-Toulouse)**, 7.0—Concert.  
**TURIN**, 7.0—News; Records, 7.30—Government Notes, 7.45—"The Barber of Seville"—Opera in Two Acts (Rossini). In the Interval: Talk and Art Notes.  
**VATICAN CITY**, 7.0-7.15—Religious Information in Italian.  
**VIENNA**, 7.0—Old Viennese Folk Music (contd. from 6.50), 7.45—See Turin.  
**WARSAW**, 7.0—Station Orchestra. Conductor: Nawrot, 7.45—See Turin.

## 8 p.m.

**ATHLONE**, 8.10—Sydney Green (Piano-forte), 8.30—Song and Stories by Cathal O'Bryne, 8.45—Irish Music. Station Orchestra.  
**BELGRADE**, 8.0—Philharmonic Orchestra (contd. from 7.30).  
**BERLIN**, 8.0—Variety (contd. from 7.10).  
**BEROMÜNSTER**, 8.5—News. —See 8.30 Monte Ceneri.  
**BORDEAUX-LAFAYETTE**, 8.0—Talk: Wine, 8.15—Records, 8.45—"Les Chevaux de Bois"—Comedy (Antoine and Lery).  
**BRESLAU**, 8.0—See 7.10 Munich.  
**BRNO**, 8.0—"At the Castle of Kroneriz"—Play (contd. from 7.10).  
**BRUSSELS (No. 1)**, 8.0—Orchestra. Light Music. Conductor: Walpot. Wigy (Violin). Overture, "La petite mariée" (Lecocq). Selection, "Les dragons de Villars" (Mailart). Première valse (Ackermans). Puppe und Kobold (Armandola). Violin Solo (Bazini). Ronde de nuit (Boellmann). Campana a sera (Billi). Tarnade (Brusselmans). Intermezzo (Caludi). Rigaudon (Chaminade). Gold and Silver (Lehár). In the interval at 8.30—Results of the Draw of the Colonial Lottery.  
**BRUSSELS (No. 2)**, 8.0—Radio Orchestra. Conductor: Gason. Selection, "Werther" (Massenet). Danses villageoises (Grétry). Serenade in D (d'Agrèves). Suite arabe (Dijck), 8.45—Film and Book Review.  
**BUDAPEST**, 8.0—"Singing Bird"—Fairy Play (contd. from 6.45), 8.30—News, 8.50—Opera House Orchestra. Conductor: Fridl.  
**COLOGNE**, 8.0—"Lanzelot und Sanderein"—Play (contd. from 7.30), 8.10—Boieldieu Memorial Concert. Station Orchestra and Chamber Choir. Conductor: Kühn. Kläre Hansen (Soprano); Erna Serphos-Schott (Contralto); Kircheis (Tenor). Paul Gehly (Announcer). Extracts, "La dame blanche". Extracts, "Jean de Paris."

**DEUTSCHLANDSENDER**, 8.0—Chopin Concert (contd. from 7.15), 8.30—"Take your Seats"—Humorous Scenes (Stimmel).  
**FRANKFURT**, 8.0—"Der Opernball"—Opera (contd. from 7.30).  
**HAMBURG**, 8.0—Station Dance Band and Soloists. Conductor: Bolt.  
**HILVERSUM**, 8.0—The Concertgebouw Orchestra and Tito Schipa (Tenor) (contd. from 7.55).  
**HUIZEN**, 8.0—Anniversary Programme (contd. from 7.40).  
**KALUNDBORG**, 8.0—Concert (contd. from 7.10).  
**KÖNIGSBERG**, 8.0—"Amber the World Over"—Play (Greiser) (contd. from 7.30), 8.25—"Folk Songs of the Nations"—Station Choir. Conductor: Firschow.  
**LEIPZIG**, 8.0—"Hein Goden wind"—Play (Fock-Balzer).  
**LYONS (La Doua)**, 8.30—Chamber Music. Conductor: Witkowski.  
**MONTE CENERI**, 8.0—Popular Swiss Airs. Station Orchestra, 8.30—Choir and Carillon—Concert by the "Canterini del Ceresio", conducted by Filippello. Choir: (a) L'amor patrio del Ticinese, (b) Che bel nasin. Carillon. Cradle Song. Choir: Vós da la sira (Filippello-Pocobelli). Carillon. Tenor and Soprano Duets: (a) Quando arriverá a Balerna, (b) Scia, scia,

Pepina bèla l Carillon. Suite, Vigilia di sagra (Filippello-Borilli). Carillon. Barcarolle (Filippello-Pocobelli). Choir: Quell'uselin dal bosch. Carillon.

**MOSCOW (No. 1)**, 8.0—German Programme: Talk: The Younger Generation; Letter-Box, 8.55—Chimes from the Kremlin.  
**MUNICH**, 8.0—"Voice Magicians" (contd. from 7.10).  
**OSLO**, 8.0—Talk (contd. from 7.50). 8.10—Southern Norway in Music, 8.40—News.  
**PARIS (Poste Parisien)**, 8.0—Talk, 8.15—Weekly Review by Max Régner, 8.20—"Prenez garde à la peinture" (The Late Christopher Bean)—Comedy in Three Acts (Fauchois). In the interval at 8.40 Exchange.

**PARIS (PTT)**, 8.0—News, 8.10—Records, 8.30—"La Diva"—Comic Opera in Three Acts (Offenbach). National Orchestra and Soloists. Conductor: Desormière.  
**PARIS (Radio-Paris)**, 8.0—The Foundations of French Music" Concert. Part I—Lecture-Recital by Gustave Samazeuilh and Yvonne Gall; Berlioz, Gounod and Massenet. Part 2—Instrumental Music. Part 3—Vocal Quartet. In the interval at 8.30 Press Review.

**PRAGUE**, 8.0—See 7.45 Turin. In the interval, News.  
**RADIO-NORMANDIE**, 8.0—Opera and Operetta Extracts.  
**ROME**, 8.0—Madami Quartet (contd. from 7.45); "Wood Violet"—One-Act Play (Molnar).  
**RUYSSELEDE**, 8.0—See Brussels No. 2, 8.45—Records.  
**SOTTENS**, 8.0—News, 8.10—Act II, "Carmen"—Opera (Bizet), from the Grand Theatre.

**STOCKHOLM**, 8.5—Septet in E flat (Beethoven), 8.45—News.  
**STRASBOURG**, 8.0—News in German; Records, 8.30—Station Orchestra. Conductor: De Villers. Bracony (Songs). Part I: Haydn Music. Symphony. Two Arias from "The Seasons." Part II: Mchul Music. Overture, "Joseph." Song: Romance from "Ariodant." Selection from "La Chasse du Jeune Henri." Part III: Belgian Music. Procession (de Boeck). Réve (de Boeck). Song: L'Eglise paysanne (de Boeck). Phrygian Suite (Brusselmans).

**STUTTGART**, 8.0—See 7.30 Frankfurt.  
**TOULOUSE (Radio Toulouse)**, 8.0—Folk Music, 8.15—Choirs, 8.30—Military Music.  
**TURIN**, 8.0—"The Barber of Seville"—Opera (Rossini) (contd. from 7.45).  
**VIENNA**, 8.0—See 7.45 Turin, 8.25—Topical Report.  
**WARSAW**, 8.0—See 7.45 Turin. In the interval at 8.25, News.

## 9 p.m.

**ALGIERS**, 9.5—News, 9.10—Oriental Music, 9.55—News.

**ATHLONE**, 9.0—Irish Songs by P. MacGréine, 9.15—Hardebeck (Piano-forte) and F. O'Higgins (Fiddle), 9.45—Irish Songs, by M. Noonan.

**BELGRADE**, 9.0—News, 9.10—Philharmonic Orchestra, 9.30—Dance Records.

**BERLIN**, 9.0—News, 9.20—Krolop Dance Band.

**BEROMÜNSTER**, 9.0—To be Announced, 9.15-9.35—Weekly Review for Swiss Abroad.

**BORDEAUX-LAFAYETTE**, 9.0—"Les Chevaux de Bois"—Comedy (contd. from 8.45).

**BRESLAU**, 9.0—News, 9.25—Records: Caruso Songs, 9.30—Bach Recital. Burket (Organ).

**BRUSSELS (No. 1)**, 9.0—Lottery Results; Talk: The Crisis, 9.15—Spanish Music. Orchestra. Conductor: Gason. Mittmann and Béthune (Violin). Spanish Caprice (Rimsky-Korsakov). Spanish Dances (Fallá). Dances (Turina). Violin Solos. Spanish Dances (Sarasate). Spanish Dances (Granados). In the Intervals, Lottery Results.  
**BRUSSELS (No. 2)**, 9.0—Orchestra. Conductor: Walpot. Overture, "Die schöne Müllerin" (Micheils). Polka (Desormes). Selection, "Rip van Winkle" (Planquette). Silver Bells (Ramthor). Tango (Hurt). Serenade (Löhrr). Selection, "The Tales of Hoffmann" (Offenbach), 9.50—Angelus.

**BUDAPEST**, 9.0—Orchestra (contd. from 8.50).  
**COLOGNE**, 9.0—News; Weekly Review, 9.20—See Berlin.

**DEUTSCHLANDSENDER**, 9.0—News; Announcements, 9.30—Talk: National Cures for National Ills.

**FRANKFURT**, 9.0—News, 9.20—Talk on Records: America, 9.30—String Quartet in D (Beethoven), by the Lenzewski Quartet.

**HAMBURG**, 9.0—News, 9.20—Talk on Records: America, 9.30—Station Dance Band and Soloists. Conductor: Bolt.

**HILVERSUM**, 9.0—Concertgebouw Orchestra and Tito Schipa (Tenor) (contd. from 7.55).

**HUIZEN**, 9.0—Anniversary Programme (contd. from 7.40), 9.40—News, 9.50—Records.

**JUAN-LES-PINS (Radio Côte d'Azur)**, 9.0—News, 9.15—Literary and Musical Programme.

**KALUNDBORG**, 9.0—Concert (contd. from 7.10), 9.15—News, 9.30—Literary Discussion, 9.45—Warny Dance Band.

**KÖNIGSBERG**, 9.5—News; Sports Notes, 9.30—To be announced.

**LEIPZIG**, 9.0—"Hein Godenwind"—Play (Fock-Balzer) (contd. from 8.0), 9.10-9.20—News; Sports Notes.

**MOSCOW (No. 1)**, 9.5—Talk in French: Bolshevik Promise and Fulfillment.

**MUNICH**, 9.0—News; Sports Notes, 9.20—Talk on Records: America, 9.30—To be announced.

**OSLO**, 9.0—Topical Talk, 9.15-9.45—Talk: Southern Norway in Humour.

**PARIS (Poste Parisien)**, 9.0—"Prenez garde à la peinture" (The Late Christopher Bean)—Comedy (Fauchois) (contd. from 8.20).

**PARIS (PTT)**, 9.0—"La Diva"—Comic Opera, (Offenbach) (contd. from 8.30).

**PARIS (Radio-Paris)**, 9.0—Concert (contd. from 8.0). In the Interval at 9.15, News; Report by Paul Reboux.

**PRAGUE**, 9.0—See 7.45 Turin.

**RADIO-NORMANDIE**, 9.0—Concert.

**ROME**, 9.0—Variety; Dance Music.

## 10 p.m.

**ATHLONE**, 10.0—Variety, 10.30—News, 10.40—Records.

**BERLIN**, 10.0—Krolop Dance Band.  
**BORDEAUX-LAFAYETTE**, 10.0—"Les Chevaux de Bois"—Comedy (contd. from 8.45).

**BRESLAU**, 10.0—Organ Recital.

**BRUSSELS (No. 1)**, 10.0—News, 10.10—Request Records, 10.20—Lottery Results; Request Records.

**BRUSSELS (No. 2)**, 10.0—News, 10.10—Records: Selection, "La Bohème" (Puccini).

**BUDAPEST**, 10.0—Orchestra (contd. from 8.50), 10.10—Kovacs (Piano-forte). English Suite (Bach). Sonatina in A (Kuhlau). Two Intermezzos (Brahms). Three Brazilian Dances. Barcarolle (Milhaud).

**COLOGNE**, 10.0—See Berlin.

**DEUTSCHLANDSENDER**, 10.0—The World's Best Dance Bands (on Records).

**FRANKFURT**, 10.0—See Munich.

**HAMBURG**, 10.0—Milder Quartet. Quartet in D minor—"Death and the Maiden" (Schubert). Quartet in G (Haydn).

**HILVERSUM**, 10.0—Concertgebouw Orchestra and Tito Schipa (Tenor) (contd. from 7.55), 10.10—Records, 10.40—News, 10.50—Dajos Bela's Orchestra.

**HUIZEN**, 10.0—Records.

**KALUNDBORG**, 10.0—Warny Dance Band.

**KÖNIGSBERG**, 10.0—See Munich.

**MADRID (EAQ)**, 10.15—News, 10.30—Spanish Music; Wireless Notes.

**MOSCOW (No. 1)**, 10.5—Talk in Spanish: Russian Metal-Workers.

**MUNICH**, 10.0—Josef Schwarz Dance Band.

**PARIS (Poste Parisien)**, 10.0—"Prenez garde à la peinture" (The Late Christopher Bean)—Comedy (Fauchois) (contd. from 8.20), 10.20—News; Exchange.

**VIENNA**, 10.0—See 7.45 Turin, 10.40—Friedl Schick Dance Band, from the Café Palmhof, Heinrich Lamp and Viktor Stiernau (Songs).  
**WARSAW**, 10.0—See 7.45 Turin, 10.45—Light Music.

## 11 p.m.

**BARCELONA**, 11.0—Military Band.  
**FRANKFURT**, 11.0—See Stuttgart.

**HAMBURG**, 11.0—"Suites." Station Orchestra and Choir. Conductors: Maass and Gregor. Cimarosa Suite (Paulsen). German Folk Song Suite (Paulsen). Orchestral Suite, "Idomeneo" (Mozart-Clausius).

**HILVERSUM**, 11.0-11.40—Dajos Bela's Orchestra.

**HUIZEN**, 11.0—Records.  
**KALUNDBORG**, 11.0-11.30—Warny Dance Band.

**MADRID (EAJ7)**, 11.0—Relay from a Theatre, 11.45—News.

**PARIS (PTT)**, 11.0—Dance Music; News.

**PARIS (Radio-Paris)**, 11.0—Dance Music.

**PITTSBURGH**, 11.0—Dan and Sylvia, 11.15—To be announced, 11.30—Kings and Queens of Sport, 11.45—Lowell Thomas.

**RADIO - NORMANDIE**, 11.0—Military Band, 11.30—Variety Programme.

**STUTTGART**, 11.0—Serenade.

**TOULOUSE (Radio-Toulouse)**, 11.0—Concert.

**VIENNA**, 11.0—Dance Music.

**ZEESEN**, 11.0—See Hamburg.

## 12 midnight

**BARCELONA**, 12.0—News.

**FRANKFURT**, 12.0—See Stuttgart.

**MADRID (EAJ7)**, 12.0—Chimes.

**MADRID (EAQ)**, 12.0—Variety.

**PITTSBURGH**, 12.0—Amos 'n'



Horowitz, who plays Tchaikovsky's first concerto in the Kalundborg programme at 7.10 p.m.

**RUYSSELEDE**, 9.0—News in Flemish.  
**SOTTENS**, 9.0—Dance Records.

**STOCKHOLM**, 9.0—Orchestra. Overture, "Die Fledermaus" (Strauss). (Petite Suite de Concert (Coleridge-Taylor). Preludes in C Sharp minor and G minor (Rachmaninov). Moonlight on Manhattan (Alter). Lover (Rodgers). Metropolis (Grofé).

**STRASBOURG**, 9.0—Orchestra (contd. from 8.30). In the Interval at 9.30, Press Review.

**STUTTGART**, 9.0—News, 9.20—Talk on Records: America, 9.30—Dance Records.

**TOULOUSE (Radio-Toulouse)**, 9.0—"La Fille de Madame Angot"—Operetta in Three Acts (Lecocq) (Concert Version).

**TURIN**, 9.0—"The Barber of Seville"—Opera (Rossini) (contd. from 7.45).

**VIENNA**, 9.0—See 7.45 Turin. In the Interval at 9.35, News.

**WARSAW**, 9.0—See 7.45 Turin. In the Interval at 9.40, Talk on Poland.

**PARIS (PTT)**, 10.0—"La Diva"—Comic Opera (Offenbach) (contd. from 8.30), 10.30—Dance Music.

**PARIS (Radio-Paris)**, 10.0—Concert (contd. from 8.0), 10.30—Dance Music.

**PITTSBURGH**, 10.0—Stanleigh Malotte, 10.15—KDKA Kiddies' Klub, 10.30—The Singing Lady, 10.45—Orphan Annie.

**PRAGUE**, 10.0-10.45—See 7.45 Turin.  
**RADIO-NORMANDIE**, 10.0—Concert.

**ROME**, 10.0—News.

**STRASBOURG**, 10.0—Orchestra. Conductor: Théodore. Waltz, Sphärenklänge (Jos. Strauss). Selection, "The Mastersingers" (Wagner). The Musical Box (Blauw). Overture, "Nebuchadnezzar" (Verdi). First Movement, "Unfinished" Symphony (Schubert). The Student Passes by (Ibenez).

**STUTTGART**, 10.0—See Munich.

**TOULOUSE (Radio-Toulouse)**, 10.0—Concert.

**TURIN**, 10.0—"The Barber of Seville"—Opera (Rossini) (contd. from 7.45), 10.45—(approx.) News in Italian and Spanish.

Andy, 12.15—Lois Miller and Reed Kennedy, 12.45—Shirley Howard.

**RADIO - NORMANDIE**, 12.0—Dance Music.

**SCHENECTADY**, 12.25—Exchange.

**STUTTGART**, 12.0—Serenade.

**TOULOUSE (Radio-Toulouse)**, 12.0—News, 12.5—"Au caveau de minuit"—Radio Fantasy, 12.15-12.30—Welsh Rhapsody (German) by the Station Orchestra.

**ZEESEN**, 12.30—"Red Earth"—Literary and Song Sequence from Westphalia (Klinger).

## 1 a.m. (Friday)

**MADRID (EAJ7)**, 1.0—Dance Music.  
**PARIS (Radio-Colonial)**, 1.0—Concert.

**PITTSBURGH**, 1.0-6.0—Popular Programme.

**RADIO - NORMANDIE**, 1.0—News, 1.10—Dance Music.

**SCHENECTADY**, 1.0-4.0—Popular Programm.



NATIONAL

For Time Signals, see Monday 10.15 a.m. (Droitwich)—Service. 10.30 (Droitwich)—Weather forecast. 10.45—Child Welfare Talk. "Preparing the Way for Weaning." A Doctor. 11.0—Cinema Organ (Reginald New). 11.30 (except Scottish)—For Schools: Music and Movements for Infants. 11.30 (Scottish)—Reading. 11.50—The New Victoria Cinema Orchestra. 12.30 p.m.—B.B.C. Dance Orchestra. 1.15—Orrea Pernel (Violin). Beatrice Hewitt (Pianoforte). 2.0-3.15 (except Scottish)—For Schools: Reception Test. 2.5—Life and Work. 2.30—Music. 3.0—Friday Afternoon Story. 2.0 (Scottish)—Studio Orchestra. 2.30-3.15 (Scottish)—Regional. 3.15—To Unemployed Clubs. John Hilton: "This and That." 3.35—Herring Fishing Bulletin. 3.40—The B.B.C. Northern Orchestra. Overture, Fingal's Cave (Mendelssohn). Waltz, Little Cupid's Dances (Gung'l). Four Norwegian Dances (Grieg). Suite, Children's Games (Bizet). 4.30—The Hotel Metropole Orchestra. 5.15—The B.B.C. Dance Orchestra. 6.0—"The First News." 6.25—Bulletin of Special Notices. 6.30—Keyboard Talk: Beethoven. Professor D. F. Tovey, Mus. Doc. 6.50—"In Your Garden." C. H. Middleton. 7.10—"From Plainsong to Purcell." The Foundations of English Music. 7.30—Shakespearean Music. The B.B.C. Orchestra (Section E). Overture, The Merry Wives of Windsor (Nicolaï). Macbeth Music (Bantock). Suite, Scenes Dramatiques (Massenet). Evening in the Forest, Country Dance (As You Like It) (Quilter). Military March (Othello) (Coleridge-Taylor). 8.30—Entertainment Hour. Harry Leader and his Band. Matthew Boulton, assisted by Margaret Yarde, in his own comedy, "His rest Day." Where is it? Queries in Quatrain. An Aural Problem for Listeners. Devised by Gerald Cock. Leonard Henry (Comedian). 9.30—"The Second News." 10.0—Causes of War—2. Sir Norman Angell. 10.15—Stanford Robinson and Max Kester present the Famous Ballerina Lydia Lopokova in "Imperial Ballet" with the B.B.C. Theatre Orchestra. 11.10—Extract from "Gulliver's Travels" by Jonathan Swift, read by Patric Curwen. 11.15-12.0—Dance Music. Harry Roy and his band, relayed from the May Fair Hotel.

REGIONAL

For Time Signals, see Monday 10.15-10.45 a.m. (except Midland)—National. 10.45—The Western Studio Orchestra. 11.45 (except Belfast)—Organ Recital. 11.45 (Belfast)—Organ Recital. 12.15 p.m.—Records. 12.45—The Coventry Hippodrome Orchestra. 1.45—Records. 2.30 (Scottish from 2.55)—The Scottish Studio Orchestra. 2.30-2.55 (Scottish)—For Schools: Reception Test. 2.35—Geography. 3.15—Records: Brahms. 3.45—The B.B.C. Midland Orchestra. 4.45—Records: Variety. 5.15—The Children's Hour. 6.0—"The First News." 6.30 (London, Midland, North)—The B.B.C. Midland Orchestra. Miranda Suggen (Soprano). 6.30 (Scottish)—Gardening Talk. 6.30 (West)—The Studio Orchestra. Arthur Walter (Baritone). 6.30 (Belfast)—Ballad Concert. 6.45 (Scottish)—"Next week you'll Hear." 6.55 (Scottish)—The Studio Orchestra. Jean Craig (Mezzo-Soprano). 7.0 (West)—One-act Comedy. 7.0 (Belfast)—For Farmers. 7.15 (Belfast)—The Romy Orchestra. 7.30 (London)—Students' Songs. 7.30 (Midland)—Records: Fanny Davies. 7.30 (North)—For Farmers. 7.30 (West)—Records. 7.45 (Belfast)—Belfast Philharmonic Chorus and Orchestra. Conductor, E. Godfrey Brown. Stuart Robertson (Baritone). Gaspar Cassado (Violoncello). 7.45 (West)—Sutton Netherwood. A Grand Concert. 7.45 (Midland)—Variety, including Billy Cotton and his Band, relayed from the Grand Theatre, Derby. 7.50 (North)—Frank A. Terry presents "Pleasure on Parade." 7.50 (Scottish)—For Farmers. 8.0 (London)—The Vario Trio. 8.0 (Scottish)—S.C.W.S. Prize Brass Band. 8.30 (except Belfast)—"Speeches that never Happened." 2. 8.45 (except Belfast)—Concert of Contemporary Music. Prokofiev. The B.B.C. Symphony Orchestra (Section D), conducted by Serge Prokofiev. Symphony No. 3. Chout, Suite du Ballet. 9.0 (Belfast)—"Friday Morning." A Play by Val Gielgud. 10.0—News Summary. 10.10 (except Scottish)—Dance Records. 10.10 (Scottish)—Scottish Dance Music. The Studio Orchestra. 10.30-12.0 (Midland till 11.15)—Harry Roy and his Band.

EMPIRE SUMMARY

For wavelengths, see S.W. List Transmission 1 (GSD, GSB) 7.15 a.m.—Big Ben. Surprise Item.\* 7.30—Recital by David Wise (Violin), Maurice Vinden (Organ). 8.15—William Walker presents "More Bits of Ballyhoo."\* 9.0—Empire News and Announcements. Fruit Market Notes. 9.20—Close Down. Transmission 2 (11.0—12.30 GSF, GSG; 12.30—2.0 GSF, GSB). 11.0 a.m.—Big Ben. Cinema Organ (Reginald New). 11.30—The Western Studio Orchestra. 11.45—(See 8.15 a.m.)\* 12.30 p.m.—B.B.C. Dance Orchestra. 1.15—Coventry Hippodrome Orchestra. 1.40—Empire News, Announcements. 2.0—Close Down. Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSE, GSB). 2.15—Big Ben. Students' Songs. The Wireless Male Chorus. Stanley Riley (Bass). 2.45—The Scottish Studio Orchestra. 3.15—"Getting the Bird." No laughing matter, by Edgar Skeet. 3.30—Instrumental Records. 3.45—"Alice Meets Humpty Dumpty." Being one of "Alice's Adventures through the Looking-Glass," by Lewis Carroll, arranged for Broadcasting by Cecil Madden. 4.0—The Belfast Wireless Orchestra. Anna Reid (Soprano). 5.0—Empire News, Announcements. 5.20—The B.B.C. Dance Orchestra. 5.45—Close Down. Transmission 4 (GSD, GSB) 6.0 p.m.—Big Ben. Empire News and Announcements. Fruit Market Notes. 6.20—Variety.\* 6.50—The B.B.C. Midland Orchestra. 7.5—"Getting the Bird."\* 7.20—Orchestra (contd.). 7.30—(See 2.15 p.m.). 8.0—Talk: "Music and the Ordinary Listener." Sir Walford Davies. 8.20—Interlude.† 8.30—Entertainment Hour. 9.30—Light Orchestral Concert.† 9.37—(See 3.45 p.m.). 9.52—Orchestral Concert (contd.).† 10.0—Empire News, Announcements. 10.20—Dance Music.† 10.30—Dance Music. 10.45—Close Down. Transmission 5 (GSC, GSA) 11.0 p.m.—Big Ben. Henry Cummings (Baritone), Maurice Vinden (Organ). 11.55—(See 8.15 a.m.)\* 12.40 a.m.—Empire News, Announcements. 1.0—Close Down. \* Electrical Recording. † Gramophone Records.

FRIDAY Oct. 19

PRINCIPAL EVENTS

CONCERTS

2.30 p.m. Kalundborg: Radio Orchestra. 2.40 " Huizen: Popular orchestral. 3.0 " Leipzig, Deutschlandsender: Symphony orchestra. 5.0 " Brussels No. 1: Vreuls programme. 7.15 " Cologne and German stations: Symphony No. 6 (Straesser). 7.15 " Warsaw: Philharmonic Orchestra. 8.0 " Brussels No. 2: Symphony No. 8 (Beethoven). 8.0 " Prague: Conductor, Carmen Studer-Weingartner. 8.0 " Vienna: Brahms, Tchaikovsky. 8.15 " Huizen: The "Wiener Sängerknaben." 8.15 " Königsberg: Opera House Orchestra. 8.20 " Beromünster: Radio Orchestra. 8.45 " Radio-Paris: Operatic selections. 9.15 " Brussels No. 1: French opera and operetta music. 9.20 " Berlin: Orchestral and instrumental. 9.40 " Kalundborg: Popular French music. 10.0 " Frankfurt, Stuttgart: Ballet music. 10.15 " Budapest: Cigány Band Rigo.

OPERAS, OPERETTAS

6.30 p.m. Budapest: Relay from Opera House. 7.0 " Stockholm: "The Merry Widow" (Lehár). 7.45 " Rome, etc.: "The Duchess of Bai Tabarin" (Lombardo). 11.0 " Frankfurt, Stuttgart: "The Barber of Bagdad" (Cornelius) (gramophone).

RECITALS

6.30 p.m. Brussels No. 1: Russian pianoforte music. 8.10 " Cologne: Max Reger organ music. 8.10 " Hilversum: Song and pianoforte. 8.30 " Strasbourg: Lotte Lehmann. 9.0 " Stockholm: Instrumental and vocal.

PLAYS AND READING

7.0 p.m. Sottens: "Les Femmes Savantes" (Molière). 7.10 " Kalundborg: "Madame Sans-Gêne" (Sardou). 8.0 " Radio-Paris: Pages from Dickens. 8.30 " Paris PTT: "Guibour"—a mystery of the Middle Ages.

DANCE MUSIC

9.30 p.m. Breslau; 9.50, Vienna; 10.10, Brussels No. 2; 10.25, Brussels No. 1; 10.30, Paris PTT, Radio-Paris.

MISCELLANEOUS

9.20 p.m. Breslau: The Australia-England Air Race (relayed from London).

Hours of Transmission in Greenwich Mean Time

6 a.m.

BERLIN, 6.0—News. 6.10—See Hamburg. BRESLAU, 6.0—News. 6.10—See Leipzig. COLOGNE, 6.0—News; Hymn; Records. DEUTSCHLANDSENDER, 6.0—News. 6.10—See Hamburg. FRANKFURT, 6.0—See Stuttgart. HAMBURG, 6.0—News. 6.10—Orchestra. KÖNIGSBERG, 6.0—News. 6.10—See Hamburg. LEIPZIG, 6.0—News. 6.10—Orchestra. MUNICH, 6.10—Records. PARIS (Radio-Paris), 6.45—Gym. PRAGUE, 6.0-6.30—Music; News. STUTTGART, 6.0—Records. WARSAW, 6.0—Gym. 6.7—Records; News. 6.50—Light Music.

7 a.m.

BERLIN, 7.0—Gym. 7.20—Records. BRESLAU, 7.0—Hymn; Motto; Operetta Records. COLOGNE, 7.0—Records. 7.20-7.35—Gym. HAMBURG, 7.10-7.40—Records. HILVERSUM, 7.40—Records. HUIZEN, 7.40—Records. KALUNDBORG, 7.30—Service. KÖNIGSBERG, 7.0—Prayers. 7.30—Gym. LEIPZIG, 7.0—Gym. MUNICH, 7.0-7.30—Records. PARIS (Poste Parisien), 7.10—Fanfare; Records; News. PARIS (Radio-Paris), 7.0—Records. 7.15—Press Review. 7.45—Gym. STUTTGART, 7.0—Records. TURIN, 7.0-7.15—News.

8 a.m.

BERLIN, 8.20—For Women. BRESLAU, 8.0—News. DEUTSCHLANDSENDER, 8.40—Reading. HILVERSUM, 8.0—Records. HUIZEN, 8.0—Records. KÖNIGSBERG, 8.0—Talk in English: English Religious Life. LEIPZIG, 8.20—Records. PARIS (Poste Parisien); 8.0—Records; News. 8.45—Cookery Hints. PARIS (Radio-Paris), 8.0—Records.

9 a.m.

BERLIN, 9.0—News. 9.15-9.45—For Schools. BRESLAU, 9.15—See Deutschlandsender. 9.45—Records. COLOGNE, 9.0—News. 9.10—For Schools. 9.45—Vocal and Instrumental. DEUTSCHLANDSENDER, 9.0—News. 9.15—"Ferdinand Schichau"—Play (Randolf-Schmalnauer). FRANKFURT, 9.0—News. 9.10—"Heinrich von Kleist"—Literary Sequence. HAMBURG, 9.15—See Deutschlandsender. 9.50—News. HILVERSUM, 9.0—Records. 9.40—Religious Programme. HUIZEN, 9.40—Records. KÖNIGSBERG, 9.40—News. LEIPZIG, 9.0—Exchange; Announcements. 9.15-9.45—See Deutschlandsender. MUNICH, 9.15—See Stuttgart. PRAGUE, 9.5—News; Records. 9.30—For Schools. STUTTGART, 9.0—News. 9.15—"Heinrich Schliemann, Archaeologist"—Sequence (Lorenz). 9.45—Folk Songs.

10 a.m.

BERLIN, 10.25-10.30—Exchange. BRESLAU, 10.0—Records; News. COLOGNE, 10.0—Vocal and Instrumental. 10.30—Records. DEUTSCHLANDSENDER, 10.0—Gym. 10.50—Announcements. FRANKFURT, 10.0—Records; Exchange. HAMBURG, 10.0—Stories in Dialect. 10.30—Wind Band. HILVERSUM, 10.0—Recitations. 10.10—V.A.R.A. Orchestra. Conductor: De Groot. Gobets (Tenor). In the Interval at 10.40: Recitations. HUIZEN, 10.0—Records. 10.10—Concert. 10.40—Records. KALUNDBORG, 10.15—"The Jutland Festival"—Radio Report. KÖNIGSBERG, 10.30—See Hamburg. LEIPZIG, 10.0—Records. 10.30—News. MUNICH, 10.15—News; Records. PRAGUE, 10.5—For Schools. STUTTGART, 10.0—Folk Songs. 10.15—Post Office Propaganda; Records. 10.45—For Farmers. TURIN, 10.30—String Orchestra. VATICAN CITY, 10.0-10.15—Religious Information in German.

11 a.m.

BERLIN, 11.0—See Hamburg. BEROMÜNSTER, 11.0—Lieder Records. 11.29—News. 11.40—Orchestra. BRESLAU, 11.0—Light Music. Conductor: Arndt. BUDAPEST, 11.5—Weidinger Chamber Orchestra. In the Interval at 11.30: News. COLOGNE, 11.0—Records: Sound-Film Music. 11.45—Announcements.

12 noon

BERLIN, 12.0—Midday Echoes. 12.15—Records. BEROMÜNSTER, 12.0—Kruno Orchestra. 12.25—Exchange. BRESLAU, 12.0—Bunzlau Municipal Orchestra. Conductor: Arndt. BRUSSELS (No. 1), 12.0—Light Music. Conductor: Douliez. BRUSSELS (No. 2), 12.0—Records. BUDAPEST, 12.0—Weidinger Chamber Orchestra. 12.30—Police Band. COLOGNE, 12.0—Light Music. Conductor: Eysoldt. DEUTSCHLANDSENDER, 12.0—Records. 12.45—News.

FRANKFURT, 12.0—News. 12.15—Records. HAMBURG, 12.0—Exchange. 12.20—Light Music. HILVERSUM, 12.0—Records. 12.10—Kovacs Lajos' Orchestra. HUIZEN, 12.0—Light Music (contd. from 11.55). KALUNDBORG, 12.0—Andersen String Ensemble. KÖNIGSBERG, 12.5—Records of Songs and Dances. LEIPZIG, 12.0—News. 12.10—Marches and Waltzes. Station Orchestra. Conductor: Blumer. MONTE CENERI, 12.5-12.30—Records. MUNICH, 12.0—Orchestra (contd. from 11.0). 12.15—News. 12.25—Records. OSLO, 12.45—Exchange. PARIS (Poste Parisien), 12.0—Exchange. 12.5—Boieldieu and Lacombe Records. 12.25—News. 12.35—New Records. PARIS (PTT), 12.15—National Orchestra. Conductor: Rosenthal. PARIS (Radio-Paris), 12.0—Talk for Jews. 12.30—Goldy's Orchestra. PRAGUE, 12.0—Chamber Orchestra (contd. from 11.35). 12.35—Labour Exchange. 12.45—Records; Exchange. SOTTENS, 12.0—Talk. 12.10—Exchange. 12.15—Small Radio-Lausanne Orchestra. Conductor: Moser. Overture, "Figaro" (Mozart). Minuet and Finale, Symphony in B (Haydn). Sinfonietta for Strings (Jensen). STOCKHOLM, 12.0—Danish for Schools. 12.30—Accordion; Reading. STUTTGART, 12.0—News. 12.15—Records. TURIN, 12.0—Announcements. 12.5—Malatesta Chamber Orchestra. In the Interval at 12.30: Records; Exchange. WARSAW, 12.0—News; Records.



FRIDAY Oct. 19

1 p.m.

ATHLONE, 1.30—Exchange; Records.  
 BERLIN, 1.0—News. 1.15—Songs and Pianoforte.  
 BRESLAU, 1.5—Exchange. 1.10—Announcements.  
 BRUSSELS (No. 1), 1.0—News. 1.10—Records; Songs.  
 BRUSSELS (No. 2), 1.0—News. 1.10—Orchestra. Conductor: André Gras (Pianoforte).  
 BUDAPEST, 1.0—Police Band.  
 COLOGNE, 1.0-1.45—Light Music. Small Station Orchestra. Conductor: Eysoldt.  
 FRANKFURT, 1.0—Records. 1.15—News. 1.30—Industrial Report. 1.45—Exchange.  
 HAMBURG, 1.0—Light Music. 1.15—News. 1.30—Orchestral Records.  
 HILVERSUM, 1.0—Kovacs Lajos Orchestra. In the Interval: Records.  
 HUIZEN, 1.0—Light Music (contd. from 11.55). 1.40—Records.  
 KÖNIGSBERG, 1.0—News; Records.  
 LEIPZIG, 1.0—News. 1.15-1.35—Talk.  
 MUNICH, 1.0—News. 1.20—Reading. 1.50—"Swabian Women" (Clara von der Traisen).  
 PARIS (Poste Parisien), 1.5—Exchange. 1.15—Records. 1.30—Exchange. 1.35—Records.  
 PARIS (PTT.), 1.0—News.  
 PARIS (Radio-Paris), 1.0—Goldy's Orchestra. In the Interval at 1.20: Exchange.  
 STOCKHOLM, 1.0—Light Music.  
 STUTTGART, 1.0-1.45—Records.  
 TURIN, 1.0—Orchestra (contd. from 12.5). 1.15-1.25—Exchange.

2 p.m.

ATHLONE, 2.0-2.30—Records.  
 BERLIN, 2.0-2.30—Exchange.  
 BEROMÜNSTER, 2.30—Records.  
 BRESLAU, 2.10—Russian Songs. 2.40—Talk.  
 COLOGNE, 2.15—Talk: The Reichsbank. 2.30—Exchange. 2.45—Talk: The Bayreuth Festival.  
 DEUTSCHLANDSENDER, 2.0—Exchange. 2.15—For Women. 2.40—Records.  
 FRANKFURT, 2.0—Chamber Music. 2.15—Talk.  
 HAMBURG, 2.0—Exchange.  
 HILVERSUM, 2.10—Talk. 2.30—Records.  
 HUIZEN, 2.0—Records. 2.40—K.R.O. Orchestra. Conductor: Gerritsen. Concerto grosso No. 12 (Handel). Harpsichord Concerto in A, No. 3 (Rameau). Toccata, Bourée and Gigue (Scarlati-Casella).  
 KALUNDBORG, 2.30—Radio Orchestra. Conductor: Gröndahl. Agnes Harpsøe (Songs). Overture, "Gustave III" (Auber). Selection, "Miss Decima" (Audran). Waltz (Waldteufel). Andante con moto and Adagio (Guk). Rhapsodic Dance (Coleridge-Taylor). Songs (Glaeser). Overture, "Carnival in Venice" (Thomas). Slav Dance (Glazunov). Selection, "Gretina Green" (Guiraud). Calme (Honegger). Intermezzo, "L'amico Fritz" (Mascagni). Danse macabre (Saint-Saëns). Serenade (Saint-Saëns). Symphonic Dance (Grieg). Prelude, "Peer Gynt" (Grieg).  
 KÖNIGSBERG, 2.0—Exchange. 2.15—Riddles. 2.40—For Women.  
 LEIPZIG, 2.0—Lotte Sitt (Violin). Sammler (Pianoforte). 2.35—Exchange.  
 MUNICH, 2.0—"Swabian Women" (contd. from 1.50). 2.30—Humorous Tales.  
 PARIS (PTT.), 2.0—Records.  
 PARIS (Radio-Colonial), 2.45—Light Music.  
 PRAGUE, 2.50—News. 2.55—Orchestra.  
 STUTTGART, 2.30—"The Swineherd"—Play after Andersen (Neisser).  
 WARSAW, 2.30—Announcements; Exchange. 2.45—Orchestra.

3 p.m.

BERLIN, 3.0—Fröhlich Orchestra.  
 BEROMÜNSTER, 3.0—Classical Concert.  
 BRESLAU, 3.0—Light Music. Conductor: Rischka.  
 COLOGNE, 3.0—See Leipzig.  
 DEUTSCHLANDSENDER, 3.0—See Leipzig.

FRANKFURT, 3.0—See Berlin.  
 HAMBURG, 3.0—See Breslau.  
 HILVERSUM, 3.0—Records. 3.40—Dressmaking.  
 HUIZEN, 3.0—K.R.O. Orchestra (contd. from 2.40). 3.20—Records.  
 KALUNDBORG, 3.0—Orchestra (contd. from 2.30).  
 KÖNIGSBERG, 3.0—Light Music. Small Station Orchestra. Conductor: Wilcken.  
 LEIPZIG, 3.0—Leipzig Symphony Orchestra. Conductor: Blumer. Krämer (Violin).  
 MONTE CENERI, 3.0—See Beromünster.  
 MUNICH, 3.0—Station Orchestra. Conductor: Kloss. Dina Grohmann (Soprano).  
 PARIS (Poste Parisien), 3.15—Exchange.  
 PARIS (Radio-Colonial), 3.0-3.45—Light Music.  
 PARIS (Radio-Paris), 3.45—Exchange.  
 PRAGUE, 3.0—Orchestra. 3.45—Czech for Germans.  
 SOTTENS, 3.0—See Beromünster.  
 STUTTGART, 3.0—See Berlin.  
 TURIN, 3.35—News. 3.45—For Children.  
 WARSAW, 3.0—For Invalids.

4 p.m.

BERLIN, 4.0—Fröhlich Orchestra.  
 BEROMÜNSTER, 4.0—Records. 4.10—Variety.  
 BRESLAU, 4.0—Light Music. Conductor: Topitz. 4.35—"Round the World for Eight Marks Fifty"—Humorous Play (Sommerfeld).  
 BRUSSELS (No. 1), 4.55—Announcements.  
 BUDAPEST, 4.0—Concert. 4.55—Farkas Cigány Band.  
 COLOGNE, 4.0—A Westphalian Legend. 4.15—Farces and Idylls for Pianoforte (Haas), by Steinkrüger. 4.30—"Gelsenkirchen"—Sequence (Moog).  
 DEUTSCHLANDSENDER, 4.0—See 3.0 Leipzig. 4.30—Records.  
 FRANKFURT, 4.0—See Berlin.  
 HAMBURG, 4.0—See Breslau. 4.30—Training Wild Animals. 4.45—For Young People.  
 HILVERSUM, 4.0—Dressmaking. 4.25—Records. 4.40—For Children.  
 HUIZEN, 4.0—Records. 4.30—K.R.O. Orchestra. Conductor: Gerritsen. Overture, "La caravane" (Grétry). Suite, "The Sleeping Beauty" (Tchaikovsky). Piece. Polish National Dance (Scharwenka).  
 KALUNDBORG, 4.0—Concert (contd. from 2.30). 4.45—Literary Talk: Karl Larsen.  
 KÖNIGSBERG, 4.0—Light Music (contd. from 3.0). In the Interval: Book Review. 4.50—For Farmers.  
 LEIPZIG, 4.0—Orchestra (contd. from 3.0). 4.30—Book Review. 4.45—Exchange. 4.55—Radio Report.  
 MONTE CENERI, 4.0—See Beromünster.  
 MUNICH, 4.0—Orchestra (contd. from 3.0). 4.30—Discussion: Photography. 4.50—Organ Music of the Baroque Period—Recital by Gustav Schoedel.  
 OSLO, 4.0—Concert.  
 PARIS (Poste Parisien), 4.50—Exchange.  
 PARIS (Radio-Paris), 4.30—English.  
 PRAGUE, 4.0—The Ondřicek Quartet. String Quartet in C (Mozart). String Quartet in A minor (Schumann).  
 SOTTENS, 4.0—See Beromünster.  
 STOCKHOLM, 4.5—For Girl Guides. 4.25—Records.  
 STUTTGART, 4.0—See Berlin.  
 TURIN, 4.0—For Children. 4.10—Songs.  
 VIENNA, 4.30—Famous Poems in Various Musical Settings. Arthur Fleischer (Baritone). Goethe's "Wanderers Nachtlied": (a) Zelter, (b) Schubert, (c) Schumann. Höpfl's "Minnelied": (a) Mendelssohn, (b) Brahms. Goethe's "Prometheus": (a) Schubert, (b) Wolf. Heine's "Die beiden Grenadiere": (a) Schumann, (b) Wagner.  
 WARSAW, 4.0—For Invalids. 4.15—Mokrzycka (Soprano) and Tolkaez (Pianoforte). 4.50—Book Review.

5 p.m.

BERLIN, 5.0—Announcements. 5.5—Book Review. 5.30—Kaiser (Baritone). Three Michelangelo Lieder (Wolf). Five Songs (Jarmach). In the Interval: Recitations.  
 BEROMÜNSTER, 5.0—For Children. 5.30—Topical Talk.  
 BRESLAU, 5.0—Talk: Music in Breslau a Century Ago. 5.20—"Wireless and the Home"—Sequence.

BRUSSELS (No. 1), 5.0—Vreuls Concert. Symphony Orchestra. Symphonic Poem, Jour de fête. Symphonic Poem, Werther. Interlude, "A Midsummer Night's Dream."  
 BRUSSELS (No. 2), 5.0—Dance Records.  
 BUDAPEST, 5.0—Farkas Cigány Band. 5.50—Talk.  
 COLOGNE, 5.0—For Young People. 5.20—English Programme: Readings of Irish Literature. 5.40—Topical Talk. 5.50—Exchange; Sports Report.  
 DEUTSCHLANDSENDER, 5.0—Discussion with a Bulgarian: The New Germany. 5.25—Talk: The Shoe-making Industry. 5.55—A Poem; Weather.

FRANKFURT, 5.0—"Horribili cribifax"—Humorous Sketch (Koch). 5.15—Talk: The German War Graves Commission. 5.30—Dialogue: The State Railways. 5.45—Light Music. Station Orchestra. Conductor: Cornelius. In the Interval: Exchange; Announcements.

HAMBURG, 5.0—"Homeland"—Programme in Dialect. 5.45—Exchange; Weather.

HILVERSUM, 5.0—For Children. 5.10—V.A.R.A. Orchestra. Conductor: De Groot. Overture, "Queen for a Day" (Adam). Les fleurs (Waldteufel). Les deux Pierrots amoureux (Drigo). Esquisse (d'Ambrosio). Meditation (Bece). Flirt (Steck). Mandolinata (Paladilhe). Two Circassian Songs (Ippolitov-Ivanov). Extract, "Au jardin" (Dubois). Loin du bal (Gillet). Pizzicato (Gillet). Serenata mandolinata (Désormes). El Capitan (Souza). Overture, "Martha" (Flotow). Sérénade (Gounod). Funeral March of a Marionette (Gounod). Hymn to St. Cecilia (Gounod). Soljanka (Wilke).

HUIZEN, 5.0—K.R.O. Orchestra (contd. from 4.30). 5.10—For Farmers. 5.40—K.R.O. Boys. Conductor: Lustenhouer.  
 KALUNDBORG, 5.0—Literary Talk (contd. from 4.45). 5.15—Elementary German. 5.45—Announcements.

KÖNIGSBERG, 5.0—For Farmers. 5.15—Markets. 5.25—For Young People.

LEIPZIG, 5.0—Report: The Blankenburg (Thuringia) Harvest. 5.15—New Choral Music. Station Chamber Choir. Conductor: Werle. 5.55—"Choosing a Career"—Sequence.

MOSCOW (No. 1), 5.0—Talks.  
 MUNICH, 5.0—Organ Music (contd. from 4.50). 5.10—Review of Periodicals. 5.30—Holiday Hints.

OSLO, 5.0—Talk. 5.30—English.  
 PARIS (PTT.), 5.45—Talk.

PRAGUE, 5.0—Markets. 5.10—For Workers. 5.20—Talks and News in German.

ROME, 5.0-5.10—Corn Prices.  
 SOTTENS, 5.0—Book Review. 5.25—Orchestra.

STOCKHOLM, 5.0—Records. 5.30—Legal Review.

STUTTGART, 5.0—The German Peasant in the Saar District—Sketch (Horn). 5.30—Records and Songs.

TURIN, 5.0—Corn Prices.  
 VIENNA, 5.0—Sports Review. 5.10—Tourist Report. 5.25—Talk: House Furnishing. 5.50—Talk: Farming in the U.S.A.

WARSAW, 5.0—For Farmers. 5.10—Art Notes. 5.15—Colette Frazn (Violin). 5.45—Talk: The Lion.

6 p.m.

ATHLONE, 6.0—For Children. 6.45—News.

BERLIN, 6.0—Kaiser (Baritone) (contd. from 5.30). 6.15—"The Next Man"—Sketch. 6.25—Evening Echoes. 6.45—Political Report.

BEROMÜNSTER, 6.0—Exchange; Announcements. 6.25—Talk: The Revision of the Swiss Constitution. 6.55—Rural Programme.

BRATISLAVA, 6.10—Records. 6.45—Chaconne from the Violin Sonata in D minor (Bach), by Gasperek.

BRESLAU, 6.0—See Hamburg.  
 BRNO, 6.10—Records. 6.15—Esperanto. 6.45—Report from the Castle of Kromeriz.

BRUSSELS (No. 1), 6.0—Talk: Philately. 6.15—Request Records. 6.30—Delcour (Pianoforte). Concert Etude (Rubinstein). Valse caprice (Rubinstein). Nocturne (Scriabin). Mazurka (Cui). Islamey

(Balakirev). Prelude (Rachmaninov). Polichinelle (Rachmaninov). Prelude (Prokofiev).

BRUSSELS (No. 2), 6.0—Orchestra. Conductor: Douliez.

BUDAPEST, 6.0—Talk. 6.30—Relay from the Opera House.

COLOGNE, 6.0—Light Music. Small Station Orchestra. Conductor: Eysoldt. 6.45—See Berlin.

DEUTSCHLANDSENDER, 6.0—"Helter Skelter"—Fröhlich Orchestra with Engel (Xylophone) and Glombig (Pianoforte).

FRANKFURT, 6.0—Light Music (contd. from 5.45). 6.45—See Berlin.

HAMBURG, 6.0—"Moritaten und Bänkelsänge"—Programme of Street Ballads. Station Orchestra and Soloists. Conductor: Secker. 6.45—See Berlin.

HILVERSUM, 6.0—V.A.R.A. Orchestra (contd. from 5.10). In the Interval at 6.25: Recitations.

HUIZEN, 6.0—K.R.O. Boys (contd. from 5.40). 6.25—Records. 6.40—Police Messages. 6.55—Talk.

KALUNDBORG, 6.0—News. 6.16—Talk from the University: Doctors and Quacks.

KÖNIGSBERG, 6.0—Pianoforte Sonata in A (Mozart); by Riebensahm. 6.30—Programme from Gumbinnen, East Prussia.

LAHTI, 6.0—Symphony Concert. Helsinki Municipal Orchestra. Conductor: Schnevoigt. Ellegaard (Pianoforte).

LEIPZIG, 6.0—"Choosing a Career"—Sequence. 6.20—War Reminiscences. 6.45—See Berlin.

MOSCOW (No. 1), 6.0—Light Music.  
 MUNICH, 6.0—Request Records. 6.45—See Berlin.

OSLO, 6.0—Book Review. 6.15—News. 6.45—Fanny Elsta (Songs); Johan Simonsen (Violin).

PARIS (Poste Parisien), 6.45—Exchange. 6.49—For Farmers. 6.50—Talk. 6.58—Maeterlinck and Courteline Readings on Records.

PARIS (PTT.), 6.0—For Women: Notes; Music; Talks. 6.30—News.

PARIS (Radio-Paris), 6.20—Announcements; Talk. 6.45—Theatre Notes.

PRAGUE, 6.0—News. 6.10—Riha (Saxophone). 6.30—Talk: Czechoslovakia and International Affairs. 6.45—Report.

ROME, 6.0—Announcements. 6.15—News in Foreign Languages.

SOTTENS, 6.0—Tourist and Sports Notes. 6.15—Small Radio-Lausanne Orchestra. 6.40—Political Talk. 6.59—Weather.

STOCKHOLM, 6.0—Folk Songs. 6.15—News. 6.30—Talk: The Roman Emperors.

STRASBOURG, 6.15—Elocution. 6.30—Light Classical Music. Conductor: De Villers.

STUTTGART, 6.0—See Hamburg. 6.45—See Berlin.

TURIN, 6.0—Announcements. 6.15—News in Foreign Languages.

VIENNA, 6.0—News. 6.10—Wind Band. Conductor: Herrmann.

WARSAW, 6.0—Light Music. 6.20—Topical Talk; Light Music. 6.45—Programme Announcements. 6.50—Sports.

7 p.m.

ATHLONE, 7.0—Talk: Drama of To-day. 7.15—Literary and Dramatic Talk. 7.31—Station Orchestra. Leslie Jones and E. Leer (Songs).

BELGRADE, 7.15—Bronislav Music Concert.

BERLIN, 7.0—News. 7.15—See Cologne. 7.55—"The Border Line"—Ballad after Conrad Themes (Lange), with Music by Stummacher and Soloists. Conductor: The Composer.

BEROMÜNSTER, 7.0—Rural Programme. 7.30—"Es schwärz Warte"—Dialect Play (Lisa Wenger).

BRATISLAVA, 7.5—Talk: Humour. 7.20—Station Band.

BRESLAU, 7.0—News. 7.15—See Cologne. 7.55—See Frankfurt.

BRNO, 7.0—Report from the Castle of Kromeriz (contd. from 6.45). 7.5—Choir.

BRUSSELS (No. 1), 7.0—Talk. 7.15—Recitations to Music. 7.30—Legal Notes; Literary Talk.

BRUSSELS (No. 2), 7.0—Talk. 7.15—"La furia d'Arlecchino" (Lualdi) on Records. 7.30—News.

BUDAPEST, 7.0—Opera Relay (contd. from 6.30).

COLOGNE, 7.0—News. 7.15—Transmission for all German Stations: Symphony in E (Strässer) by the Augmented Station Orchestra. Conductor: Buschkötter. 7.55—Carl Loewe Ballads. Station Chamber Choir. Conductor: Breuer.

DEUTSCHLANDSENDER, 7.0—Motto; News. 7.15—See Cologne. 7.55—New German Music. Station Orchestra. Conductor: Hess. Röhn (Violin). March (Reiter). Lausbuben-Ouverture (Hess). Capriccio (Blumer). Serenade (Fiedler). Baurische Festmusik (Jentsch).

FRANKFURT, 7.0—News. 7.15—See Cologne. 7.55—"Wedding Customs"—Sequence (Westerlind).

HAMBURG, 7.0—News. 7.15—See Cologne. 7.55—"Cocktails"—Variety, on Records.

HILVERSUM, 7.0—V.A.R.A. Orchestra (contd. from 5.10). 7.10—Talk. 7.30—Records. 7.37—S.O.S. Messages. 7.40—Religious Address.

HUIZEN, 7.0—Talk (contd. from 6.55). 7.15—Records. 7.40—K.R.O. Orchestra. Conductor: Gerritsen. Overture, "Zais" (Rameau). Selection, "The Gordian Knot untied" (Purcell). Extracts, "Armida" (Gluck). Five German Dances (Schubert).

KALUNDBORG, 7.0—Sonata by Per Knutzon. 7.10—"Madame Sans-Gêne"—Play in Three Acts (Sardou).

KÖNIGSBERG, 7.0—News. 7.15—See Cologne. 7.55—Reading (Vogler).

LAHTI, 7.0—Symphony Concert (contd. from 6.0). 7.45—News.

LEIPZIG, 7.0—News. 7.15—See Cologne.

MONTE CENERI, 7.0—Concert.  
 MOSCOW (No. 1), 7.0—Light Music.

MUNICH, 7.0—News. 7.15—See Cologne. 7.55—"Musical Masterpieces"—Three Plays (Feinisz). Small Station Orchestra, conducted by Kloss, and the Station Schrammel Quartet. (a) "B-A-C-H." (b) Haydn's "Ochsenmennet." (c) "Radetzky March" of Strauss.

OSLO, 7.0—Songs and Violin (contd. from 6.45). 7.30—Dramatic Programme.

PARIS (Poste Parisien), 7.0—Maeterlinck and Courteline Readings (on Records). 7.10—News. 7.30—Records.

PARIS (PTT.), 7.45—Talk: The National Museums. 7.53—Talk: Foreign Politics.

PARIS (Radio-Paris), 7.0—Talk: Hunting. 7.15—Talk: Model Ships. 7.25—Assurance Societies' Reports. 7.30—Topical Talk.

PRAGUE, 7.5—Josef Riavec (Tenor). 7.30—"The Conqueror"—Play (Tornius).

RADIO-NORMANDIE, 7.0—Light Music.

ROME, 7.0—News. 7.10—Records. 7.30—Government Notes. 7.45—To be announced.

RUYSELEDE, 7.45—News in French.

SOTTENS, 7.0—"Les femmes savantes"—Comedy in Four Acts (Molière).

STOCKHOLM, 7.0—"The Merry Widow"—Operetta (Lehár).

STRASBOURG, 7.0—Light Classical Music. Conductor: De Villers. 7.30—News. 7.45—Records.

STUTTGART, 7.0—News. 7.15—See Cologne. 7.55—"The Beggars' Academy at Salamanca"—Play about Cervantes (Hofmeier).

TOULOUSE (Radio-Toulouse), 7.0—Opera Arias. 7.15—Military Music. 7.30—News. 7.45—Medical Talk.

TURIN, 7.0—News; Records. 7.30—Government Notes. 7.45—"The Duchess of the Bal Tabarin"—Operetta (Lombardo).

VATICAN CITY, 7.0-7.15—Religious Information in Italian.

VIENNA, 7.0—Wind Band (contd. from 6.10). News in the Interval.

WARSAW, 7.0—Hints for Holidays. 7.5—Music Talk. 7.15—Philharmonic Orchestra. Conductor: Scheinpflug. Mainardi (Cello). Suite in D for Strings (Bach). The Haffner Serenade (Mozart). Concerto in D (Haydn). Symphony No. 3—the Eroica (Beethoven). In the Interval: News.

8 p.m.

ALGIERS, 8.0—Time. 8.2—Records. 8.25—News. 8.30—Orchestra.

ATHLONE, 8.0—Orchestra; Songs. 8.30—Claire O'Beirne (Pianoforte). 8.45—Annie Fagan (Harp).



8 p.m. (contd.)

**BELGRADE**, 8.0—Bronislav Music Concert (contd. from 7.15). 8.15—Records.

**BERLIN**, 8.0—"The Border Line"—Ballad (contd. from 7.55).

**BEROMÜNSTER**, 8.0—News. 8.10—A Visit to Night Workers. 8.20—Radio Orchestra. 8.45—Contemporary Swiss Music.

**BORDEAUX-LAFAYETTE**, 8.0—Spanish Lesson. 8.15—Records. 8.30—Symphony Concert with Songs.

**BRESLAU**, 8.0—See 7.55 Frankfurt.

**BRUSSELS (No. 1)**, 8.0—Radio Orchestra. Conductor: André Rhapsody (Lacombe). Rhapsody on Popular Swedish Themes (Lindberg). Russian Rhapsody (Nussbaum). Celtic Suite (Foulds). Cockney Suite (Ketelbey). In the Interval: Songs.

**BRUSSELS (No. 2)**, 8.0—Symphony, No. 8 in F (Beethoven). Symphony Orchestra. 8.30—"Sire Halewijn"—Play (de Ghelderode).

**BUDAPEST**, 8.0—Opera Relay (contd. from 6.30).

**COLOGNE**, 8.0—Loewe Ballads (contd. from 7.55). 8.10—Max Reger Organ Recital by Gerard Bunk, from the Reinoldikirche, Dortmund. Fantasia on "Wachet auf, ruft uns die Stimme." Four Pieces: (a) Kyrie eleison, (b) Gloria in excelsis, (c) Benedictus, (d) Te Deum. Introduction and Passacaglia in D minor.

**DEUTSCHLANDSENDER**, 8.0—New German Music (contd. from 7.55). In the Interval at 8.5: Topical Talk.

**FRANKFURT**, 8.0—"Wedding Customs"—Sequence (contd. from 7.55).

**HAMBURG**, 8.0—"Cocktails"—Variety, on Records.

**HILVERSUM**, 8.0—Religious Address. 8.10—Anna Stroink (Songs). Lien Vtringa (Pianoforte). Prelude (Kahn). Ich und Du (Pfitzner). Du meines Herzens Kronelein (Strauss). Folk Song (Mittler). Die süsse Sieben (Stöhr). Die Ablösung (Lazarus). Schmied Schmerz (Weigl). Das mitleidige Madel (Schillings). Trutz (Goldmark). Four Pieces (Poulenc): (a) Air romantique, (b) Air champagne, (c) Air Melancolique, (d) Air vif. Three Songs (Gretchaninov). Four Indian Love Songs (Woodforde-Finden). In the Interval at 8.40: Talk.

**HUIZEN**, 8.0—K.R.O. Orchestra (contd. from 7.40). 8.10—News. 8.15—The Wiener Sängerknaben. Conductor: Emmer. Three Songs (Gallus): (a) Ante Luziferum, (b) Repleti sunt, (c) Pueri concinit. Records. Stabat Mater (Pergolesi). Records. Abendgung im Lenz, No. 2 (Reger). Da unten im Tale (Brahms). Drei Blümelein. The Blue Danube (Strauss).

**KALUNDBORG**, 8.0—"Madame Sans-Gêne"—Play (contd. from 7.10).

**KÖNIGSBERG**, 8.15—Opera House Orchestra. Conductor: Brückner. Verdi Variations (Heger). Dances from Galanta (Kodály).

**LEIPZIG**, 8.0—"Full Moon"—Humorous Sequence (Kühnert).

**LAHTI**, 8.0—News in Swedish.

**LYONS (La Doua)**, 8.30—Literary Programme.

**MONTE CENERI**, 8.0—Concert.

**MOSCOW (No. 1)**, 8.0—Talk in Czech: The Russian Revolution. 8.55—Chimes from the Kremlin.

**MUNICH**, 8.0—"Musical Masterpieces" (contd. from 7.55).

**OSLO**, 8.0—Dramatic Programme. 8.35—Announcements. 8.40—News.

**PARIS (Poste Parisien)**, 8.12—Announcements.

**PARIS (PTT)**, 8.0—Scandinavian Records. 8.30—Plays: (a) "Gringoire" (Banville), (b) "Guibour" (Goudan).

**PARIS (Radio-Paris)**, 8.0—Reading: "Pages from Dickens." 8.30—Press Review. 8.45—Opera Music. Conductor: Bigot. Permet, Coelli, and Faniard (Songs).

**PRAGUE**, 8.0—Station Orchestra. Conductor: Carmen Studer-Weingartner. Overture, "Dame Gobold" (Weingartner). Scherzetto, "The Tempest" (Weingartner). Symphony in D (Brahms).

**RADIO-NORMANDIE**, 8.0—Choral Music. 8.30—Talk. 8.38—Topical Talk. 8.45—Light Music.

**ROME**, 8.0—Operetta (contd. from 7.45).

**RUYSSELEDE**, 8.0—See Brussels No. 2. 8.30—Records.

**SOTTENS**, 8.0—"Les Femmes Savantes" (Molière) (contd. from 7.0). News in the Interval at 8.15.

**STOCKHOLM**, 8.0—"The Merry Widow" (Lehár) (contd. from 7.0). 8.45—News.

**STRASBOURG**, 8.0—News in German; Records. 8.30—Lotte Lehmann (Soprano), from the Palais des Fêtes. Three Songs (Beethoven). (a) Freudvoll und leidvoll, (b) Wonne der Wehmüt, (c) Neue Liebe, neues Leben. Songs (Schumann): (a) Romance from "Rosamunde," (b) Ungeduld, (c) Frauenliebe und -Leben. Songs (Brahms): (a) Ein Sonett, (b) Wie bist du, meine Königin, (c) Immer leiser wird mein Schlummer, (d) Der Jäger. Im Spätboot (Strauss). Mit deinen blauen Augen (Strauss). Seelige Nacht (Marx). Der Ton (Marx).

**STUTTGART**, 8.0—"The Beggars' Academy at Salamanca"—Play (contd. from 7.55).

**TOULOUSE (Radio-Toulouse)**, 8.0—"The Lion and the Rat"—a Fable. 8.15—Orchestra. Danse macabre (Saint-Saëns). Minuet in G (Beethoven). 8.30—Duets.

**COLOGNE**, 9.0—News. 9.20—Film Review.

**DEUTSCHLANDSENDER**, 9.0—Political Report (on Records). 9.15—News; Sports Notes.

**FRANKFURT**, 9.0—News. 9.30—Sports Review.

**HAMBURG**, 9.0—News. 9.20—Light Music.

**HILVERSUM**, 9.0—Songs and Pianoforte (contd. from 8.10). 9.40—Press Review; Church Notes. 9.55—Talk.

**HUIZEN**, 9.0—The Wiener Sängerknaben (contd. from 8.15). 9.40—Marek Weber Orchestra, from the Cafe Heck, Amsterdam.

**JUAN-LES-PINS (Radio Côte d'Azur)**, 9.0—News; 9.15 (approx.)—Orchestra.

**KALUNDBORG**, 9.0—"Madame Sans-Gêne"—Play (contd. from 7.10). 9.25—News. 9.40—French Music. Radio Orchestra. Conductor: Reesen. March and Waltz, "La belle Hélène" (Offenbach). Saltarella, "Les brigands" (Offenbach). Selection, "Giroflé-Girofla" (Lecocq). Waltz (Ganne). March (Ganne).

**KÖNIGSBERG**, 9.0—News; Sports

**RUYSSELEDE**, 9.0—News in Flemish.

**SOTTENS**, 9.0-9.15—"Les Femmes Savantes" (Molière) (contd. from 7.0).

**STOCKHOLM**, 9.0—Märta Byström (Songs), Witkowsky (Pianoforte) and Ahilberg (Violin).

**STRASBOURG**, 9.0—Lotte Lehmann (Soprano) (contd. from 8.30). News in the Interval.

**STUTTGART**, 9.0—News. 9.30—Sports Review.

**TOULOUSE (Radio-Toulouse)**, 9.0—Opera Music. 9.30—Viennese Orchestra.

**TURIN**, 9.0—Play (contd. from 7.45). 9.15—Symphony Music (Schubert, Ravel, Weber).

**VIENNA**, 9.0—Symphony Orchestra (contd. from 8.0). 9.30—News. 9.50—Dance Music, old and new.

**WARSAW**, 9.0—Philharmonic Orchestra (contd. from 7.15). 9.30—Recitations. 9.40—Light Music.

10 p.m.

**ATHLONE**, 10.0—Variety. 10.30—News. 10.40—Records.



"Dance music old and new" is to be broadcast from Vienna at 9.50

**TURIN**, 8.0—Play (contd. from 7.45).

**VIENNA**, 8.0—Vienna Symphony Orchestra. Conductor: Nilius. Cornelius Czarniowski (Pianoforte). Concerto in D minor (Brahms). Symphony No. 4 in F minor (Tchaikovsky).

**WARSAW**, 8.0—Philharmonic Orchestra (contd. from 7.15).

9 p.m.

**ATHLONE**, 9.0—Station Orchestra. 9.30—Traditional Fiddle. 9.45—Pipes.

**BERLIN**, 9.0—News. 9.20—Concert. Station Orchestra. Conductor: Steiner. Szymanowski and Steiner (Violin); Else Pfaff (Recitations). March, "The Cid" (Cornelius). Suite for Two Violins and Orchestra (Zilcher). Spitzvegianna (Anders).

**BEROMÜNSTER**, 9.0—Contemporary Swiss Music. 9.10-9.15 (approx.)—Radio Orchestra.

**BORDEAUX-LAFAYETTE**, 9.0—Symphony Concert (contd. from 8.30).

**BRATISLAVA**, 9.15—News. 9.30-9.45—Records.

**BRESLAU**, 9.0—News. 9.20—Talk relayed from London: The London-Melbourne Air Race. 9.30—Dance Music.

**BRUSSELS (No. 1)**, 9.0—Talk. 9.15—Opera and Operetta Music.

**BRUSSELS (No. 2)**, 9.0—"Sire Halewijn"—Play (de Ghelderode) (contd. from 8.30). 9.30—Radio Orchestra. Conductor: André. Selection, "Show Boat" (Kern). "Sunny" (Kern). "No, no, Nanette" (Youmans).

**BUDAPEST**, 9.0—Opera Relay (contd. from 6.30). 9.30—Dance Music.

Notes. 9.30—Topical Talk. 9.55—See Leipzig.

**LEIPZIG**, 9.0—News; Sports Notes. 9.20—Liszt Music. Hoyer (Organ). Variations on Bach's "Weinen, Klagen, Sorgen, Zagen." Variations on Bach's Mass in B minor. Fantasia on the Name B.A.C.H. 9.55—Light Music. Station Orchestra. Conductor: Weber. Skriwanek (Tenor). Overture, "Pique Dame" (Suppé). Two Songs, "Eine Nacht in Venedig" (Strauss). Extracts, "Andersen" (Nedbal). Two Songs, "Der Bettelstudent" (Millocker). Overture, "The Crown Diamonds" (Auber). Two Songs, "Der Bettelstudent" (Millocker). Sista (Waldteufel). Two Songs, "Venus in Seide" (Stolz). Selection, "Paganini" (Lehár).

**LYONS (La Doua)**, 9.0—Literary Programme.

**MOSCOW (No. 1)**, 9.5—English Programme: (a) Talk: Students and Unemployment; (b) For Children.

**MUNICH**, 9.0—News; Sports. 9.20—To be announced.

**OSLO**, 9.0—Topical Talk. 9.15-9.45—Male Voice Choir.

**PARIS (Poste Parisien)**, 9.0—To be announced.

**PARIS (PTT)**, 9.0—Plays (contd. from 8.30).

**PARIS (Radio-Paris)**, 9.0—Opera Music (contd. from 8.45). In the interval at 9.15: News; Dietetics.

**PITTSBURGH**, 9.0—Betty and Bob. 9.15—Karen Fladoes. 9.30—Exchange: Arm Chair Driver. 9.45—Gen. Fed. Women's Clubs.

**PRAGUE**, 9.0—News. 9.15—Records. 9.30-9.45—News in Russian.

**RADIO-NORMANDIE**, 9.0—Folies Bergères.

**ROME**, 9.0—Operetta (contd. from 7.45).

**BARCELONA**, 10.5—Clavé Music. L'Artesana Choir and Station Orchestra. Conductor: Lopez.

**BERLIN**, 10.0—Concert (contd. from 9.20). 10.30—Talk: Myth and Fable Survivals.

**BORDEAUX-LAFAYETTE**, 10.0—Symphony Concert (contd. from 8.30).

**BRESLAU**, 10.0—Dance Music.

**BRUSSELS (No. 1)**, 10.0—News. 10.10—Request Records. 10.25—Dance Records.

**BRUSSELS (No. 2)**, 10.0—News. 10.10—Dance Records.

**BUDAPEST**, 10.0—Dance Music. 10.15—Rigo Gigan Band.

**COLOGNE**, 10.0—"Ghosts"—Variety.

**DEUTSCHLANDSENDER**, 10.0—"Flying Flowers"—Butterflies in Music and Literature. 10.45—Dance Records.

**FRANKFURT**, 10.0—Ballet Music. Station Orchestra. Conductor: Naeue. Ballet Suites, "Anacréon" (Cherubini), "Rosamunde" (Schubert), "Faust" (Gounod), "The Nutcracker" (Tchaikovsky).

**HAMBURG**, 10.0—Bremen Symphony Orchestra. Conductor: Martini. Overture, "Si j'étais roi" (Adam). Selection, "Rigoletto" (Verdi). Suite (Dvořák). Waltz (Strauss). Jeux d'enfants (Bizet).

**HILVERSUM**, 10.0—Talk. 10.40—Dance Records.

**HUIZEN**, 10.0—Marek Weber Orchestra (contd. from 9.40). 10.10—News. 10.15—Records. 10.40—Marek Weber Orchestra (contd.).

**KALUNDBORG**, 10.0-10.10—French Music (contd. from 9.40).

**KÖNIGSBERG**, 10.0—See 9.55 Leipzig.

FRIDAY Oct. 19

**LEIPZIG**, 10.0—Light Music (contd. from 9.55).

**MADRID (EAJ7)**, 10.5—See Barcelona.

**MADRID (EAO)**, 10.15—News. 10.30—Spanish Music. 10.45—Wireless Notes.

**MOSCOW (No. 1)**, 10.5—German Transmission: Literary Programme; Science Notes.

**MUNICH**, 10.0—See Hamburg.

**PARIS (Poste Parisien)**, 10.20 (approx.)—News; Exchange.

**PARIS (PTT)**, 10.0—Plays (contd. from 8.30). 10.30—Dance Music.

**PARIS (Radio-Paris)**, 10.0—Opera Music (contd. from 8.45). 10.30—Dance Music.

**PITTSBURGH**, 10.0—Memories. 10.15—KDKA Kiddies' Klub. 10.30—The Singing Lady. 10.45—Orphan Annie.

**RADIO-NORMANDIE**, 10.0—Folies Bergères.

**ROME**, 10.0—News.

**STUTTGART**, 10.0—See Frankfurt.

**TOULOUSE (Radio-Toulouse)**, 10.0—"Au Caveau de Dix Heures"—Radio Fantasy. 10.15—News. 10.30—Operetta Songs.

**TURIN**, 10.0—News. 10.10—Announcements in Spanish.

**VIENNA**, 10.0—Dance Music.

**WARSAW**, 10.5—Light Music.

11 p.m.

**BARCELONA**, 11.0—Clavé Music (contd. from 10.5); Records.

**BRUSSELS (No. 1)**, 11.0—La Brabançonne.

**DEUTSCHLANDSENDER**, 11.0-11.30—Dance Records.

**FRANKFURT**, 11.0—Scenes, "The Barber of Bagdad"—Opera (Cornelius), on Records.

**HUIZEN**, 11.0—Marek Weber Orchestra (contd. from 9.40). 11.25-11.40—Records.

**LEIPZIG**, 11.0-11.30—Light Music (contd. from 9.55).

**MADRID (EAJ7)**, 11.0—See 10.5 Barcelona. 11.15—Dance Music. 11.45—News.

**MADRID (EAO)**, 11.0—Spanish Music. 11.45—Light Music.

**PITTSBURGH**, 11.0—Dan and Sylvia. 11.15—To be announced. 11.30—Comedy Stars of Hollywood. 11.45—Lowell Thomas.

**RADIO-NORMANDIE**, 11.0—Folies Bergères.

**STUTTGART**, 11.0—See Frankfurt.

**TOULOUSE (Radio-Toulouse)**, 11.0—Concert.

**VIENNA**, 11.0—Dance Music. 11.15—Records.

12 midnight

**BARCELONA**, 12.0—News.

**FRANKFURT**, 12.0—Old and New Dance Music on Records.

**PITTSBURGH**, 12.0—Amos 'n' Andy. 12.15—Plantation Echoes. 12.30—Red Davis. 12.45—Dangerous Paradise.

**RADIO-NORMANDIE**, 12.0—Folies Bergères. 12.15—Dance Music.

**SCHENECTADY**, 12.25—Exchange.

**STUTTGART**, 12.0—See Frankfurt.

**TOULOUSE (Radio-Toulouse)**, 12.0—News. 12.5—Spanish Songs. 12.15-12.30—Chamber Music. Moment musical (Schubert). Quartet in G, No. 2 (Beethoven). Extase (Ganne).

**ZEESEN**, 12.30—Louis Spohr Chamber Music.

1 a.m. (Saturday)

**PARIS (Radio-Colonial)**, 1.0—Concert.

**PITTSBURGH**, 1.0-6.0—Popular Programme.

**RADIO-NORMANDIE**, 1.0—News. 1.10—Dance Music.

**SCHENECTADY**, 1.0-4.0—Popular Programme.



# SATURDAY Oct. 20

## PRINCIPAL EVENTS

### CONCERTS

- 11.0 a.m. Leipzig; Deutschlandsender: Dresden Philharmonic.  
 2.30 " Kalundborg: English orchestral music.  
 5.0 " Radio-Paris: Lamoureux Concert.  
 5.0 " Strasbourg: Mozart programme.  
 5.15 " Stockholm: Military band.  
 6.20 " Brussels No. 2: Light music.  
 7.15 " Cologne, Berlin: Operetta programme.  
 7.15 " Oslo: Popular orchestral.  
 7.45 " Budapest: Excerpts from operettas.  
 8.0 " Kalundborg: Contemporary composers.  
 8.25 " Hilversum: The V.A.R.A. Orchestra.  
 9.0 " Vienna: Popular orchestral.  
 9.40 " Huizen: Wind Band.  
 10.45 " Vienna Cigany Band from Budapest.

### OPERAS, OPERETTA

- 7.0 p.m. Bratislava, Prague: "Frühlingsstürme" (Weinberger).  
 7.30 " Athlone: "La Traviata" (Verdi).  
 7.45 " Turin, etc.: "Debora e Jael" (Pizzetti).  
 8.30 " Radio-Paris: "Manon" (Massenet), from the Opéra-Comique.

### CHAMBER MUSIC

- 5.25 p.m. Königsberg: Wind Instrument Sextet (Thuille).

### RECITALS

- 5.20 p.m. Berlin: Ansonge (pianoforte music).  
 6.30 " Königsberg: Sacred organ and vocal.  
 6.30 " Oslo: Grieg romances.  
 7.30 " Beromünster: Two pianofortes.  
 8.0 " Warsaw: Niedzielski (pianoforte).

### PLAYS

- 7.0 p.m. Vienna: "Die Katakomben" (Gustav Davis).  
 8.30 " Strasbourg: Comedy programme.

### DANCE MUSIC

- 9.5 p.m. Poste Parisien; 9.15, Beromünster; 9.45, Oslo; 9.50, Berlin, Breslau; 10.0, Budapest, Munich, Stuttgart; 10.15, Kalundborg; 10.30, Strasbourg.

### MISCELLANEOUS

- 7.0 p.m. Stockholm: International swimming contest.  
 7.15 " Hamburg, Deutschlandsender: Cabaret programme.  
 8.30 " Paris PTT: Revue.  
 9.20 " Breslau, Berlin, Kalundborg: Opening of International Red Cross Congress at Tokio.

## NATIONAL

- For Time Signals, see Monday  
 10.15 a.m. (Droitwich)—Service.  
 10.30 (Droitwich)—Weather Forecast.  
 10.45—"What shall I Read?" Mrs. Belloc Lowndes.  
 11.0—Orchestral Records.  
 11.45—The B.B.C. Northern Orchestra. Douglas Steele (Pianoforte).  
 1.0 p.m. (Droitwich)—The Commodore Grand Orchestra. Suite, Three Pieces from Carmen (Bizet). Selection, Sing as we go (Gray). Waldteufel Memories (Finck). Tango, Moonlight Kisses (Barozi). Selection of Sullivan's Music (arr. Dan Godfrey).  
 1.45 (Droitwich)—An Eye-witness Account of the start of the London-Melbourne Air Race, by Squadron-Leader W. Helmore, R.A.F.  
 2.0 (Droitwich)—Herring Fishing Bulletin.  
 2.5 (Droitwich)—The Belfast Wireless Orchestra. John B. McAlpine (Baritone).  
 3.0 (Droitwich)—Cinema Organ (Harold Ramsay).  
 3.30 (Droitwich)—The B.B.C. Northern Orchestra. Mary Worth (Soprano).  
 4.30-5.15 (London)—Television.  
 4.45 (Droitwich)—Cinema Organ (Reginald Dixon).  
 5.15—Sydney Kyte and his band.  
 6.0—"The First News."  
 6.25—Interlude.  
 6.30—Sports Talk. "Racing on the Zambesi." Ernest Barry.  
 6.45 (Droitwich)—Welsh Interlude. Iorwerth C. Peate, M.A.; "Preserving Welsh Peasant Culture."  
 6.45 (ex. Droitwich)—A Recital by Eileen Pilcher (Contralto).  
 7.0—"In Town To-night."  
 7.30—Morris Motors Band. Jack Salisbury (Violin).  
 8.30—Music Hall. Dave Apollon with his band of Romantic Serenaders and Nora Williams and Harold Aloma. Douglas Vine and Algy More. Lily Morris. Muriel George and Ernest Butcher. The Orchestra under the direction of Kezale Kelley. The Dancing Daughters.  
 9.30—"The Second News."  
 10.0—The Gershwin Parkington Quintet. Arnold Matters (Baritone). Quintet: Selection, Romeo and Juliet (Gounod); Introduction and Humoresque (d'Ambrosio). Arnold Matters: Late Summer (Warlock); Bredon Hill (Butterworth). Quintet: Lotus Land, Water Wagtail (Scott); Berceuse (Danbe). Arnold Matters: Sailing Homeward (Armstrong Gibbs); The Merry Minstrel (Matiesen); Yarmouth Fair (arr. Warlock). Quintet: Suite, Week-End (Galud).  
 11.0-12.0—Dance Music.

## REGIONAL

- For Time Signals, see Monday  
 10.15-10.45 a.m. (ex. Midland)—National.  
 10.45—Scottish Studio Orchestra.  
 11.45—Cinema Organ (Sydney Gustard).  
 12.15 p.m.—Miscellaneous Records.  
 1.0-5.15 (ex. Midland)—Droitwich.  
 4.30-5.15 (Midland)—Television.  
 5.15—The Children's Hour.  
 6.0—"The First News."  
 6.30 (London)—The London Zigeuner Orchestra.  
 6.30 (Midland)—The Midland Music-Makers. Light Entertainment.  
 6.30 (North)—Cinema Organ (Herbert Maxwell).  
 6.30 (Scottish and Belfast)—An Eye-witness account of the Football Match, Ireland v. Scotland, by John Grieve.  
 6.30 (West)—Records—Rossini.  
 6.45 (Scottish)—Studio Orchestra. Scots and Irish Airs.  
 6.45 (West)—See Droitwich.  
 6.45 (Belfast)—"Echoes of Ulster."  
 7.0 (London, North, West)—The Victor Olof Sextet. Muriel Herbert (Soprano).  
 7.0 (Midland)—Hunting Songs. The Wireless Singers (Men's Voices).  
 7.5 (Belfast)—Fireside Singers.  
 7.15 (Scottish)—The Week in Scotland. William Law.  
 7.20 (Belfast)—Operatic Programme. Wireless Orchestra. Redvers Liewellyn (Baritone).  
 7.30 (Midland)—Beethoven Concert. City of Birmingham Orchestra, conducted by Leslie Heward. Tom Bromley (Pianoforte). Overture, Egmont, Concerto No. 3.  
 7.30 (Scottish)—Variety. Relay from the Scottish National Radio Exhibition, Edinburgh.  
 8.0 (London)—Organ Recital, by G. Thalben-Ball.  
 8.0 (North)—"Pithead Chronicles."  
 3—Sam—His Bath.  
 8.0 (West)—The Taunton Madrigal Society.  
 8.20 (North)—Records.  
 8.30—"Over the Horizon." I—Journey to Persia. Being a journey in speech and sound from London to Baghdad and thence through Persia. Produced by Lionel Fielden.  
 9.15 (ex. Belfast and North)—A Recital by Elena Gerhardt.  
 9.15 (North)—"The Arcadian Follies." Relay from Blackpool.  
 9.15 (Belfast)—Variety.  
 10.0—News Summary.  
 10.10 (ex. West and Midland)—Dance Records.  
 10.10 (Midland)—Topical Talk.  
 10.15 (West)—"The House where I was born." John Capel.  
 10.30-12.0 (Midland till 11.0)—Dance Music.

## EMPIRE SUMMARY

- For wavelengths, see S.W. List  
**Transmission 1 (GSD, GSB)**  
 7.15 a.m.—Big Ben. Musical Comedy and Light Opera.  
 8.0—"Getting the Bird." No laughing matter, by Edgar Skeet.\*  
 8.15—The B.B.C. Dance Orchestra.\*  
 8.30—"Alice Meets Humpty Dumpty." Being one of "Alice's Adventures through the Looking-Glass," by Lewis Carroll, arranged for broadcasting by Cecil Madden.\*  
 8.45—Dance Orchestra\* (contd.).  
 9.0—Empire News.  
 9.15—Close Down.  
**Transmission 2 (11.0—12.30 GSF, GSG; 12.30—2.0 GSF, GSB)**  
 11.0 a.m.—Big Ben. The Scottish Studio Orchestra.  
 11.15—Commentary\* on the start of the London to Melbourne Air Race.  
 11.45—Cinema Organ (Sydney Gustard).  
 12.15 p.m.—Troise and his Mandoliers.  
 1.0—The Commodore Grand Orchestra.  
 1.45—Empire News.  
 2.0—Close Down.  
**Transmission 3 (2.15—3.45 GSF, GSE; 3.45—5.45 GSE, GSB)**  
 2.15 p.m.—Big Ben. The Belfast Wireless Orchestra. John B. McAlpine (Baritone).  
 3.0—(See 11.15 a.m.).  
 3.30—The B.B.C. Northern Orchestra. Mary Worth (Soprano).  
 4.15—"Babel Ballads." A Musical "At Home."\*  
 4.45—Cinema Organ (Reginald Dixon).  
 5.0—Empire News.  
 5.15—Sydney Kyte and his band.  
 5.45—Close Down.  
**Transmission 4 (GSD, GSB)**  
 6.0 p.m.—Big Ben. Empire News.  
 6.15—William Walker presents "More Bits of Ballyhoo."\*  
 7.0—"In Town To-night."  
 7.30—The Morris Motors Band. Jack Salisbury (Violin).  
 8.0—(See 3.0 p.m.).\*  
 8.30—A Music-Hall Programme.  
 9.30—A Recital by Elena Gerhardt (Mezzo-Soprano).  
 10.0—Empire News.  
 10.15—The Gershwin Parkington Quintet. Arnold Matters (Baritone).  
 10.45—Close Down.  
**Transmission 5 (GSC, GSA)**  
 11.0 p.m.—Big Ben. Henry Hall's Guest Night with the B.B.C. Dance Orchestra.  
 12 midnight—(See 3.0 p.m.).\*  
 12.30 a.m.—Interlude.†  
 12.45—Empire News.  
 1.0—Close Down.

\* Electrical Recording.  
 † Gramophone Records.

Hours of Transmission in Greenwich Mean Time.

### 5 a.m.

- BERLIN, 5.15—Hymn; Gym. 5.30—Weather; Prayer. 5.35—See Königsberg.  
 BRESLAU, 5.0—Weather; Gym. 5.35—Band.  
 COLOGNE, 5.0—Hymn; Records. 5.45—Gym.  
 FRANKFURT, 5.0—For Farmers. 5.15—Gym. 5.45—Announcements. 5.50—Weather. 5.55—Hymn; Motto.  
 HAMBURG, 5.0—Weather; Market Prices. 5.15—Gym. 5.30—Time; Weather. 5.35—See Königsberg.  
 KÖNIGSBERG, 5.0—Weather. 5.15—Gym. 5.35—Military Band.  
 LEIPZIG, 5.5—Announcements. 5.15 Gym. 5.35—See Breslau.  
 MUNICH, 5.30—Gym. 5.45—Weather; News. 5.55—Motto.  
 PRAGUE, 5.15—Gym; Music; News.

### 6 a.m.

- BERLIN, 6.0—News. 6.10—See Königsberg.  
 BRESLAU, 6.0—News. 6.10—Band.  
 COLOGNE, 6.0—Hymn; News. 6.15—Orchestra from Düsseldorf. Conductor: Artz.  
 DEUTSCHLANDSENDER, 6.0—News. 6.10—See Königsberg.  
 FRANKFURT, 6.0—See Stuttgart.  
 HAMBURG, 6.0—News. 6.10—See Königsberg.  
 KÖNIGSBERG, 6.0—News. 6.10—Military Band.  
 LEIPZIG, 6.0—News. 6.10—See Breslau.  
 MUNICH, 6.0—See Stuttgart.  
 PARIS (Radio-Paris), 6.45—Gym.  
 PRAGUE, 6.0-6.30—Gym; Music; News.  
 STOCKHOLM, 6.20—Gym. 6.45—Service.  
 STUTTGART, 6.0—Records.  
 WARSAW, 6.0—Gym. 6.7—Records; News.

### 7 a.m.

- BERLIN, 7.0—Gym. 7.20-7.35—Physical Culture.  
 BRESLAU, 7.0—Hymn; Motto. 7.10—Band.  
 COLOGNE, 7.0—Orchestra from Düsseldorf. 7.15—Weather; Water Level. 7.20—Gym. 7.35-7.45—Reading.  
 FRANKFURT, 7.0—See Stuttgart. 7.30-7.45—Gym.  
 HAMBURG, 7.0—Cookery Hints. 7.10-7.40—Announcements; Records.  
 HILVERSUM, 7.40—Records.  
 HUIZEN, 7.0—Records.  
 KALUNDBORG, 7.30—Service.  
 KÖNIGSBERG, 7.0—Prayers. 7.30—Gym. for Women.  
 LEIPZIG, 7.0—Gym. 7.20—Records. For Schools.  
 MUNICH, 7.0—See Stuttgart.  
 PARIS (Poste Parisien), 7.10—Fare. 7.15—Records.  
 PARIS (Radio-Paris), 7.0—Records. 7.15—Press Review. 7.45—Gym.  
 RADIO-NORMANDIE, 7.0—Records. 7.10—Gym. 7.20—News. 7.35—Record. 7.38—Racing Notes. 7.40—Reading. 7.48—Announcements. 7.50—Record. 7.53—Cookery Hints.  
 ROME, 7.0-7.15—News; Market Prices.  
 STUTTGART, 7.30—Records; Gym; Weather; Water Level.  
 TURIN, 7.0-7.45—News; Market Prices.

### 8 a.m.

- BRESLAU, 8.0—News. 8.40—For Children.  
 DEUTSCHLANDSENDER, 8.40—For Schools.  
 HILVERSUM, 8.0—Records.  
 HUIZEN, 8.0-8.55—Records.  
 LEIPZIG, 8.55—Exchange.  
 PARIS (Poste Parisien), 8.0—Records. In the Interval at 8.20: News. 8.45—Cookery.  
 PARIS (Radio-Paris), 8.0—Records.

- PRAGUE, 8.50—News.  
 RADIO-NORMANDIE, 8.0—Records. 8.15—Dance Music.  
 VIENNA, 8.0—News.

### 9 a.m.

- BERLIN, 9.0—News; Weather; Market Prices. 9.30—Records; Announcements.  
 BRESLAU, 9.15—For Schools. Fanfare; Discussions. 9.45—Records.  
 COLOGNE, 9.0—News; Water Level. 9.10—For Children. 9.30—Topical Talks; Sports; Seafaring and Cinema.  
 DEUTSCHLANDSENDER, 9.0—News. 9.15—"Bruder lustig"—Play for Children. 9.50—For Children (on Records).  
 HAMBURG, 9.50—News.  
 HILVERSUM, 9.0—Records. 9.40—Religious Programme. 9.55—Concert for Night Workers.  
 HUIZEN, 9.40—Records.  
 KALUNDBORG, 9.15-9.45—Talk for Schools; Australia.  
 KÖNIGSBERG, 9.15—See Deutschlandsender.  
 LEIPZIG, 9.0—Announcements. 9.15—Talk for Schools; The Saar.  
 MUNICH, 9.40—Market Prices.  
 PRAGUE, 9.5—News in German; Record. 9.15—Brass Band. 9.50—Reading.  
 STUTTGART, 9.0—News. 9.15—"The Shepherd's Dream"—Play for Children. 9.45—Brahms Lieder, by Käthe Ivers (Soprano).  
 VIENNA, 9.50—Water Level; Weather.

### 10 a.m.

- BERLIN, 10.0-10.30—Exchange.  
 BRESLAU, 10.0—Records. In the Interval: News.  
 COLOGNE, 10.0—Topical Talks (contd. from 9.30). 10.30—Post Office Propaganda.  
 DEUTSCHLANDSENDER, 10.30—Talk; Acoustics.

- FRANKFURT, 10.0—Concert. 10.30—Announcements.  
 HAMBURG, 10.0—For Schools. 10.30—See Königsberg.  
 HILVERSUM, 10.0—Concert for Night Workers.  
 HUIZEN, 10.0—Records. 10.10—Concert. 10.40—Records.  
 KALUNDBORG, 10.15—For Schools.  
 KÖNIGSBERG, 10.5—News. 10.30—Orchestra. Conductor: Stiebertz. Festival March (Koschny). Friedensfeier (Reicke). Two Pieces (Grieg). (a) Peer Gynt's Home coming. (b) Solvèg's Song. Waltz on a Schubert Theme (Bohne). Intermezzo, Herzdame (Finger). Selection, "Der Kuhreigen" (Kienzi). March (Stiebertz). Strauss Potpourri (Antonius). Overture, "The Volga Gipsy" (Spiellek). March, Die Wahrheit siegt (Schar-schmidt).  
 LEIPZIG, 10.0—Announcements; Records. 10.30—News; Weather. 10.45—For Farmers.  
 LYONS (La Doua), 10.0—Orchestra.  
 MUNICH, 10.0—For Farmers: Co-operation between Town and Country. 10.20—Weather; News. 10.30—Records; Announcements.  
 OSLO, 10.50—Exchange.  
 PRAGUE, 10.0—Record. 10.5—Muzik Quartet. 10.55—For Farmers.  
 RADIO-NORMANDIE, 10.0—Symphony Orchestra.  
 STRASBOURG, 10.45—Cotton Exchange; Records.  
 STUTTGART, 10.0—Erich Fleich-hauer (Violin) and Elfy Erhardt (Pianoforte). Rondino (Beethoven). Wiegeliel (Reger). Gipsy Serenade (Valez). Andalusian Romance (Sarazate). 10.15-10.45—Concert.  
 TURIN, 10.30—Records.  
 VATICAN CITY, 10.0-10.15—Religious Information in Various Languages.  
 VIENNA, 10.30—For Women. 10.55—Weather.

### 11 a.m.

- BERLIN, 11.0—See 10.30 Königsberg. In the Interval at 11.30: Weather.  
 BEROMÜNSTER, 11.0—Waltzes on Records. 11.29—Time; News. 11.40—Records.  
 BRESLAU, 11.0—See Leipzig.  
 BUDAPEST, 11.5—Trio Concert. In the Interval at 11.30: News.  
 COLOGNE, 11.0—See Leipzig. 11.45—Announcements; Greetings.  
 DEUTSCHLANDSENDER, 11.0—See Leipzig.  
 FRANKFURT, 11.0—See 10.30 Königsberg.  
 HAMBURG, 11.0—Market Report; Time; Weather; Shipping Report. 11.15—See 10.30 Königsberg.  
 HILVERSUM, 11.0—Concert for Night Workers. 11.40—Records. 11.55—Light Music. Conductor: Wins. Marche des gamins de Paris (Berger). Leuchtkaferchens Stelldichein (Siede). Prière (Crémieux). Selection, "Giuditta" (Lehár). Parquitta (Leonardi). Piece (Mur-zilli). Spiel mir auf der Balalaika (Kaper). Selection, "The Czarevitch" (Lehár).  
 HUIZEN, 11.0—Records. 11.10—Religious Address. 11.40—Police Notes. 11.55—K.R.O. Boys. Conductor: Lustenhauer. March (Leur). Die Spieluhr der Pompadour (Noack). March Pot-pourri (Ciere). Waltz Pot-pourri (Ciere). Millocker Pot-pourri (Morena). Budapest (Langsfelder). Records. Croon to me (Pola). Plaisir d'amour (Martini). Pot-pourri (Dostal). Wiener Bürger (Ziehrer). Schubert Pot-pourri (Urbach). Finale.  
 KALUNDBORG, 11.0—Bendix String Ensemble.  
 KÖNIGSBERG, 11.0—Orchestra (contd. from 10.30).  
 LEIPZIG, 11.0—Dresden Philharmonic Orchestra. Conductor: Schestak. I—Scandinavian. Extracts, "Sigurd Jorsalfar" (Grieg).



11 a.m. (contd.)

Waltz (Sibelius). Four Swedish Dances (Tor Aulin). Heimatklänge (Juel-Fredriksen). Overture, Nachklänge von Ossian (Gade). Part II—Light Music. March, Barcelona (Friedemann). Waltz, Sorgenbrecher (Strauss). Liebesgeständnis (Nicodé). Gopak (Bullerian). Selection, "Die schöne Galathee" (Suppé). Hahnen-Rheinländer (Ferras). Als der Grossvater die Grossmutter nahm (Spohr).

12 noon

ALGIERS, 12.30—Station Orchestra. Overture, "Zampa" (Herold). Selection, "La Favorita" (Donizetti). Fête Florentine (Mignan). Waltz (Waldteufel). BARCELONA, 12.0—For Women. 12.45—Records. BELGRADE, 12.0—Station Orchestra. 12.30—News; Time. BERLIN, 12.0—Midday Echoes. 12.15—Records. BEROMÜNSTER, 12.0—Records. 12.25—Time; Weather; Exchange. 12.30—Parliamentary Review. 12.45—Wireless Notes. BRESLAU, 12.0—Records and News. 12.30—See 11.0 Leipzig. BRUSSELS (No. 1), 12.0—Records. BRUSSELS (No. 2), 12.0—Orchestra. Conductor: Douliez. Ferari (Violin) Dance from Esquisses flamandes (Brussemans). Italian Songs (de Micheli). Bohemian Songs and Dances (Fetras). Zigeunerweisen (Sarasate). Czech Dances, "The Bartered Bride" (Smetana). Rhine Fair (Dreissen). BUDAPEST, 12.30—Military Band. COLOGNE, 12.0—Military Band, from Essen. Conductor: Knaden. 12.45—Announcements. DEUTSCHLANDSENDER, 12.0—Records. 12.45—News. FRANKFURT, 12.0—News. 12.10—Local News. 12.15—Records. HAMBURG, 12.0—Exchange. 12.15—Weather. 12.20—Musical Programme. HILVERSUM, 12.0—Light Music. (contd. from 11.55). 12.40—V.A.R.A. Ensemble. Conductor: Bakels. Turkish March (Algra). Auf der Veluwe (Siep). Mooi Volendam (de Groot). The Mill in the Black Forest (Eilenberg). Rosemousse (Bosc). The Clock and the Dresden Figures (Kettelberg). Frauenherz (Strauss). Pizzicato (Strauss). Dancing Doll (Poldini). Neapolitan Serenade (de Micheli). Selection, "La Fille de Madame Angot" (Lecocq).

PARIS (Radio-Paris), 12.0—Light Music. Conductor: André. Reine Chanteix (Soprano), and Dorelot (Tenor). March (Buissou-Letoibe). Slow Waltz (André). Two Songs. Minuet (Briclot). Overture, "Le Roi d'Ys" (Lalo). Two Songs. Polka for Trumpets (Reynaud). Selection, "Martha" (Flotow). Two Songs. Appassionata (Filipucci). Selection, from the Ballet "Le Burgonde" (Vidal). Two Songs. Overture, "Les Mousquetaires au Couvent" (Varney). Waltz (Waldteufel). Selection, "Le petit Duc" (Lecocq). Piece (Reeves). Waltz (Wesly). Valencia (Padilla). PRAGUE, 12.0—Light Music. 12.35—Industrial Report. 12.45—Records. 12.55—Exchange. RADIO-NORMANDIE, 12.0—Extracts from Operettas. 12.45—News. 12.50—Light Music. ROME, 12.0—Light Music. In the Interval: from 12.30-12.45: News. SOTTENS, 12.0—Records. 12.10—Exchange. 12.15—Records. STRASBOURG, 12.0—Records. 12.45—News. STUTTGART, 12.0—News. 12.15—Records. TURIN, 12.0—Announcements. 12.2—Kerruzzi Orchestra. In the Interval: from 12.30-12.45: Records; Exchange. VIENNA, 12.0—News. 12.10—Records. WARSAW, 12.0—News. 12.5-12.30—Le Carnaval des Animaux (Saint-Saëns) on Records.

1 p.m.

ALGIERS, 1.0—News. 1.5—Orchestra. Fleur de Lys (Paradis). Au Bois chantant (Pesse). Promenade matinale (Lacombe). Hidalgo (Landry). ATHLONE, 1.30—Time; Weather; Exchange; Records. BARCELONA, 1.0—Records; 1.30—Theatre Notes; Amusement Guide; Records. BRRLIN, 1.0—Weather; News; Water Level. 1.15—Dance Records. BEROMÜNSTER, 1.0—String Instruments. 1.40—Scientific Talk. BRESLAU, 1.0—News. 1.5—Exchange. 1.10—Records; Announcements. 1.35—Greetings. 1.40—Market Prices. BRNO, 1.5-1.10—Markets. BRUSSELS (No. 1), 1.0—News. 1.10—Light Music. Conductor: Douliez. Rag-time (Goffin). Chant printanier (Caludi). Provincial Suite (Jongen). Songe d'amour (Marsick). Piece (Jacob). Waltz (Caludi). Pourquoi pleurez-tu? (Kalkman). Nedjma (Munot). Valse des blondes (Ganne). Walloon Songs (Hillier). BRUSSELS (No. 2), 1.0—News. 1.10—Records. BUDAPEST, 1.0—Military Band. COLOGNE, 1.0—Records. 1.45—Animal Stories. DEUTSCHLANDSENDER, 1.55—Announcements; Exchange. FRANKFURT, 1.0—Records. 1.15—News. 1.30—Economic Reports and Discussions. 1.50—Exchange. 1.55—Weather. HAMBURG, 1.0—Musical Programme. 1.15—News. 1.30—Records. HILVERSUM, 1.0—V.A.R.A. Ensemble (contd. from 12.40). 1.55—Talk. HUIZEN, 1.0—K.R.O. Boys (contd. from 11.55). 1.40—For Young People. JUAN-LES-PINS (Radio Côte d'Azur), 1.0—News. 1.15—Orchestra. KALUNDBORG, 1.30—Records. KÖNIGSBERG, 1.0—News. 1.30—Post Office Propaganda; Records. LEIPZIG, 1.0—News; Exchange; Weather. 1.15—Records; Light Music. LYONS (La Doua), 1.0—The Fusier Orchestra. MADRID (EAJ7), 1.30—Station Sextet. MUNICH, 1.0—News; Sports Notes; Programme Announcements. 1.20—Girls' Choir. 1.45—Chess Lesson. PARIS (Poste Parisien), 1.0—Records. 1.5—Exchange. 1.15—Station Orchestra. Overture, "François les Bas-Bleus" (Messenger). Aubade (Caludi). Italian Serenade (Caludi). Ballet, "Coppélia" (Delibes). Extase (Ganne). Selection, "Countess Maritza" (Kálmán). PARIS (PTT), 1.0—News. 1.30—Records. PARIS (Radio-Paris), 1.0—Light Music (contd. from 12.0). In the Interval: at 1.20—Exchange. PRAGUE, 1.0-1.15—Exchange and Weather in German.

ROME, 1.0-1.15—Light Music (contd. from 12.0). SOTTENS, 1.45—Report on the Quinzaine Genevoise Festival. STOCKHOLM, 1.0—Light Music. STRASBOURG, 1.0—Records. STUTTGART, 1.0—Records. 1.15—Talk with Records: Popular Love Songs. VIENNA, 1.0—Announcements.

2 p.m.

ATHLONE, 2.0-2.30—Records. BARCELONA, 2.0—News. 2.10—Station Sextet. In the Interval: Report; Political Notes. After the Concert, Exchange. BERLIN, 2.0-2.20—Exchange. 2.35—"Mümmelmännchen"—Sequence (Metz Briv). BRESLAU, 2.0—Market Prices. 2.10—Book Review. 2.30—Dialogue in Commemoration of Brehm, the Naturalist. COLOGNE, 2.0—Animal Stories. 2.30—Exchange. 2.40—Talk: By-products of Coal. DEUTSCHLANDSENDER, 2.0—Exchange. 2.15—For Children. 2.40—Industrial Review of the Week. FRANKFURT, 2.0—For Young People: (a) Songs and Music, (b) "Fritz will zum Gebietstreffen"—Play (Porstendorfer). HAMBURG, 2.0—Wireless Notes. 2.15—Exchange. 2.40—Shipping; Aviation. HILVERSUM, 2.0—Talk. 2.10—V.A.R.A. Ensemble. Conductor: Bakels. Overture, "Marinella" (Fučík). Heinzelmännchens Wacht- parade (Noack). Selection, "Countess Maritza" (Kálmán). Narcissus (Nevin). Hab' ich nur deine Liebe (Suppé). Song and Dance (Tarenghi). Lotusblumen (Ohlsen). 2.55—Mandoline Orchestra. HUIZEN, 2.0—For Young People (contd. from 1.40). 2.10—Records. 2.40—For Children. KALUNDBORG, 2.0—For Children. 2.30—English Music. Radio Orchestra. Conductor: Reesen. Overture, "The Merry-makers" (Coates). Serenade in E minor for Strings (Elgar). Eight Sixteenth Century English Dances (arr. Reesen). Gipsy Suite (German). Pomp and Circumstance (Elgar). Overture, "The Bohemian Girl" (Balfe). In the Showdown (Finck). Japanese Suite (Holst). Overture, "The Mikado" (Sullivan). KÖNIGSBERG, 2.0—Market Prices. 2.20—For Women. 2.30—For Children. LEIPZIG, 2.0—For Children. 2.30—Weekly Review. 2.45—Exchange; Weather; Time. LYONS (La Doua), 2.0—The Fusier Orchestra. MADRID (EAJ7), 2.0—Amusement Guide; Exchange; Light Music. 2.30—Station Sextet. MUNICH, 2.0—Chess Lesson (contd. from 1.45). 2.15—Poems, Songs and Tales in Franconian Dialect. 2.35—Weather; Market Prices. 2.50—Labour Market Report. PARIS (PTT), 2.0—Popular Music. 2.30—Variety. Selection, "L'oeil crevé" (Hervé). "Celui qui revient"—One-Act Play (Roques). Spanish Waltz, Rosita (Julien). "La peri-Colle"—Parody on Offenbach's "La périoche" (Roques). PARIS (Radio-Colonial), 2.45—Station Quintet. Selection, "The Magic Flute" (Mozart). Passepied (Chaminade). Piece (Messenger). Les maisons de l'éternité (Bloch). Selection, "Aida" (Verdi). Selection, "The Arabian Nights" (Strauss). Selection, "The Gipsy Princess" (Kálmán). PRAGUE, 2.55—Novotny Brass Band. SOTTENS, 2.0-2.15—Report (contd. from 1.45). STOCKHOLM, 2.0—Reading. 2.20—Andersson (Viola). Greta Persson-Albertus (Songs). Ebersson (Pianoforte). Viola: (a) Romance (Bossi). (b) Minuet (Boccherini). (c) Adagio and Allegro fuoco, Sonata in D (Nardini). Songs: (a) Hebridean Song (Kennedy-Fraser). (b) Sunshine (Järnefel). (c) Two Songs (Heintze). Pianoforte: (a) Danza antica (Molinari-Respighi). (b) Elegy (Rachmaninov). (c) Burlesque (Poch). STRASBOURG, 2.30—See Paris (PTT). STUTTGART, 2.0—Talk by a Member of the German Himalayan Expedition, 1934. 2.30—Talk with Music: A Folk Festival in Franconia. VIENNA, 2.0—Weather; Exchange. 2.15—Talk in English: The Three Little Pigs and the Big Bad Wolf. 2.40—Reading (Gotthelf). WARSAW, 2.30—Announcements; Exchange. 2.45—Records.

3 p.m.

BARCELONA, 3.0—For Hospitals. 3.30—Amateurs at the Microphone. BELGRADE, 3.0—Records. 3.30—Station Orchestra. BERLIN, 3.0—Operetta Music. Berlin Orchestral Society. Conductor: Schönbaumsfeld. Karl Ziegler (Tenor); Ilona Halden-Wicke (Soprano). Overture, "Das Modell" (Suppé). Tenor; (a) Song, "Das verbotene Lied" (Werther). (b) Song, "Das Veilchenmädlel" (Hellmesberger). Waltz, Die letzten Tropfen (Kratz). Soprano: (a) Song, "The Gipsy Baron" (Joh. Strauss). (b) Harriet's Song, "Der arme Jonathan" (Müllöcker). Intermezzo, "The Arabian Nights" (Joh. Strauss). Duet, "Das Dorf ohne Glocke" (Künneke). Song and Czardas (Lchár). Duet, "Die Millionengretl" (Schönbaumsfeld). Waltz, Samt und Seide (Ziehrer). Intermezzo, "Die Perle von Iberien" (Hellmesberger). Song, "The Cousin from Nowhere" (Künneke). Gondola Song, "A Night in Venice" (Joh. Strauss). Duet, "Der Bettelestudent" (Müllöcker). Selection, "Clivia" (Dostal). BEROMÜNSTER, 3.0—See Monte Ceneri. BRESLAU, 3.0—Band Concert. Conductor: Spagl. Fleury-Marsch (Fürst). Jubel-Ouverture (Weber). Waltz, España (Waldteufel). Suite, "Der Rosenkavalier" (R. Strauss). King Ludwig March (Seifert). Trombone Solo, Der Deserteur (Hackel). Barbara Präsentiermarsch (Jander). Swabian Rhapsody (Kaempfert). Schatz mein Schatz, reise nicht so weit von mir (Blume). O märkische Heimat, wie bist du so schön (Zimmer). Xylophone Solo: Overture, "William Tell" (Rossini). Potpourri, Was die Reichwehr singt (Schmidt). March, Volk ans Gewehr (Schmidt). Overture, "Light Cavalry" (Suppé). Admiralsmarsch (Friedemann). BUDAPEST, 3.0—Handwork Lesson. 3.45—News. COLOGNE, 3.0—Light Music. Village Band, Women's Choir, a Vocal Trio and Soloists. Conductor: Kneip. DEUTSCHLANDSENDER, 3.0—See Stuttgart. FRANKFURT, 3.0—See Stuttgart. HAMBURG, 3.0—See Stuttgart. HILVERSUM, 3.0—Mandoline Orchestra. 3.40—Radio Report. HUIZEN, 3.0-3.40—For Children. 3.55—Records. KALUNDBORG, 3.0—English Music (contd. from 2.30). In the Interval at 3.20 (approx.): Reading (Pearl Buck). KÖNIGSBERG, 3.0—Danzig Theatre Orchestra. Conductor: Kallipke. Overture, "Russlan and Ludmilla" (Glinka). Norwegian Dances (Grieg). Selection, "Der Page des Königs" (Goetze). Waltz, Die Tanzlustigen (Fetras). Serenade (Schmalstich). Polonaise (Schubert). Waltz (Glazunov). Egyptian Suite (Kron). Selection, "Sylvia" (Delibes). Circassian Tattoo (Wachter). LAHTI, 3.0—Records. LEIPZIG, 3.0—Leipzig Symphony Orchestra. Conductor: Blumer. Jagdouverture (Künneke). Polonaise No. 2 (Liszt). Selection, "André Chenier" (Giordano). Waltz, "Boccaccio" (Suppé). Invitation to the Dance (Weber). Polka, Leichtes Blut (Strauss). MADRID (EAJ7), 3.0—News; Light Music. 3.30—Sextet. Selection, "La Bohème" (Puccini). Prelude, "Le Déluge" (Saint-Saëns). 3.50—Announcements. MONTE CENERI, 3.0—Orchestra from the Kursaal, Lugano. 3.30—Modern Music by Leopoldo Casella (Pianoforte). MOSCOW (No. 1), 3.30—Communist Party Programme. MUNICH, 3.0—Small Station Orchestra. Conductor: Erich Kloss. Overture, "La Favorita" (Donizetti). Meditation, "Thais" (Massenet). Herbstrosen (Strauss). Selection, "Faust" (Gounod). Potpourri, Bei Lied und Wein (Lautenschlager). Trumpet Solo: Auf der Wacht (Dierig). Liebeszauber (Döring). Two Xylophone Pieces: (a) Sternengefunkel (Bode). (b) Spanish Dance (Bode). March, Die kleinste Truppe (Lohr). PARIS (Poste Parisien), 3.45—Exchange. PARIS (PTT), 3.0—Variety (contd. from 2.30). PARIS (Radio-Colonial), 3.0—Quintet (contd. from 2.45). PARIS (Radio-Paris), 3.0—For Children. PITTSBURGH, 3.0—Edward MacHugh. 3.15—KDKA Home Forum

SATURDAY Oct. 20

3.30—Singing Strings. 3.45—News; Originalities. PRAGUE, 3.0—Band (contd. from 2.55). 3.40—Reading for Young People. ROME, 3.30—For Children. 3.55—Exchange. SOTTENS, 3.0—See Monte Ceneri. STOCKHOLM, 3.0—For Children. 3.45—Records. STRASBOURG, 3.0—See 2.30 Paris (PTT). 3.30—Music Talk. 3.45—For Women. STUTTGART, 3.0—Mannheim Philharmonic Orchestra and the Riel Schrammel Quartet. Conductor: Schlawing. March, Unsere Garde (Förster). Overture, "Czar and Carpenter" (Lortzing). Selection, "Rosamunde" (Schubert). Selection, "Der Obersteiger" (Zeller). Ballet Suite (Gluck-Mottl). Waltz, Nachtschwärmer (Ziehrer). Schranzelmarsch (Kretner). (b) Weaner Madln (Ziehrer), (c) Als mein Ahnerl 20 Jahr (Zeller), (d) Leucht-käferchens Steeldichein (Siede). Waltz, Dolores (Waldteufel). Tanz in der Dorfschenke (List). Selection, "Aida" (Verdi). Overture, "The Daughter of the Regiment" (Donizetti). Mazurka, La Czarine (Ganne). Erzherzog - Albrecht-Marsch (Komzak). TURIN, 3.35—News. 3.45—For Children. VIENNA, 3.0—Reading (contd. from 2.40). 3.10—Zither Concert. Conductors: Buchner and Kunesch. March, Steirbaum (Rudolf Wagner-Kodat). Alpenglühn (Kodat). Ländler (Limberger). Gavotte (Schmidt). Kriegers-Sehnsucht nach seiner Heimat (Munzar). Aus'n steirischen Landl (Kodat). March, Frohe Heimkehr (Süss). 3.45—"Der Stock im Eisen"—Play (Ilg), relayed from the Ravag Exhibition-Studio. WARSAW, 3.0—Records. 3.30—"In the Land of the Cherry Blossom"—Play for Children (Marie Dynowska). Music by Macura.

4 p.m.

BARCELONA, 4.0—News. BELGRADE, 4.0—Station Orchestra. BERLIN, 4.0—Operetta Music (contd. from 3.0). In the interval at 4.15: Talk. BEROMÜNSTER, 4.0—See Monte Ceneri. BRESLAU, 4.0—Band (contd. from 3.0). BRNO, 4.5—Serenade for Strings (Dvořák). 4.40—For Workers. 4.50—German Transmission: Arias; "Diamant" (Opera) (Bizet). BRUSSELS (No. 1), 4.45—Announcements. 4.5—Talk: Belgian Trade. BRUSSELS (No. 2), 4.40—Announcements. 4.45—Talk. BUDAPEST, 4.0—Letter-Box. 4.35—Orchestra. Conductor: Polgár. Bagatelle (Rosza). Suite, The Pusza (Polgár). Nocturne (Szekeres) Melody (Hullebroeck). Zigeunerlager (Oscheit). COLOGNE, 4.0—A Visit to the Wülfrath Museum. 4.15—Musical Programme by Young People. 4.45—Reading (Apel). DEUTSCHLANDSENDER, 4.0—See 3.0 Stuttgart. FRANKFURT, 4.0—See 3.0 Stuttgart. HAMBURG, 4.0—See 3.0 Stuttgart. 4.30—Wolfgang Junemann reads. HILVERSUM, 4.0—Light Music. Conductor: v.d. Horst. 4.40—Literary Talk. HUIZEN, 4.0—Records. 4.25—K.R.O. Orchestra. Conductor: van 't Woud. Swedish March (Scharwenka). La Furlana (Roberts) Selection, "Nell Gwynn" (German). Elegy (Busch). Selection, Les "Saltimbanques" (Ganne). KALUNDBORG, 4.0—English Music (contd. from 2.30). 4.30—Exchange. 4.42—A Poem. 4.45—Talk. KÖNIGSBERG, 4.0—Traffic Report. 4.10 (approx.)—Orchestra (contd. from 3.0). LAHTI, 4.0—Recitation. 4.30—Music 4.50—News. LEIPZIG, 4.0—"Harvest Customs in the Halle-Merseburg District"—Sequence. 4.30—Richard Sturzenegger (Cello) and Helmut Schaefer (Pianoforte). Sonata and Arpeggione (Schubert). Romance and Caprice (Reger). LYONS (La Doua), 4.45—Jazz. MONTE CENERI, 4.0—Ballet from Opera (on Records). 4.30—Tessin Dialect Poems. 4.38—The Romantic Trio.



## SATURDAY Oct. 20

4 p.m. (contd.)

MORAVSKA-OSTRAVA, 4.25—Talk: Modern Literature. 4.35—Topical Talk. 4.45—For Workers. 4.55—News.

MOSCOW (No. 1), 4.0—Communist Party Programme. 4.30—Young Authors at the Microphone; Letter-Box; Light Music.

MUNICH, 4.0—Orchestra (contd. from 3.0). 4.30—A Modern Dictionary. 4.50—German Folk Songs. Elizabeth Hallstein (Soprano). Traute Börner (Contralto); Ludwig Schmidmeier (Pianoforte).

OSLO, 4.0—Bergen Station Orchestra.

PITTSBURGH, 4.0—Honeymooners. 4.15—KDKA Kiddies' Klub.

PRAGUE, 4.5—Schubert Songs by Božena Kozliková. 4.25—Science Talk. 4.35—Records. 4.45—For Farmers. 4.55—Talk for Workers.

RADIO-NORMANDIE, 4.0—Dance Music. 4.30—For Children. 4.45—Dance Music.

ROME, 4.0—News; Lottery Results. 4.10—Concert: Umberto Spionello (Violin), Elvira Primo (Pianoforte), Elvi Lacorini (Soprano) and Romano Rasponi (Baritone). Sonata No. 8 (Corelli). Songs: (a) La pastorella delle Alpi (Rossini), (b) Aria, "La nave rossa" (Seppilli), (c) Bimba, Bimbeta (Sibella). Violin Solos: (a) Waltz (Hummel), (b) Zigeunerweisen (Sarasate). Italian and South American Folk Songs.

SOTTENS, 4.0—See Monte Ceneri.

STOCKHOLM, 4.0—Weather. 4.45—Talk.

STRASBOURG, 4.0—To be announced.

STUTTGART, 4.0—Orchestra and Schrammel Quartet (contd. from 3.0).

TURIN, 4.0—For Women. 4.10—Dance Music from the Pagoda.

VIENNA, 4.0—Play (contd. from 3.45) (Beethoven). 4.45—Records. Overture, King Stephen.

WARSAW, 4.0—String Quartet in F (Ravel). 4.30—Songs. 4.50—For Women.

5 p.m.

BERLIN, 5.0—Announcements. 5.5—Talk: The Balloon, its use for sport and for health. 5.20—Conrad Ansoorge Recital, by Margarethe Ansoorge. Pianoforte Sonata in A. Wald im Frühling, from the suite "Träumbilder." Valse Impromptu. 5.50—"Bringing up Children"—Two Plays (Irmtraut Hugin).

BEROMÜNSTER, 5.0—Talk: Modern Swiss Lyrics. 5.30—Records.

BRATISLAVA, 5.0—Hungarian Transmission: Talk: Bratislava; Dance Music. 5.45—Weekly Review.

BRESLAU, 5.0—Discussion: Industrial Welfare. 5.20—Topical Talk. 5.30—To be announced. 5.50—Programme Notes; Weather.

BRNO, 5.0—German Transmission (contd. from 4.50). 5.25—Telegraphy Lesson. 5.40—Literary Review.

BRUSSELS (No. 1), 5.0—Records. Quadrille (Metra). Polka. Ballet Suite (Grétry-Mottl). Scherzando (Marsick). La chaise à porteurs (Chaminade). Duet, "La Traviata" (Verdi). Duets, "The Damnation of Faust" (Berlioz)—Napoli (Charpentier).

BRUSSELS (No. 2), 5.0—For Children.

BUDAPEST, 5.0—Orchestra (contd. from 4.35). 5.30—Recital by Sandor Goth and Ella Kirtesg.

COLOGNE, 5.0—A Jutland Peasant's History—a Word Picture. 5.15—Records. 5.35—See Leipzig.

DEUTSCHLANDSENDER, 5.0—Weekly Sports Review. 5.20—Announcements. 5.35—See Leipzig.

FRANKFURT, 5.0—Frontier: Problems. 5.25—Surprise Programme. 5.45—Orchestra, from Kaiserslautern.

HAMBURG, 5.0—Records: Chopin. 5.35—Talk: The German Navy. 5.50—Weather.

HILVERSUM, 5.0—Light Music (contd. from 4.0). 5.40—Records.

HUIZEN, 5.0—K.R.O. Orchestra (contd. from 4.25). 5.10—News in Esperanto. 5.25—K.R.O. Orchestra. Overture, "Le Domino noir" (Auber). Patrol of the Boxers (Berge). Suite (Herbert). Waltz Pot-pourri (Fétra).

KALUNDBORG, 5.0—Talk. 5.15—French.

KÖNIGSBERG, 5.0—Tally Ho!—Report of a Hunt. 5.15—Market Prices. 5.25—Sextet in B flat, for Flute, Oboe, Clarinet, Horn, and Pianoforte (Thuille), by the Lenzer Sextet.

LAHTI, 5.10—News in Swedish. 5.15—Talks.

LEIPZIG, 5.0—Reading. 5.20—A Modern Dictionary. 5.35—Military Band Concert, from Halle.

LYONS (La Doua), 5.0—Jazz.

MADRID (EAJ7), 5.0—Chimes. 5.5—Flamenco Songs; Orchestra.

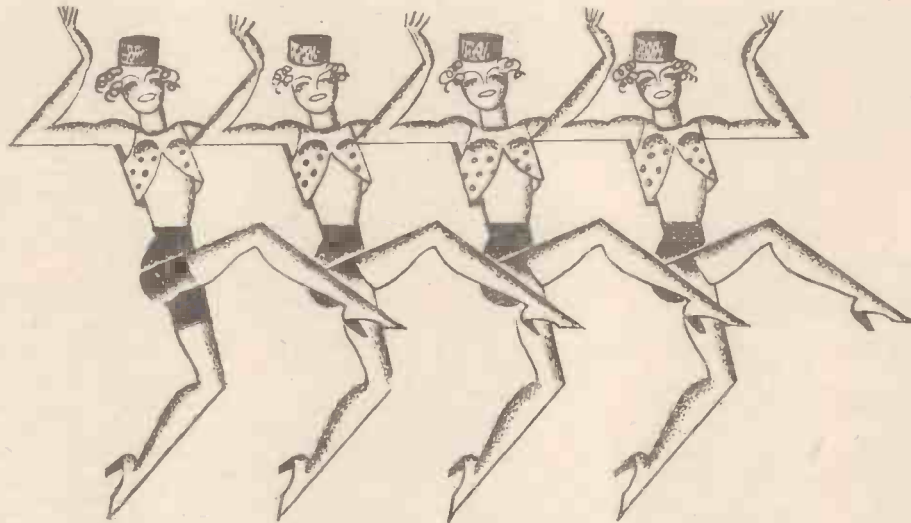
MORAVSKA-OSTRAVA, 5.0—Wagner's Zither Trio. 5.40—Accordion.

MOSCOW (No. 1), 5.0—Light Music. 5.55—Concert for Collective Farmers.

MUNICH, 5.0—German Folk Songs (contd. from 4.50). 5.10—Book Review for Young People. 5.30—Discussion: Dowries. 5.50—Announcements.

OSLO, 5.0—For Children. 5.45—Talk: Economics.

PARIS (Radio-Paris), 5.0—Lamoureux Concert.



A cabaret programme is to be broadcast by Brussels No. 2 this evening (9.0 p.m.)

PITTSBURGH, 5.0—Fields and Hall. 5.15—Genia Fonarova. 5.30—Farm and Home Hour.

PRAGUE, 5.5—German Transmission: (a) Talk for Young People, (b) Baroque Period Music, by Maria Heller (Harpischord), (c) "Di Sach muss a Reiben kriegen"—Folk Play. 5.55—News in German.

RADIO-NORMANDIE, 5.0—American Vaudeville Programme. 5.30—Orchestra.

ROME, 5.0-5.10—Corn Prices.

SOTTENS, 5.0—For Children. 5.20—Talk for Young Philatelists. 5.30—English. 5.45—Talk on the Quinzaine Gênévoise Festival.

STOCKHOLM, 5.0—Talk. 5.15—Military Band. Conductor: Widner. Egyptian March (Strauss). Midsummer Eve (Lüdig). Waltz (Ziehrer). Selection, "Tannhäuser" (Wagner). Hungarian Rhapsody (Liszt). Estonian Folk Melody. Piece (Reckling).

STRASBOURG, 5.0—Mozart Concert. Station Orchestra. Conductor: de Villers. Overtures, "Der Schauspieldirektor," "La finta giardiniera," "Il re pastore." Ballet, "Les petits riens." Symphony in E minor. Turkish March.

STUTTGART, 5.0—"Thirty Newspapers a Second"—Report from a Newspaper Printing Works. 5.30—Heinz Mönch (Zither), Erich Ockert (Xylophone), Hans Thaler (Accordion), and Max Ladewig (Pianoforte). Xylophone: Zirkus (Rüdiger). Zither: Was die Isar rauscht (Haustein). Accordion: March, Soldatenblut (Blon). Xylophone: Polka, Der Holzworm (Rüdiger). Zither: Waltz, Aus vergangenen Zeiten (Smetak). Accordion: Waltz, Mada (Vacher). Xylophone and Accordion: Rivalen (Robrecht). Zither: Romance (Kollmanek). Accordion: March, Wien bleibt Wien (Schrammel).

TURIN, 5.0-5.10—Agricultural Report; Lottery Results.

VIENNA, 5.0—Records. 5.20—Folk Song Lesson. 5.45—Talk: The Launching of the "Queen Mary."

WARSAW, 5.0—For Farmers. 5.10—Art Notes. 5.15—Mandoline Orchestra. Spanish March (Coletta).

Two Hungarian Dances (Brahms). Torádor et Andalouse (Rubinstein). Ballet Suite (Popy-Boncz-Tomaszewski). 5.45—Report.

6 p.m.

ALGIERS, 6.0—Records. 6.30—Old Dances. 6.45—Exchange. 6.55—Weather.

ATHLONE, 6.0—For Children. 6.45—News.

BARCELONA, 6.0—Station Trio. Selection, "Lilac Time" (Schubert-Bert). Song (Mendelssohn). Ballet Air (de Taeye). Serenata (Doulicz). Gavotte and Caprice (Bortkiewicz). Peasant Cradle Song (Moszkowski). Selection, "Thais" (Massenet).

BELGRADE, 6.0—Talk. 6.30—Announcements. 6.40—Records.

BERLIN, 6.0—Two Plays (contd. from 5.50). 6.40—Echoes of the Day.

BEROMÜNSTER, 6.0—Chimes. 6.15—Time; Weather; Market Prices. 6.20—Lecture Recital: The Violin Sonata.

BRATISLAVA, 6.25—Accordion.

Sailing Ship (Auson). Piece (Gebhardt). Viennese Pot-pourri (Kaper). Russian Pot-pourri (Kaper).

HUIZEN, 6.0—Press Review. 6.25—Records. 6.40—Police Messages. 6.55—Medical Talk.

KALUNDBORG, 6.0—News. 6.16—Talk: Are Games injurious to Women? 6.45—Viennese Marches and Waltzes by the Radio Orchestra. Conductor: Mahler. Benedict March (Jos. Strauss). O schöner Mai (Strauss). March, "Die sieben Schwaben" (Millöcker). Waltz, "The Gipsy Princess" (Kálmán). March, "The Merry Widow" (Lehár).

KÖNIGSBERG, 6.0—Weather. 6.5—Reading in Dialect (Brinkmann). 6.30—Cläre Wubken (Contralto); Schütz (Organ). Organ: Prelude and Double Fugue on "Wachet auf" (Ertel). Two Songs: (G. Schumann): (a) Die Orgel, (b) Auferstehung. Three Movements from the Seventh Sonata for Organ (Fährmann).

LAHTI, 6.5—National Festival Programme.

LEIPZIG, 6.0—Military Band (contd.

(Lewinek). Wine, Woman and Song (Strauss). Saxophone Solo. Fox-trot (Snyder). Minuet (Paderewski). Selection, "Federica" (Lehár). I love you truly (Jacobs-Bond). String Quartet (Sinigaglia). Fox-trot (Barris). March (Füéik).

STUTTGART, 6.0—See Cologne.

TOULOUSE (Radio-Toulouse), 6.15—Concert.

TURIN, 6.0—Tourist and Dopolavoro Announcements. 6.15—News in Foreign Languages.

VIENNA, 6.0—Talk (contd. from 5.45). 6.10—News. 6.20—Jadwiga Debicka (Soprano). Arietta (Paisiello). Arietta (Paradies). Non m'amate più (Tosti). Torna amore (Buzzi-Peccia). Piosna Dudarza (Paderewski). Otworz Janku (Niewiadomski). Krakowiak (Nozkowski). Das Veilchen (Liszt). Die Schüsselblumen (Liszt). Frühlingsstimmen (Strauss). Waltz, "Paganini" (Lehár).

WARSAW, 6.0—Malinowski Songs. The Composer at the Pianoforte. 6.20—Talk. 6.30—Choral Records. 6.45—Announcements. 6.50—Sports.

7 p.m.

ALGIERS, 7.0—Medical Talk. 7.15—Hawaiian Guitars. 7.30—News.

ATHLONE, 7.0—Poetry. 7.15—Irish Talk. 7.30—Time. 7.31—"La Traviata"—Opera in Three Acts (Verdi). Conductor: Dr. Vincent O'Brien.

BARCELONA, 7.0—Request Records. 7.15—News. 7.30—Exchange: Request Records.

BELGRADE, 7.0—To be announced. 7.30—Military Band.

BERLIN, 7.0—News. 7.15—See Cologne.

BEROMÜNSTER, 7.0—Talk: The St. Gall Abbey Library. 7.30—Music for two Pianofortes.

BORDEAUX-LAFAYETTE, 7.30—Sports Notes; News. 7.50—Records.

BRATISLAVA, 7.0—"Frühlingsstürme"—Operetta in Three Acts (Weinberger). The Zora Vocal Union and the Station Orchestra. Conductor: Dyk.

BRESLAU, 7.0—News. 7.10—"The German Harvest"—Sequence (Steinbach), with Music by Sattler. Conductor: Rischka.

BRNO, 7.0—"The Merry Wives of Windsor"—Opera (Nicolai) (contd. from 6.30).

BRUSSELS (No. 1), 7.0—Radio Orchestra (contd. from 6.30). 7.15—Talk. 7.30—Science Talk.

BRUSSELS (No. 2), 7.0—Orchestra (contd. from 6.20). 7.20—Dance, "Salomé" (Strauss) on Records. 7.30—News. 7.50—For Farmers. 7.55—News.

BUDAPEST, 7.0—Sáray Cigány Band. 7.25—News. 7.45—Operetta Music by the Budapest Concert Orchestra. Conductor: Fridl. Ilonka Szabo and Miklos Szedó.

COLOGNE, 6.0—Announcements; Local News. 7.15—Operetta Music: Two Station Orchestras. Conductors: Kühn and Eysoldt. Station Choir. Conductor: Breuer. Else Kochhann (Soprano); Anders (Tenor).

DEUTSCHLANDSENDER, 7.0—Topical Discussion. 7.15—See Hamburg.

FRANKFURT, 7.0—News. 7.5—See Stuttgart. 7.15—"Die gut' Stub' wackelt"—Humorous Programme in Mainz Dialect, from the Stadthalle, Mainz.

HAMBURG, 7.0—News. 7.15—Cabaret. Part I. Station Symphony Orchestra. Conductors: Eibenschütz and Secker; Bund's Dance Orchestra. The Station Choir and Dance Band; Five Belcantos, Erna Sack (Coloratura Soprano), Elisa Claron (Songs) and Luise Walker (Guitar).

HILVERSUM, 7.0—Two Pianofortes (contd. from 6.40). 7.10—Talk. 7.40—Announcements; Records.

HUIZEN, 7.0—Talk (contd. from 6.55). 7.15—K.R.O. Orchestra. Conductor: van 't Woud. American March (Souza). Overture, "Flotte Bursche" (Suppé). The Butterfly (Bendix). Ballet Air (Handley). Grieg Potpourri (Urbach). The Liberty Bell (Souza).

KALUNDBORG, 7.0—Viennese Marches and Waltzes (contd. from 6.45). 7.15—Talk: National Types in Holberg's Writings—the Arch-chair Politician.

KÖNIGSBERG, 7.0—News. 7.10—Programme for Soldiers.

LAHTI, 7.0—National Festival Programme.

LEIPZIG, 7.0—News. 7.10—Variety. LYONS (La Doua), 7.30—Local News.

BRESLAU, 6.0—Chimes. 6.5—Two Sketches (Karl Ude): (a) Saturday Evening, (b) The Re-union. 6.30—Programme Notes; Records.

BRNO, 6.25—Talk on the following Transmission. 6.30—"The Merry Wives of Windsor"—Opera (Nicolai), from the Olomouc Municipal Theatre.

BRUSSELS (No. 1), 6.0—For Young People. 6.30—Radio Orchestra. Conductor: Gason. Loustics en fête (Marsick). Suite No. 3 (Hervé). Intermezzo (Desprez). Cortège tartare (Dessart). Village Dances (Grétry). Aubade d'amour (Largé). Valeureux Liégeois (Ramous).

BRUSSELS (No. 2), 6.0—Philosophy Talk. 6.20—Orchestra. Conductor: Doulicz. Songs and Dances of Old Vienna (Pachernegg). Cordoba en fiesta (Turina). Orientale (Cui). Two Old Dances (Razigade). Dance Suite (Zimbalist). Serenade (Malats). Bulbul (Poldini). Irish Hornpipe (O'Neill).

BUDAPEST, 6.0—Recital (contd. from 5.30). 6.30—Sáray Cigány Bagd.

COLOGNE, 6.0—Station Schrammel Quartet, the Frohe Sänger and Soloists. Carinthian Marching Songs (Kapeller). Ich hab amal a Rüscherl g'habt (Kapeller). A Busserl. Ich und min Lisbeth. Hallo, die Schrammel spielen (Jansen). Ubers Bacherl bin i gesprungt. Tu do net a so. Der kleine Tambour. Auf geht's (Meyer). Song, Frühling in Wien (Stolz). La vera sorrentina. La tarantella. Marsch. March, Fesch und resch (Kronegger). 6.50—Snapshots.

DEUTSCHLANDSENDER, 6.0—Vocal and Instrumental. 6.45—Topical Discussions.

FRANKFURT, 6.0—Weather. 6.10—(approx.)—Orchestra (contd. from 5.45). 6.45—Topical Talk.

HAMBURG, 6.0—See Deutschlandsender. 6.45—To be announced.

HILVERSUM, 6.0—Records. 6.10—For Young People. 6.40—Jong and Steyn (Two Pianofortes). Marigold (Mayerl). Dance (Föss). The lovely

from 5.55). 6.35—Talk: The German Town in the Middle Ages.

LYONS (La Doua), 6.0—Talk. 6.30—News.

MADRID (EAJ7), 6.0—Announcements. 6.5 (approx.)—Pianoforte Recital. 6.30—Exchange; News. 6.50—Philharmonic Orchestra.

MADRID (EAQ), 6.0—Orchestra.

MONTE CENERI, 6.45—News.

MOSCOW (No. 1), 6.0—Concert for Collective Farmers.

MUNICH, 6.0—Dance Music by the Station Orchestra. Conductor: Aulich.

OSLO, 6.0—Book Review. 6.15—News. 6.30—Grieg Romances. Ingeborg Kristensen and Erik Bye.

PARIS (Poste Parisien), 6.30—Exchange. 6.35—Religious Address and Sacred Songs.

PARIS (PTT), 6.0—Book Review; Reading; Science Talk. 6.30—News.

PARIS (Radio-Paris), 6.20—Announcements; Exchange. 6.35—Talk: Horse-Racing. 6.50—Talk.

PITTSBURGH, 6.0—Farm and Home Hour. 5.30—Vic and Sade. 6.45—Hotel William Penn Orchestra.

PRAGUE, 6.0—News. 6.10—Weekly Review. 6.25—Prague Mandoline Quartet. March (Broz). Polka (Kaspárek). Spring Song (Mendelssohn). Waltz Intermezzo (Broz). Fox-trot (Sorge). Habañera (Graziani-Walter). 6.45—Reading.

RADIO-NORMANDIE, 6.0—For Children. 6.30—Sports Notes. 6.50—News; Racing Results.

ROME, 6.0—Tourist Notes; Report of the Royal Geographical Society and Dopolavoro Review. 6.15—News in Foreign Languages.

SOTTENS, 6.0—Chimes. 6.5—Film Review. 6.30—Dance Music. 6.40—Wireless Notes. 6.59—Weather.

STOCKHOLM, 6.0—Military Band (contd. from 5.15). 6.15—News. 6.30—Old Dance Music.

STRASBOURG, 6.0—French. 6.15—For Farmers. 6.30—Talk in German: The Vintage in Alsace. 6.45—Light Music. Orchestra. Conductor: Roskam. Highland March



7 p.m. (contd.)

MADRID (EAJ7), 7.0—Philharmonic Orchestra.  
 MADRID (EAQ), 7.0—Orchestra.  
 MONTE CENERI, 7.0—Topical Talk: Tessin. 7.15—Ersilia Galli-Tadini (Soprano) and Nino Herschel (Pianoforte). 7.45—Weekly Review.  
 MOSCOW (No. 1), 7.0—Symphony Concert. Conductor: Annosov. Overture, "Manfred" (Schumann). Fingal's Cave (Mendelssohn). Suite, (Tchrennikov).  
 MUNICH, 7.0—News. 7.10—"Die Drei Gspusi der Zenta"—Comedy in Three Acts (Mooshofer-Hink).  
 OSLO, 7.0—Grieg Songs (contd. from 6.30). 7.15—Station Orchestra. Conductor: Kramm. Selection, "The Three Bears" (Coates). Berceuse, "Jocelyn" (Godard). Three English Dances (German). Moment musical (Schubert). Potpourri, Die Welt im Lied (Intrator).  
 PARIS (Poste Parisien), 7.2—Talk. 7.10—News. 7.30—Opera Records-Selection, "Il Trovatore" (Verdi). Triumphant March, "Aida" (Verdi). Intermezzo, "Cavalleria rusticana" (Mascagni). Selection, "La Bohème" (Puccini). 7.45—Records.  
 PARIS (PTT), 7.45—Legal Talk. 7.53—Talk: The Prevention of Cruelty to Animals.  
 PARIS (Radio-Paris), 7.0—Weather; For Farmers: Reading. 7.15—Press Review. 7.30—Topical Talk.  
 PITTSBURGH, 7.0—To be announced. 7.30—Hawaiian Orchestra.  
 PRAGUE, 7.0—See Bratislava.  
 RADIO-NORMANDIE, 7.0—Light Music.  
 ROME, 7.0—News. 7.10—Records. 7.30—Government Notes. 7.45—Play in Three Acts. In the Interval: Book Review and Talk.  
 RUYSELEDE, 7.45—News in French.  
 SCHENECTADY, 7.30—Green Brothers Novelty Orchestra.  
 SOTTENS, 7.0—Station Orchestra. Conductor: Echenard. Suite of Chinese Melodies No. 4 (Aterberg). Serenade (Martini). 7.30—Talk: Actresses of the Eighteenth Century. 7.50—"Le bal masqué"—Cantata (Poulenc). Station Orchestra. Bracony (Baritone).  
 STOCKHOLM, 7.0—International Swimming Races from the Sports Palace. 7.45—Variety.  
 STRASBOURG, 7.0—Light Music (contd. from 6.45). 7.30—News. 7.45—Records.  
 STUTTGART, 7.0—News. 7.5—Local News. 7.15—Variety.  
 TOULOUSE (Radio-Toulouse), 7.0—Chansonnettes. 7.15—Accordion Music. 7.30—News. 7.45—Songs. 7.50—Talk.  
 TURIN, 7.0—News; Records. 7.30—Sports Talk. 7.45—"Deborah and Jael"—Opera in Three Acts (Pizzetti). Talk and Book Review in the Intervals.  
 VATICAN CITY, 7.0-7.15—Religious Information in Italian.  
 VIENNA, 7.0—"The Catacombs"—Comedy in Four Acts (Davis).  
 WARSAW, 7.0—Station Symphony Orchestra. Conductor: Oziminski. Umberto Macnez (Tenor). Overture, "Martha" (Flotow). Aria, "Manon" (Massenet). Fantasia on Schubert Themes (Foulds). Arias, "Werther" (Massenet). "Carmen" (Bizet). Ballet, "Die Puppenfee" (Bayer). 7.45—News. 7.55—Talk.

8 p.m.

ALGIERS, 8.0—Time. 8.2—Records. 8.40—News. 8.45—Station Orchestra. Paysages Normands (Spork). En Camargue (Delmas). Danses Alsaciennes (Lévade).  
 ATHLONE, 8.0—"La Traviata" (Verdi) (contd. from 7.31).  
 BARCELONA, 8.0—Educational Programme. 8.10—Records. 8.20—Medical Talk. 8.30—Press Review; Records.  
 BELGRADE, 8.0—Military Band.  
 BERLIN, 8.0—See 7.15—Cologne.  
 BEROMÜNSTER, 8.0—News. 8.10—"Lasst hören aus alter Zeit"—Folk Song Play (Greyerz), from the Basle Conservatoire.  
 BORDEAUX-LAFAYETTE, 8.0—English Lesson. 8.15—Records. 8.30—See Paris (PTT).  
 BRATISLAVA, 8.0—Operetta (Weinberger) (contd. from 7.0).  
 BRESLAU, 8.0—"The German Harvest" (contd. from 7.10). 8.10—Station Orchestra. Conductor: Rischka. Greulich ('Cello). Prelude, "Hansel and Gretel" (Humperdinck). Spanish Dances (Granados). Cello Concerto (Raff). Dances

in Old Style (Kool). Prelude (Cortopassi). Serenade in F minor (Fuchs). Waltz (Bayer). (Dance Chabrier).  
 BRNO, 8.0—"The Merry Wives of Windsor"—Opera (Nicolaï) (contd. from 6.30).  
 BRUSSELS (No. 1), 8.0—Symphony Orchestra. Overture, Deidamia (Rasse). Flute Concerto (Mozart). Symphonic Paraphrase on "Macbeth" (Dupuis). French Military March (Saint-Saëns).  
 BRUSSELS (No. 2), 8.0—Orchestra. Conductor: Gason. Prelude, "L'enfant roi" (Bruneau). Suite, Callirhoë (Chaminade). Feuilles éparses (d'Ambrosio). Habañera (Chabrier). Four Slav Dances (Dvořák). Rapsodie dahomienne (De Boeck).  
 BUDAPEST, 8.0—Operetta Music (contd. from 7.45).  
 COLOGNE, 8.0—Operetta Music (contd. from 7.15).  
 DEUTSCHLANDSENDER, 8.0—See 7.15 Hamburg.  
 FRANKFURT, 8.0—"Die gut' Stubb' wackelt" (contd. from 7.15).  
 HAMBURG, 8.0—Variety (contd. from 7.15).  
 HILVERSUM, 8.0—Belasco's Orchestra. 8.10—"Might"—Propaganda Play. 8.25—V.A.R.A. Orchestra. Conductor: de Groot. Overture, "William Tell" (Rossini). Selection, "Sylvia" (Delibes). Overture, "Maximilian Robespierre" (Litov). March (Sousa). In the interval at 8.50—Talk.  
 HUIZEN, 8.0—Exchange in Esperanto 8.10—News. 8.15—Talk. 8.45—Records.  
 JUAN-LES-PINS (Radio Côte d'Azur), 8.0—Amusement Guide; Exchange; Racing Results; News. 8.10—For Tourists; Press Review. 8.30—Orchestra. Selection, "A Waltz Dream" (Straus) and "Rose Marie" (Friml).  
 KALUNDBORG, 8.0—Orchestra. Conductor: Mahler. Else Bruun (Violin). Concert Piece for Violin and Orchestra (Tarp). Ballet, "The Demon" (Hindemith). Variations on the Folk Melody "Lave og Jon" (Bentzon). Ragtime (Stravinsky). In the interval at 8.25—Talk.  
 KÖNIGSBERG, 8.0—For Soldiers. 8.10—Börschel Dance Band.  
 LAHTI, 8.0—News in Swedish. 8.15—Dance Music.  
 LEIPZIG, 8.0—Variety.  
 LYONS (La Doua), 8.0—Talk. 8.10—Esperanto. 8.20—Sports Notes. 8.30—Music Hall.  
 MADRID (EAJ7), 8.0—Philharmonic Orchestra.  
 MONTE CENERI, 8.0—Station Orchestra. Conductor: Casella. Overture, "Zampa" (Hérold). Selection, "The Daughter of the Regiment" (Donizetti). Suite, The Arabian Nights (Bortkiewicz). Intermezzo, "Suor Angelica" (Puccini). Bacchanal, "Samson and Delilah" (Saint-Saëns).  
 MOSCOW (No. 1), 8.0—German Programme: Talk: The Russian Revolution; Sports Notes. 8.55—Chimes from the Kremlin.  
 MUNICH, 8.0—"Die Drei Gspusi der Zenta"—Comedy (contd. from 7.10).  
 OSLO, 8.0—Provincial Programme—Southern Norway. 8.35—News.  
 PARIS (Poste Parisien), 8.0—Talk: The Events of the Week. 8.20—Concert.  
 PARIS (PTT), 8.0—Records. Arias, "The Barber of Seville" (Rossini), and "Louise" (Charpentier). Song, "Les saltimbanques" (Ganne). Arias, "Lakmé" (Delibes), and "Tosca" (Puccini). 8.30—"Chasseurs, s'achons chasser"—Revue (Groffe).  
 PARIS (Radio-Paris), 8.0—Records. 8.15—"Manon"—Opera in Five Acts (Massenet), from L'Opéra-Comique.  
 PITTSBURGH, 8.0—Tommy Tucker's Orchestra. 8.30—Saturday's Songsters.  
 PRAGUE, 8.0—See 7.0 Bratislava.  
 RADIO-NORMANDIE, 8.0—Songs. 8.30—Light Music.  
 ROME, 8.0—Play (contd. from 7.45).  
 RUYSELEDE, 8.0—See Brussels No. 2.  
 SCHENECTADY, 8.0—Radio School of the Theatre.  
 SOTTENS, 8.0—"Le bal masqué" (Poulenc) (contd. from 7.50). 8.10—News. 8.20—Cabaret.  
 STOCKHOLM, 8.0—Variety. 8.45—News.  
 STRASBOURG, 8.0—News in German. 8.15—Press Review in German; Records. 8.30—Three Plays: (a) "Quelle vie!"—One-Act Play (Grevesse), (b) "L'Impudence" (Grevesse), (c) "Two-Act Comedy (Messis), (d) "Son Collègue"—One-Act Comedy (Bernard).

STUTTGART, 8.0—Variety.  
 TOULOUSE (Radio-Toulouse), 8.0—Talk. 8.15—Pianoforte. 8.30—Opera Music.  
 TURIN, 8.0—"Deborah and Jael"—Opera (Pizzetti) (contd. from 7.45).  
 VIENNA, 8.0—Comedy (contd. from 7.0).  
 WARSAW, 8.0—Niedzielski (Pianoforte). Three Preludes (Couperin-Fuller-Maitland). Allemande (Couperin-Fuller-Maitland). Sonata in B flat minor (Chopin). Barcarolle (Dogaressa). 8.45—Book Review.

9 p.m.

ALGIERS, 9.0—Orchestra (contd. from 8.45). In the Interval at 9.15: News. 9.55—News.  
 ATHLONE, 9.0—"La Traviata" (Verdi) (contd. from 7.31).  
 BARCELONA, 9.0—Climes; Weather. 9.5—Social Notes; Exchange. 9.10—"El Gato Montes"—Musical Comedy in Three Acts (Penella).  
 BELGRADE, 9.0—Time; News. 9.15—Military Band. 9.30—Light Music.  
 BERLIN, 9.0—News. 9.25—Dance Music. 9.50—See Breslau.  
 BEROMÜNSTER, 9.0—"Lasst Lören aus alter Zeit"—Folk Song Play (contd. from 8.10). 9.15—Dance Records.  
 BORDEAUX-LAFAYETTE, 9.0—See 8.30 Paris (PTT).  
 BRATISLAVA, 9.15—News in Hungarian.  
 BRESLAU, 9.0—News. 9.20—Report from Tokio of the Opening of the Fifteenth International Red Cross Conference. Speeches by the Prince of Tokugawa, Judge Payne (U.S.A.) and the President of the German Red Cross Society. 9.50—Dance Music by the Station Dance Band. Conductor: Ilgner, and the Hans Caspar Band.  
 BRUSSELS (No. 1), 9.0—Talk. 9.15—Radio Orchestra. Divertissement (Langlois). Musical Picture (Caluid). Entr'acte symphonique (Desprez). Cavatina (Vreuls). Royal Serenade (Van Herck). Sérénade à Claudine (Rogister). Cortège féérique (Ronald). Tarantella (Mawet). Où peut-on être mieux (Grétry). Walloon Song (Hillier).  
 BRUSSELS (No. 2), 9.0—"The Silent Musician"—Play (De Vroey) by De blinkende Zonnekloppers.  
 BUDAPEST, 9.0—Operetta Music (contd. from 7.45). 9.15—Records.  
 COLOGNE, 9.0—News. 9.20—Light Music and Dance Music from the Rheinhotel Dreesen, Bad Godesberg.  
 DEUTSCHLANDSENDER, 9.0—News. 9.30-9.45—Talk: Sport in Autumn.  
 FRANKFURT, 9.0—"Die gut' Stubb' wackelt" (contd. from 7.15). 9.30—News. 9.45—Local News; Weather; Sports Notes.  
 HAMBURG, 9.0—News. 9.20—Dance Music.  
 HILVERSUM, 9.0—V.A.R.A. Orchestra (contd. from 8.25). 9.25—Derby in his Repertoire. 9.40—News.  
 HUIZEN, 9.0—Records. 9.10—Recitations. 9.25—Records. 9.40—Bois-le-Duc Wind Instrument Band. Conductor: Wierts. Jubilee March (Baks). The Blue Danube (Strauss). Ballet Music, "Faust" (Gounod). Fantasia. Popular March (Wierts).  
 JUAN-LES-PINS (Radio Côte d'Azur), 9.0—News. 9.15—Orchestra. Overture, "Coriolanus" (Beethoven). Symphony in D (Brahms).  
 KALUNDBORG, 9.5—News. 9.20—Orchestra. Conductor: Mahler. Divertissement, "Heavyweight" (Krenek). Extract, "Die Dreigroschenoper" (Weill). 9.45—Relay from the Fifteenth International Red Cross Congress in Tokio. Addresses by the Prince of Tokugawa, Judge Payne (U.S.A.) and the President of the German Red Cross.  
 KÖNIGSBERG, 9.0—News. 9.30—Dance Music. 9.50—See Breslau.  
 LAHTI, 9.0—Dance Music.  
 LEIPZIG, 9.0—News; Sports Notes. 9.10—Variety. 9.20—Dance Music by the Emde Orchestra.  
 LYONS (La Doua), 9.0—Music-Hall.  
 MONTE CENERI, 9.0-9.30—Dance Music from the Cecil Casino, Lugano.  
 MORAVSKÁ-OSTRAVA, 9.30—Station Orchestra. Conductor: Divis. Overture, "Fatinitza" (Suppé). Selection, "Orlov" (Granchistaedten). Waltz, "Herbstmanöver" (Kálmán). Potpourri of Russian Songs and Dances (Svare). Intermezzo (Leopold). Mignonette (Friml). Polka (Kovarovic). March (Rehor).

MOSCOW (No. 1), 9.5—French Programme: Weekly Review; Letter-Box; Sports Notes.  
 MUNICH, 9.0—News. 9.30—See Stuttgart.  
 OSLO, 9.0—Topical Talk. 9.15—Popular Songs by Magnus Samuelson. 9.45—Dance Records.  
 PARIS (Poste Parisien), 9.5—Dance Music. Station Jazz Band and a Vocal Trio. Conductor: Romans. Carol King (Songs).  
 PARIS (PTT), 9.0—Revue (Groffe) (contd. from 8.30).  
 PARIS (Radio-Paris), 9.0—"Manon"—Opera (Massenet) (contd. from 8.15). In the Interval: News; Review by Bonnaud.  
 PITTSBURGH, 9.0—Don Carlos Orchestra. 9.15—High and Low. 9.30—Palmer Clark's Orchestra.  
 PRAGUE, 9.0—News. 9.15—Records. 9.30—See Moravská-Ostrava.  
 RADIO-NORMANDIE, 9.0—Light Music.  
 ROME, 9.0—Play (contd. from 7.45).  
 RUYSELEDE, 9.0—News in Flemish.  
 SCHENECTADY, 9.0—Radio School of the Theatre.  
 SOTTENS, 9.0—Cabaret (contd. from 8.20). 9.15—Talk: The Work of the League of Nations. 9.40—Dance Records.  
 STOCKHOLM, 9.0—Dance Music.  
 STRASBOURG, 9.0—Three Plays (contd. from 8.30). In the Interval: Press Review.  
 STUTTGART, 9.0—News. 9.30—Dance Music with Humorous Interludes.  
 TOULOUSE (Radio-Toulouse), 9.0—"Il est charmant"—Operetta (Moretto) (Concert Version). 9.35—Military Music.  
 TURIN, 9.0—"Deborah and Jael"—Opera (Pizzetti) (contd. from 7.45).  
 VIENNA, 9.0—Vienna Symphony Orchestra. Conductor: Holzer. Gebirgsvereinsmarsch (Lefnär). Overture, "Frau Luna" (Lincke). Waltz, Morgen geht's in See (Rathke-Dietrich). Selection, "The Count of Luxembourg" (Lehár). Florentine March (Fucik). Indigo (Stefaniedes). Kind, deine Heimat muss Wien sein (Obransky). Johann Strauss Potpourri (Morena). In a Poultry-Yard (Bortkiewicz). Kamerad, wir sind die Jugend (Stolz). Potpourri, Perlen vom Donaustrand (Uhl). In the Interval at 9.30: News.  
 WARSAW, 9.0—Light Music. 9.15—Dance Music.

10 p.m.

ATHLONE, 10.0—Variety. 10.30—News. 10.40—Pipes.  
 BARCELONA, 10.0—News. 10.5—"El Gato Montes" (Panella) (contd. from 9.10).  
 BELGRADE, 10.0—Dance Records.  
 BERLIN, 10.0—See Breslau.  
 BORDEAUX-LAFAYETTE, 10.0—See 8.30 Paris (PTT).  
 BRESLAU, 10.0—Dance Music.  
 BRUSSELS (No. 1), 10.0—News. 10.10—Request Records.  
 BRUSSELS (No. 2), 10.0—News. 10.10—Max Alexys Orchestra.  
 BUDAPEST, 10.0—Dance Music.  
 COLOGNE, 10.0—Light Music and Dance Music (contd. from 9.20).  
 DEUTSCHLANDSENDER, 10.0—See Hamburg.  
 FRANKFURT, 10.0—"Die gut' Stubb' wackelt" (contd. from 7.15).  
 HAMBURG, 10.0—Variety.  
 HILVERSUM, 10.0—Derby in his Repertoire. 10.10—Jong and Steyn (Two Pianofortes). Spanish Gipsy Dance (Marquina). Polka (Alex). La Paloma (Yradier). Race between a Pianoforte and an Accordion (Köhler). 10.25—Light Music. Conductor: v. d. Horst. 10.55—Dance Records.  
 HUIZEN, 10.0—Wind Instrument Band (contd. from 9.40). 10.30—News. 10.35—Records.  
 KALUNDBORG, 10.0—Orchestra (contd. from 9.20). 10.15—Dance Music.  
 KÖNIGSBERG, 10.0—See Breslau.  
 LEIPZIG, 10.0—Dance Music (contd. from 9.20).  
 MADRID (EAQ), 10.15—News. 10.30—Spanish Music. 10.45—Wireless Notes.  
 MORAVSKÁ-OSTRAVA, 10.0—Orchestra (contd. from 9.30).  
 MOSCOW (No. 1), 10.5—Spanish Programme: Weekly Review; Letter-Box; Sports Notes.  
 MUNICH, 10.0—See Stuttgart.  
 OSLO, 10.0—Dance Records.  
 PARIS (Poste Parisien), 10.0—Dance Music (contd. from 9.5). 10.20—News.  
 PARIS (PTT), 10.0—Revue (Groffe) (contd. from 8.30). After the Revue: News.

SATURDAY Oct. 20

PARIS (Radio-Paris), 10.0—"Manon"—Opera (Massenet) (contd. from 8.15).  
 PITTSBURGH, 10.0—Stanleigh Malotte. 10.15—Jackie Heller. 10.30—Bill and Alex. 10.45—Orphan Annie.  
 PRAGUE, 10.0-10.30—See 9.30 Moravská-Ostrava.  
 RADIO-NORMANDIE, 10.0—Light Music.  
 ROME, 10.0—News.  
 SOTTENS, 10.0-10.30—Dance Records.  
 STRASBOURG, 10.0—Three Plays (contd. from 8.30). 10.30—Dance Music.  
 STUTTGART, 10.0—Dance Music, with Humorous Interludes.  
 TOULOUSE (Radio-Toulouse), 10.0—Operetta Songs. 10.15—News. 10.30—Orchestra.  
 TURIN, 10.0—News. 10.10—News in Spanish.  
 VIENNA, 10.0—Orchestra (contd. from 9.0). 10.45—Cigány Music, relayed from Budapest.  
 WARSAW, 10.5—Talk: Russian Humour. 10.35—Records.

11 p.m.

BARCELONA, 11.0—"El Gato Montes" (Panella) (contd. from 9.10).  
 BERLIN, 11.0—See Breslau.  
 BRESLAU, 11.0—Dance Music.  
 BRUSSELS (No. 1), 11.0—Dance Records.  
 BRUSSELS (No. 2), 11.0—Max Alexys Orchestra.  
 COLOGNE, 11.0—Light Music and Dance Music (contd. from 9.20).  
 DEUTSCHLANDSENDER, 11.0—See 10.0 Hamburg.  
 FRANKFURT, 11.0—See Stuttgart.  
 HAMBURG, 11.0—Variety (contd. from 10.0).  
 HILVERSUM, 11.0-11.40—Dance Records.  
 HUIZEN, 11.0-11.40—Records.  
 KALUNDBORG, 11.2-11.15—Dance Music.  
 KÖNIGSBERG, 11.0-11.30—See Breslau.  
 LEIPZIG, 11.0—Dance Music (contd. from 9.20).  
 MADRID (EAJ7), 11.45—News.  
 MADRID (EAQ), 11.0—Spanish Music. 11.45—Light Music.  
 PARIS (Radio-Paris), 11.0—"Manon"—Opera (Massenet) (contd. from 8.15).  
 PITTSBURGH, 11.0—Soloist. 11.15—To be announced. 11.30—Twenty Fingers Harmony. 11.45—Isaak Walton League.  
 RADIO-NORMANDIE, 11.0—Light Music. 11.30—Opera and Operetta Music. Extracts, "The Huguenots" (Meyerbeer), "Tales of Hoffmann" (Offenbach), "The Damnation of Faust" (Berlioz), "Rigoletto" (Verdi), "Hansel and Gretel" (Humperdinck), "I Pagliacci" (Leoncavallo), "Carmen" (Bizet) and "La Bohème" (Puccini).  
 STRASBOURG, 11.0—Dance Music.  
 STUTTGART, 11.0—Orchestra.  
 TOULOUSE (Radio-Toulouse), 11.0—Concert.  
 VIENNA, 11.0—Cigány Music from Budapest.  
 WARSAW, 11.0—Dance Music.

12 midnight

BARCELONA, 12.0—News.  
 FRANKFURT, 12.0—See Stuttgart.  
 MADRID (EAQ), 12.0—Variety.  
 PITTSBURGH, 12.0—Al Williams. 12.15—To be announced. 12.30—Hotel William Penn Orchestra.  
 RADIO-NORMANDIE, 12.0—Dance Music.  
 SCHENECTADY, 12.25—Exchange.  
 STUTTGART, 12.0—Orchestra.  
 TOULOUSE, 12.0—News. 12.5—"Au caveau de minuit"—Radio Fantasy. 12.15-12.30—Operetta Music.  
 ZEESEN, 12.30—Extracts from "Don Carlos" (Schiller).

1 a.m. (Sunday)

BARCELONA, 1.0—Variety.  
 PARIS (Radio-Colonial), 1.0—Concert.  
 PITTSBURGH, 1.0-6.0—Popular Programme.  
 RADIO-NORMANDIE, 1.0—News. 1.10—Dance Music.  
 SCHENECTADY, 1.0-4.0—Popular Programme.



## ALPHABETICAL LIST OF EUROPEAN BROADCASTING STATIONS

	kc/s	m.	kW		kc/s	m.	kW
Aalesund (Norway).....	850	352.9	0.35	Magyarovar (Hungary).....	1438	208.6	1.25
Aberdeen.....	1285	233.5	1	Malmö (Sweden).....	1312	228.7	1.25
Alexandria (Egypt).....	1122	267.4	0.25	Marseilles (France) (PTT).....	749	400.5	5
Algiers (North Africa).....	941	318.8	12	Midland Regional (Gt. Britain).....	767	391.1	25
Ankara (Turkey).....	230	1304	7	Milan (Italy).....	814	368.6	50
Antwerp (Belgium).....	1492	201.1	0.1	Milan (No. 2) (Italy).....	1357	221.1	4
Athlone (Ireland).....	565	531	60	Minsk (U.S.S.R.).....	208	1442	35
Augsburg (Germany).....	1267	236.8	2	Miskolc (Hungary).....	1438	208.6	1.25
Barcarena (Lisbon) (Portugal).....	629	476.9	15	Montpellier (France).....	1339	224	5
Barcelona (Spain).....	795	377.4	5	Monte Ceneri (Switzerland).....	1167	257.1	15
Barcelona (Spain).....	1022	293.5	3	Moravská-Ostrava (Czechoslovakia).....	1113	269.5	11.2
Bari (Italy).....	1059	283.3	20	Moscow (No. 1) (U.S.S.R.).....	174	1724	500
Basle (Switzerland).....	1375	218.2	0.5	Moscow (No. 2) (U.S.S.R.).....	271	1107	100
Belfast (N. Ireland).....	1122	267.4	1	Moscow (No. 3) (U.S.S.R.).....	401	748	100
Belgrade (Yugoslavia).....	686	437.3	2.5	Moscow (No. 4) (U.S.S.R.).....	832	360.6	100
Bergen (Norway).....	850	352.9	1	Motala (Sweden).....	216	1389	30
Berlin (Germany).....	841	356.7	100	Munich (Germany).....	740	405.4	100
Berne (Switzerland).....	1375	218.2	0.5	Naples (Italy).....	1104	271.7	1.5
Beromünster (Switzerland).....	556	539.6	100	Newcastle (Gt. Britain).....	1429	209.9	1
Beziers (France).....	1429	209.9	2	Nîmes (France).....	1492	201.1	0.2
Binche (Belgium).....	1492	201.1	0.1	Norrköping (Sweden).....	1312	228.7	0.25
Boden (Sweden).....	413.5	726	0.6	North National (Gt. Britain).....	1013	296.2	50
Bodo (Norway).....	1276	235.1	0.5	North Regional (Gt. Britain).....	668	449.1	50
Bolzano (Italy).....	536	559.7	1	Notodden (Norway).....	1357	221.1	0.08
Bordeaux-Lafayette (France).....	1077	278.6	12	Novosibirsk (U.S.S.R.).....	217.5	1379	100
Bordeaux-Sud-Ouest (France).....	1348	222.6	1	Nürnberg (Germany).....	1267	236.8	2
Bournemouth.....	1474	203.5	1	Nyiregyháza (Hungary).....	1122	267.4	6.2
Brasov (Romania).....	160	1875	20	Odessa (U.S.S.R.) RV13.....	968	309.9	10
Bratislava (Czechoslovakia).....	1004	298.8	13.5	Oslo (Norway).....	260	1154	60
Bremen (Germany).....	1330	225.6	1.5	Osterund (Sweden).....	392	765	0.6
Breslau (Germany).....	950	315.8	17	Ufa (U.S.S.R.).....	436	688	10
Brno (Czechoslovakia).....	922	325.4	32	Ukhta (U.S.S.R.).....	968	309.9	2
Brussels (No. 1) (Belgium).....	620	483.9	15	Oulu (Ulcaborg) (Finland).....	431	696	2
Brussels (No. 2) (Belgium).....	932	321.9	15	Oviedo (Spain).....	1022	293.5	0.7
Bucharest (Romania).....	823	364.5	12	Palermo (Italy).....	565	531	4
Budapest (No. 1) (Hungary).....	546	549.5	120	Paredo (Portugal).....	1031	291	5
Budapest (No. 2) (Hungary).....	1321	227.1	0.3	Paris (Ecole Supérieure) (France).....	695	431.7	7
Cairo (Egypt).....	620	483.9	20	Paris (Poste Parisien) (France).....	959	312.8	100
Cassel (Germany).....	1195	251	1.5	Paris (Radio LL) (France).....	1429	209.9	2
Chatelaineau (Belgium).....	1492	201.1	0.1	Paris (Radio-Paris) (France).....	182	1648	75
Christiansand (Norway).....	1276	235.1	0.5	Paris (Radio-Vitus) (France).....	1348	222.6	2
Cologne (Germany).....	1176	455.9	100	Pecs (Hungary).....	1465	204.7	1.25
Copenhagen (Denmark).....	1176	455.9	100	Petrozavodsk (U.S.S.R.).....	648	463	10
Cork (I.F.S.).....	1240	241.9	1	Pietarsaari (Jacobstad) (Finland).....	1500	200	0.25
Courtrai (Belgium).....	1492	201.1	0.1	Plymouth.....	1474	203.5	0.3
Cracow (Poland).....	986	304.3	2	Pori (Finland).....	749	400.5	0.5
Danzig (Free City).....	1303	230.2	0.5	Porsgrund (Norway).....	850	352.9	0.7
Deutschlandsender (Germany).....	191	1571	60	Poznań (Poland).....	868	345.6	16
Dnepropetrovsk (U.S.S.R.).....	913	328.6	10	Prague (Czechoslovakia).....	638	470.2	120
Dornbirn (Austria).....	1294	231.8	0.5	Prague (No. 2) (Czechoslovakia).....	1204	249.2	5
Dresden (Germany).....	1285	233.5	1.5	Rabat (Morocco).....	601	499.2	6.5
Droitwich (Gt. Britain).....	200	1500	150	Radio-Comte (Belgium).....	1500	200	0.1
Dublin (Ireland).....	1348	222.6	1	Radio-Normandie (France).....	1456	206	10
Eiffel Tower (Paris) (France).....	215	1395	13	Rennes (France).....	1040	288.5	2.5
Falun (Sweden).....	1086	276.2	2	Reykjavik (Iceland).....	208	1442	16
Finmark (Norway).....	355	845	10	Riga (Latvia).....	583	514.6	15
Finnish Common Wave.....	527	569.3	0.5	Riikari (Norway).....	1348	222.6	0.15
Flensburg (Germany).....	1330	225.6	1.5	Rome (Italy).....	713	420.8	50
Florence (Italy).....	609	492.6	20	Rome (No. 3) (Italy).....	1258	238.5	1
Frankfurt-am-Main (Germany).....	1195	251	1.5	Rostov-on-Don (U.S.S.R.).....	355	845	20
Frankfurt-am-Main (Germany).....	776	386.6	0.7	Salzburg (Austria).....	1348	222.6	0.5
Frederikstad (Norway).....	1195	251	1.5	San Sebastian (Spain) EAJ8.....	1258	238.5	3
Freiburg-im-Breisgau (Germany).....	1195	251	1.5	Scottish National.....	1050	285.7	50
Geneva (Switzerland).....	401	748	1.3	Scottish Regional (Gt. Britain).....	804	373.1	50
Genoa (Italy).....	986	304.3	10	Scrading (Belgium).....	1500	200	0.1
Gleiwitz (Germany).....	1231	243.7	5	Seville (Spain) EAJ5.....	731	410.4	1.5
Göteborg (Sweden).....	941	318.8	10	Simferopol (U.S.S.R.).....	859	349.2	10
Graz (Austria).....	886	338.6	7	Sofia (Rodno-Radio) (Bulgaria).....	850	352.9	1
Grenoble (France) (PTT).....	968	309.9	20	Sottens (Switzerland).....	677	443.1	25
Hamar (Norway).....	519	578	0.7	Stalino (U.S.S.R.).....	776	386.6	10
Hamburg (Germany).....	904	331.9	100	Stavanger (Norway).....	1276	235.1	0.5
Hanover (Germany).....	1330	225.6	1.5	Stettin (Germany).....	1330	225.6	1.5
Helsinki (Finland).....	895	335.2	10	Stockholm (Sweden).....	704	426.1	55
Hilversum (Holland).....	995	301.5	20	Strasbourg (France).....	859	349.2	15
Hörby (Sweden).....	1131	265.3	10	Stuttgart (Germany).....	574	522.6	100
Huizen (Holland).....	160	1875	7	Sundsvall (Sweden).....	601	499.2	10
Innsbruck (Austria).....	519	578	0.5	Sverdlovsk (U.S.S.R.).....	375	800	50
Istanbul (Turkey).....	185	1621	5	Tallinn (Estonia).....	731	410.4	20
Juan-les-Pins (Radio Côte d'Azur) (France).....	1249	240.2	2	Tampere (Finland).....	1420	211.3	1.2
Kaiserslautern (Germany).....	1195	251	1.5	Tartu (Estonia).....	518	579	—
Kalundborg (Denmark).....	238	1261	75	Tashkent (U.S.S.R.).....	256.4	1170	25
Karlskrona (Sweden).....	1530	196	0.2	Teheran (U.S.S.R.).....	1013	296.2	5
Karlstad (Sweden).....	1212	228.7	0.25	Tiflis (U.S.S.R.).....	280	1071.4	35
Katowice (Poland).....	758	395.8	12	Tiraspol (U.S.S.R.).....	1068	280.9	4
Kaunas (Lithuania).....	155	1935	7	Toulouse (Radio-Toulouse) (France).....	913	328.6	60
Kharkov (U.S.S.R.).....	232	1293	20	Toulouse (France).....	776	386.6	2
Kharkov No. 2 (U.S.S.R.).....	1185	253.2	10	Trier (Germany).....	1195	251	2
Kiev (U.S.S.R.) RV9.....	722	415.5	36	Trieste (Italy).....	1222	245.5	10
Klagenfurt (Austria).....	1294	231.8	0.5	Trolhättan (Sweden).....	1312	228.7	0.25
Königsberg (Germany).....	1031	291	60	Tromsø (Norway).....	1204	249.2	0.1
Kootwijk (Holland).....	160	1875	50	Trøndelag (Norway).....	629	476.9	20
Kosice (Czechoslovakia).....	1158	259.1	2.6	Turin (Italy).....	1140	263.2	7
Lahti (Finland).....	166	1807	40	Turin No. 2 (Italy).....	1366	219.6	0.1
Leipzig (Germany).....	785	382.2	120	Turku (Abo) (Finland).....	1492	201.1	0.6
Leningrad (U.S.S.R.).....	245	1224	100	Valencia (Spain).....	850	352.9	1.5
Leningrad (U.S.S.R.).....	1040	288.5	0.1	Verviers I (Belgium).....	1500	200	0.1
Liège Experimental (Belgium).....	1500	200	0.1	Verviers II (Belgium).....	1500	200	0.1
Liepāja (Latvia).....	1737	173	0.1	Vienna Experimental (Austria).....	240	1250	0.5
Lille (France) (PTT).....	1213	247.3	5	Vienna (Bisamberg) (Austria).....	592	506.8	120
Limoges (France).....	895	335.2	0.5	Viipuri (Viborg) (Finland).....	527	569.3	13
Linz (Austria).....	1294	231.8	0.5	Vinnitsa (U.S.S.R.).....	1095	274	10
Ljubljana (Yugoslavia).....	527	569.3	5	Voroneje (U.S.S.R.).....	413.5	726	10
London Regional (Gt. Britain).....	877	342.1	50	Wallonia (Belgium).....	1492	201.1	0.1
London National (Gt. Britain).....	1149	261.1	50	Wallonia (Belgium).....	1500	200	0.1
Lódz (Poland).....	1339	224	1.7	Warsaw No. 1 (Poland).....	224	1339	120
Luxembourg.....	230	1304	150	Warsaw No. 2 (Poland).....	1384	216.8	2
Lwów (Poland).....	795	377.4	16	West National (Gt. Britain).....	1149	261.1	50
Lyons (La Doua) (France).....	648	463	15	West Regional (Gt. Britain).....	977	307.1	50
Lyons (Radio-Lyons) (France).....	1393	215.4	5	Wilno (Poland).....	536	559.7	16
Madona (Latvia).....	1104	271.7	50	Zagreb (Yugoslavia).....	1086	276.2	0.7
Madrid (Spain).....	731	410.4	3				
Madrid (No. 2) (Spain).....	1095	274	7				
Magdeburg (Germany).....	1330	225.6	1.5				



FOREIGN LANGUAGES

(Continued from page 491)

above all the Rhine district that is famous for its vineyards. When the vintage is over there are always festivities.

The autumn brings new glories (*lit.*, beauties). In early autumn the trees are still thickly covered with foliage. New flowers with glowing colours have come into bloom, e.g., asters. Gradually the leaves of the oaks, beeches and other trees change colour. They turn red, brown and yellow. A wood offers a magnificent sight. All shades (of colour) of red, brown and yellow are there, and in addition there is the dark green of the firs. In the morning a light mist lies over the meadows and woods. But it lifts when the sun shines.

MAX KROEMER.

(To be continued)

ITALIAN

Esercizi linguistici italiani.

Traduco:—

Le pareti eran coperte di fotografie e Miss Trant passò l'altro quarto d'ora a esaminarle. Era come cogliere in un'occhiata, in un di quei panorami che si vedono nelle fiere attraverso a una lente, un mondo diverso. C'erano fotografie di grosse donne in maglie attillate, di massicci Dick Whittingtons e di Prince Charmings, o di ragazze in sottanine da ballerina o in costume da pierrot. C'erano fotografie di signori in abito da sera, o in cappelli ammaccati e calzoni a scacchi mostruosi o con nient'altro addosso che una pelle di leopardo e stivali a legacci. Negri e fate e vagabondi e pierrettes guardavano dai loro ritratti con lo stesso sorriso vago e impersonale. Quasi ogni fotografia aveva non soltanto una firma confusa, seguita da una breve ma imponente descrizione dell'autore della firma—Attore principale in "Hot Times," Prima attrice in "Mother Goose," Parte primaria in "The Doodahs," e così via—ma anche trasmetteva, con una prodigalità di punti d'esclamazione, veementi messaggi come "Con affetto infinito," o "Con tutto il cuore!" Era impossibile non credere che le parsonne ritratte in quelle fotografie non vivessero nel pieno vortice del successo; esse sembravano irradiare sorrisi da brillanti trionfi. Solo con uno sforzo Miss Trant riusciva a comprendere che quelle raggianti creature potevano esser sperdute in qualche piccola città e ridotte a spendere il loro ultimo scellino in telegrammi di appello disperato. Ma essa fu aiutata a comprendere dalla vista d'una cartolina piena di gran sorrisi forzati e svolazzi e nappes, mandata da Elsie stessa, quell'Elsie che era adesso così derelitta a Rawlsley. Tutto ciò era stranamente affascinante. Era un mondo che sembrava lontan lontano e fantastico quanto uno di quei mondi ch'essa aveva esplorati con tanto ardore nei suoi romanzi favoriti—il mondo degli Ugonotti pronti alla battaglia o del Giovane Pretendente—eppure era proprio là, appena a uno svolto della via. Anzi, essa ci aveva già fatto dentro un passo, in quello stesso momento. Pensiero pieno di eccitazione; e, quantunque essa ridesse un poco di sé stessa, tuttavia l'insensata piccola eccitazione rimaneva, come un motivo musicale che le risuonasse in un angolo nascosto della mente.

Ora passiamo alle osservazioni.—Si può dire anche in italiano "spendere il tempo," ma solo quando si vuol esprimere l'idea, o seriamente o ironicamente, di un tempo che si passa in un lavoro importante. P.es.: ho speso anni ed anni in questo studio"; "mi hai fatto spendere un'ora intera a cercare inutilmente."—Ho voluto esser fedele al senso di "peepshow" ed ho quindi tradotto con una lunga frase; traducendo un po' liberamente potremmo anche dire "attraverso a uno spiraglio."—"Stared out" è

difficile a rendersi con eguale brevità, per via della forza di quel "out"; ho dovuto dunque completare la frase con "dai loro ritratti."—Ho interpretato il "wide smile" nel senso di "vago": infatti, è "wide" perchè si sperde intorno, e questo è appunto un sorriso vago.—*Dashing* poteva anche rendersi con "affrettata."—The writer: alcuni dicono anche (alludendo al fatto materiale dello scrivere) "lo scrivente" o anche "il firmante": ma né l'una né l'altra forma mi va a genio, perchè sa troppo di burocratico.—*Flung out* potrebbe anche rendersi con "lanciare."—*Heaps of love* non si potrebbe tradurre letteralmente con "mucchi d'amore," che farebbe ridere.—"Irradiare" è proprio dello spandere intorno, come una lampada manda intorno i suoi raggi, e perciò si adatta a rendere quello *smile out*.—SOS è ormai un termine quasi internazionale, in virtù della sua brevità, ma il modo nostro è più lento ma più umano.—Sembra più decoroso in italiano "farci dentro un passo" che "averci dentro un piede."—Quanto alle parole "exciting" e "thrilling," è un vero problema il tradurle. A volte possono significare "eccitante," altre volte "emozionante," "penetrante," "commovente," "che dà un brivido di gioia, di paura, di ansia, di passione, di turbamento, eccetera. Nel nostro caso può stare la forma analoga all'inglese.

Traduzione:—

After the evening service, he said, "Come, you shall go home with me, and sit just an hour." But he was better than his word: for, after we had drunk tea with Mrs. Williams, he asked me to go up to his study with him, where we sat a long while together in a serene, undisturbed frame of mind, sometimes in silence, and sometimes conversing, as we felt ourselves inclined, or, more properly speaking, as he was inclined; for, during all the course of my long intimacy with him, my respectful attention never abated, and my wish to hear him was such, that I constantly watched every dawning of communication from that great and illuminated mind. He observed, "All knowledge is of itself of some value. There is nothing so minute or inconsiderable, that I would rather know it than not. In the same manner, all power of whatever sort, is of itself desirable. A man would not submit to learn to hem a ruffle of his wife, or of his wife's maid; but if a mere wish could attain it, he would rather wish to be able to hem a ruffle.

He again advised me to keep a journal fully and minutely, but not to mention such trifles as that meat was too much or too little done, or that the weather was fair or rainy. He had till very near his death a contempt for the notion that the weather affects the human frame. I told him that our friend Goldsmith had said to me that he had come too late into the world, for that Pope and other poets had taken up the places in the Temple of Fame; so that, as but a few at any period can possess poetical reputation, a man of genius can now hardly acquire it. Johnson: "That is one of the most sensible things I have ever heard of Goldsmith. It is difficult to get literary fame, and it is every day growing more difficult." (From Boswell's *Life of Johnson*.)

D. PETTOELLO.

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Portuguese Folk Music

(From our Lisbon Correspondent)

One of the most interesting discoveries of old music was recently made by Dr. Jose Braganza when, among a number of MSS. of the works of the celebrated Guillaume Dufay, he found an early manuscript by an unknown composer dating from the early fifteenth century. The music is scored for two instruments and is entitled "Portugalar." This composition, played by violin and 'cello, has already been broadcast twice. In a broadcast talk on this remarkable discovery, Dr. Braganza claimed that this composition could well be called "the ancestor of Portuguese folk-music," the similarity between the cadence of the phrases in the fifteenth century MS. and the traditional folk-songs of the Alemtejo being especially marked.

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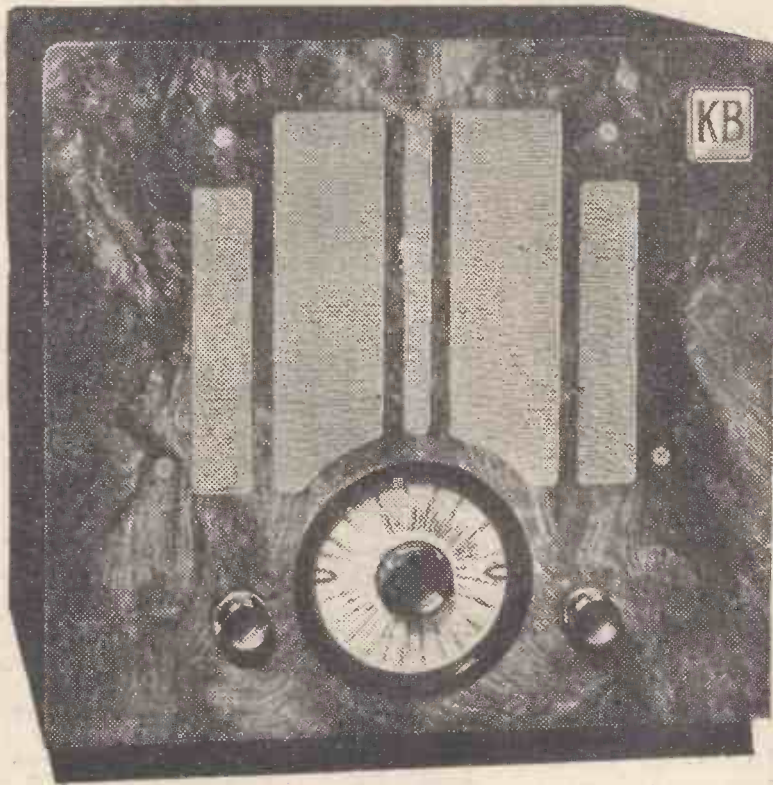
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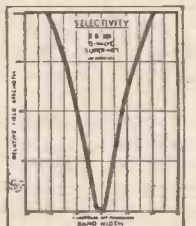
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# Wireless as an Aid to Air Navigation

By F. X. J. ABRAHAM, A.M.I.R.E.

It is not generally realised how great a part is played by wireless telegraphy and telephony in the navigation of commercial aircraft, especially in countries where long routes are flown as in the United States of America. During fog and bad weather the navigation of aircraft is done entirely by some form of wireless communication, and landing in dense fog is made possible by means of wireless signals.

The success of any air transport concern depends largely upon the ability to fly to a time-table and under all conditions of weather. Speed and safety naturally are considered, but aircraft must be able to leave the air-port even under conditions of thick fog and be able to fly the route to the distant air-port, although the whole course may be affected by bad weather conditions.

Aeroplanes, to ensure speed and safety, are fitted with two or more engines. For normal navigation, gyro-compasses are used; also "bank" and "turn" indicators; altimeters for height; air-speed indicators and numerous other indicators for the safe control of the machine, but all these become of secondary importance once the pilot is deprived of the landmarks by which he is navigating his craft, and then, unless he has other means of navigation available, he is forced to bring his aeroplane to the ground. Even if the pilot chooses to "fly blind" for some distance, he still has no means of ascertaining when he has reached his destination.

## Navigation Problems

This difficulty called for a great deal of research, and much money was spent before a satisfactory solution was arrived at. A lot of the work was done in the United States of America by the Bureau of Standards; also, in this country, by Marconi's Wireless Telegraph Co., Ltd.—but America chiefly, because the air routes there stretch from coast to coast, and are used very considerably both by night and day services. Navigation by wireless was tried during the War when night bombers fitted with direction-finders attempted to find their objectives. A moderate degree of success was attained, but constant development has taken place since then, with very satisfactory results.

An aeroplane flying under conditions in which the pilot has to obtain his position by means of wireless signals uses one of two systems. In one system he can ask the ground station for his position, or, alternatively, he can plot his own position while he is still flying. In the first case, the pilot asks the control station for his position by means of wireless telephony, and,

while he is doing this, at least two wireless direction-finding stations are taking the bearing of the received signal. They then transmit their results by telephone to the control station operator, who, by a method of triangulation, determines the position of the aircraft, which he then transmits to the pilot.

In the second case, the aeroplane itself is a direction-finding station and the pilot is able to take the bearings of any known wireless stations that happen to be transmitting, or, by means of radio telephony, he can ask for signals to be transmitted by some known ground stations, and, again by triangulation, the position is obtained.

Unfortunately, however, these systems only give the position at any particular moment, and while suitable for short routes, are more for assisting the pilot in the navigation rather than doing most of the navigation for him.

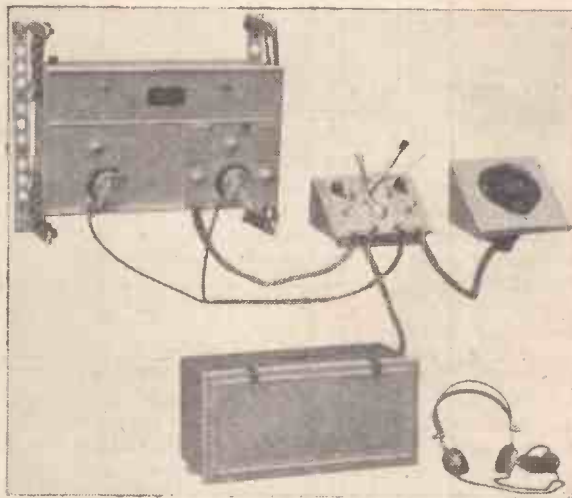
A system used during the War was devised by Captain J. Robinson, and utilised a small rotating frame aerial having two windings arranged exactly at right-angles and mounted on a common axis. The complete frame was tuned and rotated until an approximately maximum signal was obtained upon the "main" coil. A switch was then operated which reversed the sense of any signal currents in the "auxiliary" coil, so increasing or diminishing the strength of signal heard in headphones connected to a suitable receiver. No change in signal strength indicated that the main coil lay exactly in the direction of the transmitting station, the bearing of which could then be read off on a compass scale. This was satisfactory in that the aeroplane did not have to transmit any signal which would have given its position away to the enemy.

The Marconi-Bellini-Tosi direction-finder, which is fitted to most ships and many aircraft, uses a somewhat similar frame aerial, except that it does not rotate.



Fig. 2—Reed course indicator showing white ends of reeds stationary in centre aperture

Unfortunately, however, the system suffers from some disadvantages. The aeroplane may be guided to the air-port only to find that it is enveloped in fog—unless, of course, the pilot has this information transmitted and chooses to land elsewhere. It cannot, however, be used satisfactorily when the air route is congested, as confusion would arise, owing to several



[Photos by courtesy of Marconi's Wireless Telegraph Co., Ltd.]

Fig 3—Aircraft receiving equipment for visual reception of beacon transmissions

aircraft asking for bearings at the same time.

## Course Indicators

The most satisfactory system is one which will bring the aeroplane to its destination and then give the necessary information, either aural or visual, which will enable the aeroplane to land, even in fog. A most interesting system using an aural indication is one in which two transmitters are operating on the same frequency and at the same position. One, however, transmits the letter A — — in morse and the other the letter N — — in morse. Now, as long as the aeroplane is flying a true course on to the transmitter, only a long dash (caused by the overlapping of the signals) will be heard, but if the aeroplane flies to either side, one or other of the letters will be heard distinctly.

This system has been extensively used by aircraft flying on long routes and has led to the development of a visual system. In this case the transmitter uses two directive loop-aerials placed at right-angles to each other, while the radiation from each loop is modulated with a different audio-frequency. Suitable frequencies vary between 50 and 100 cycles. In the aircraft there is an instrument containing two vibrating reeds which are mechanically tuned to these frequencies. As long as the aeroplane flies on a true course to the transmitter, both reeds will vibrate with equal amplitude and the ends will form two white lines of equal length. If the aeroplane deviates from the true course the amplitude of one reed will be greater than the other, according to which side of the true track the machine is flying. (See Fig. 2.)

This course indicator, in conjunction with ordinary navigating instruments, will bring the aeroplane safely to its destination, where a very ingenious landing system comes into operation. The polar curve of a very short wavelength transmitter is used as a landing path for the aeroplane. This transmitter works on relatively low power, so that its beam does not extend far from the air-port. The aeroplane is equipped with a meter to measure the rectified current of

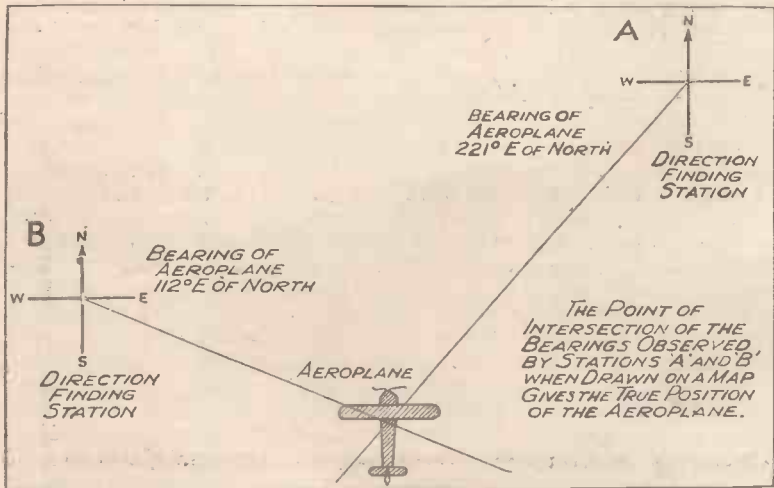


Fig. 1—Determining position of aircraft in flight by means of two ground D.F. stations

The energy picked up in the frame windings is taken to a radio-goniometer, which consists of a small former having two balanced windings at right-angles to each other, and in the middle is a small coil, called a search coil, which is capable of rotation. The electrical effect is the same as rotating the whole aerial or pick-up system. The ends of the windings of the pick-up coil are connected to the input terminals of a suitable amplifier. This type of direction-finder is installed at most of the British air-ports.

(Continued in column 1, page 499)



# Re-Valving

By M. G. SCROGGIE, B.Sc., A.M.I.E.E.

Some practical hints on the important subject of valve renewal

AFTER a receiver has celebrated several birthdays, it is likely to require new valves to keep its voice clear. By that time there may be difficulty in getting replacements of the types originally fitted. Valve manufacturers continue, at great personal inconvenience, to produce small quantities of old types for replacement; but dealers naturally do not care to load their shelves with several hundred (at least) different sorts of old valves on the off-chance of their being required some day.

During the last year or two considerable progress has been made in valve design; and it is true that the performance of an old set may be improved by substituting modern valves. But unless they are used with great discrimination the probabilities are in favour of trouble. New valves generally require new circuits to bring forth their merits. Here follow, then, some notes on the advantages and disadvantages of new valves.

Much depends on how the receiver was designed originally. The type of set held chiefly in view here is the H.F.—Detector—Power combination, with perhaps an L.F. stage between the last two. Superhets. are excluded, as being current models; except the early types, and they are beyond hope to anybody other than an expert.

It is also rather a specialised job adapting receivers designed for 4-volt or 6-volt valves to the present more common 2-volt types. It is perhaps worth making a determined attempt to secure the original types.

## The Output Stage

Tackling the output valve first, because it is usually the first to fade away; a change from triode to pentode is not generally advised. The most probable results are shrill and harsh reproduction, and perhaps a continuous howl or whistle. But if a pentode were part of the original plan it should be easy to get one like it, or even to make effective use of a better one. Incidentally, it is as well to remember that battery pentodes are now fitted with a 5-pin base instead of 4-pin and side terminal; and that mains pentodes have 7-pin bases in place of the earlier 5-pin and terminal.

Battery pentodes are roughly divisible into two classes—those that are intended to give strict economy, and those to give a large output where economy is less vital. The former require about double the loudspeaker impedance of the latter, so it is not advisable to change over from one to the other without seeing that the loudspeaker is suitable.

The earlier pentodes usually required a load impedance more of the former class; so if an "economy" pentode is used the main thing to attend to is the grid bias, which may have to be reduced. A milliammeter is an enormous asset in this work, for making sure that the

particular specimen of valve one has got is adjusted to its correct condition.

Small triode power valves have advanced along very much the same lines, and most makers supply two chief types, both having a "slope" (mutual conductance) of nearly 4 milliamps per volt. The economy model has an A.C. resistance (anode impedance) of about 4,000 ohms, and that of the more powerful one is about half as much. The impedance of the loudspeaker is much less critical than with a pentode; an oldish loudspeaker is more likely to fit the 4,000-ohm valve, and can be used with complete success on the other also, except that one loses a little of the possible volume. The lower impedance speaker, however, is not satisfactory on the higher impedance valve.

These valves have a very much greater slope than those available a few years ago; and this means that they can give either a greater undistorted output for a given H.T. voltage (but at the cost of increased current consumption); or the same maximum volume but greater amplification, so that weak stations can be heard more loudly. These in themselves are desirable features; but it must be remembered, firstly, that the grid bias may have to be altered to ensure proper working conditions; and, secondly,

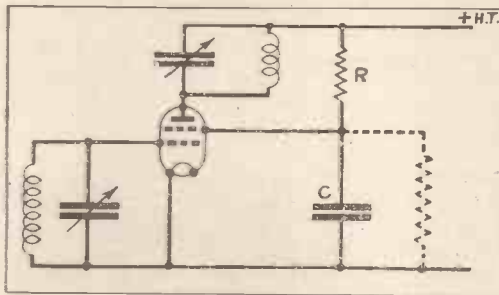


Fig. 2—R is a resistor for reducing voltage on the screen of the valve—usually a fraction of a megohm. C keeps the screen at constant H.F. potential—0.1 $\mu$ F may be used. Sometimes a second resistor is used (shown dotted) to form a potential divider, in which case the screen voltage depends less on the valve.

that the increased amplification may tend to cause howling or motor-boating.

The latter tendency is more marked with mains-driven sets, but is noticeable in battery sets which have much L.F. amplification. The cure is to fit decoupling components where they are lacking, and to increase the capacity of decoupling condensers where they are present. The subject of decoupling is too big to cover here, but Fig. 1 exemplifies the usual system. The minimum decoupling, which is often effective enough, is the resistor and condenser shown in the detector anode circuit. The bigger they both are, the better for decoupling; but a limit is set to the resistance by the loss of voltage therein. The only limit to the condenser is one's privy purse.

The effects named in connexion with the output valve are accentuated when the detector (and L.F. valve, if any) also is modernised. It should be understood clearly that the slope of a valve combines the effects of A.C. resistance and of amplification factor, so that an increase in slope may be taken in the form of a reduction in the one, an increase in the other, or a combination of both.

When an old valve is replaced by one of higher slope, the resistance should be approximately the same in order to preserve the correct load conditions. This means that the amplification factor is higher. Actually the best condition

is for the change to be partly in one form and partly in the other, but mainly in increased amplification.

Apart from any other consideration, if the slope were all in the form of lower resistance, the current consumption would go up unpleasantly; and while this can be corrected

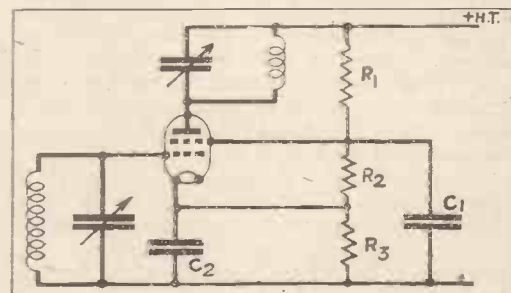


Fig. 3—A further development of the potential divider to apply bias to the grid as well as screen voltage

by adjustment of grid bias (where used) it is not curable in this way in "grid" detector valves.

## High-Frequency Stages

The H.F. stage or stages are presumably of the screened-grid type, or tetrode. These have practically been superseded by screened pentodes in current models. Many types of tetrodes and pentodes are interchangeable; the difference between these is of relatively small importance compared with the difference between "variable-mu" and ordinary or "short base" valves. The former may be further subdivided into long and short base types. So we have, first, the ordinary tetrode or pentode, in which the amplification is completely annulled by a negative grid bias of about 6 or 8 volts. This is so steep an effect as to be unsuitable for volume control when strong signals are liable to be present. Secondly, there is the short-base variable-mu valve, with a base of 10-20 volts; suitable for battery-driven sets, and the simpler types incorporating A.V.C. And, lastly, those with a long base, 30-40 volts, for multi-valve receivers, with A.V.C. or suitable manual volume control.

If variable bias be used as a means of volume control it is vital to replace by the correct class of valve, whether it be tetrode or pentode. Otherwise, they are more or less interchangeable; the only difference being that the variable-mu class is apt to give rather less amplification for a given current consumption. Likewise, tetrodes and pentodes are usually interchangeable. There is seldom much advantage in substituting a pentode, nor is there any inherent disadvantage. The only trouble one is likely to encounter when trying either a pentode or a more modern tetrode is that the amplification may be so much greater that the H.F. amplifier is unstable on some or all wavelengths; that is to say, oscillates uncontrollably.

The proper thing to do then is to improve the screening, and so obtain the benefits of the enhanced amplification. But as it may not be particularly obvious how to accomplish this, one may have to fall back on the lazy method of killing the added amplification. There are plenty of ways of doing this, voluntary and otherwise, but perhaps the easiest is to reduce the screen voltage. If the tapping is brought directly out, it does not take long to plug in to a battery socket of lower voltage (provided that the battery is suitably tapped). The alternative is a voltage-dropping resistor which should be increased (see Fig. 2). If there is not another resistor from screen to earth (or thereabouts) it usually requires a considerable increase—say, from 0.1 megohm to 0.25 megohm or more—to have much effect.

In fact, when installing a new sort of H.F. valve it is generally well worth while to do a bit of experimenting with the screen voltage.

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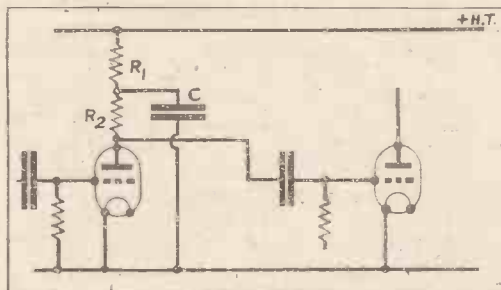


Fig. 1—R1 and C are the decoupling components. R1 is usually 5,000-25,000 ohms, and C from 1 $\mu$ F upwards. R2 is the coupling resistor



WIRELESS AS AN AID TO AIR NAVIGATION

(Continued from page 497)

a suitable receiver, and, by keeping this constant by manipulation of the aircraft's controls, it can be brought safely to earth without the pilot having to look anywhere but at the instrument board.

Suitable indicators are used to inform the pilot of his position when the machine enters the beam. The equipment at the aerodrome consists of four units:—

- (1) The main "course beacon" transmitter—for the navigation of the aircraft to the aerodrome—having a range of 200 or more miles;
- (2) A "landing path" transmitter, using a wavelength of about 3½ metres and having a range of, say, two miles;
- (3) The "runway indicating beacon," which may have a range of, say, five miles; and
- (4) The aerodrome boundary marking beacon, having a range of approximately two miles. An illustration of the complete system is shown in Fig. 5.

The aeroplane, arriving at the air-port, comes to a point where the reeds of the course indicator cease to vibrate, showing that he is directly over the station transmitting the signals. The pilot then turns to pick up the runway marking

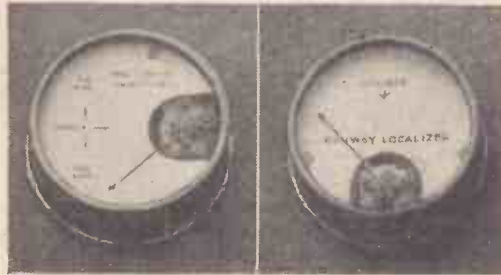


Fig. 4—Landing path indicator (left) and runway beam indicator (right)

beacon signal, which radiates its beam along the centre line of the aerodrome. The machine then flies down this course until it reaches the aerodrome boundary marking beacon, which is indicated by a suitable instrument. The engine is then switched off and the aeroplane allowed to glide, preparatory to landing. The indication is kept constant in the landing path gliding indicator until the aeroplane finally touches the ground.

This system of blind landing and navigation has been considerably developed during the last two years, and for fast mail aeroplanes it is quite a feasible proposition, although from a passenger-carrying point of view the risk of blind landing may be considered rather greater than it is desirable to take.

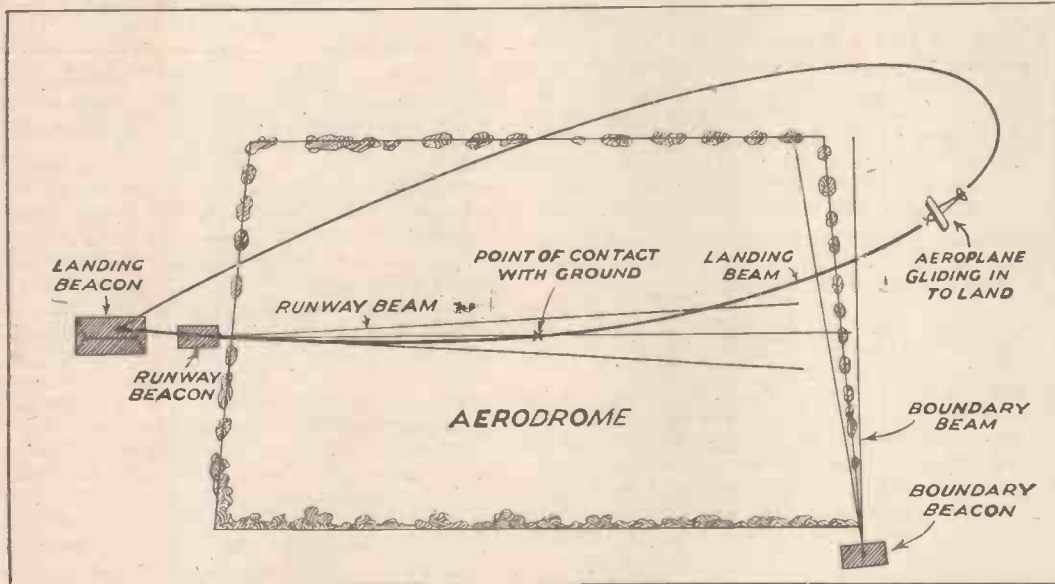


Fig. 5—Illustrating the ingenious system which enables the pilot to land his machine in complete darkness or even in fog

RE-VALVING

(Continued from page 498)

But see that, in so doing, the grid bias is not simultaneously altered, thus making it impossible to draw systematic conclusions from the tests. This warning applies where there is a resistance network supplying both screen and grid voltages (Fig. 3).

Triode valves in the H.F. stages have long been obsolete; and any attempt to use more modern valves is likely to be ill rewarded, for the sets using them were generally worked on the verge of stability and require little provocation in the form of more efficient valves to push them over the edge.

Until now we have been considering matters from the standpoint of battery drive. In applying the same ideas to mains-driven receivers, the need for caution in departing from the exact original types is to be stressed. For one thing, it is less easy to adjust the working voltages. Then, until the last few years the methods of running valves from the mains were not standardised.

Rectifier valves are not very exacting in their requirements; and will stand considerable departures from the rated anode voltage. The chief thing to watch is that a modern rectifier working at 4 volts on the filament, is not plugged into a socket providing 6 or 7.5 volts, which was quite common some years ago.

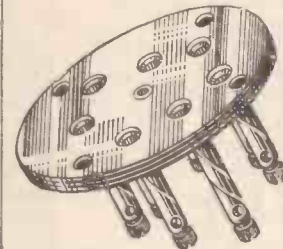
Finally, while you are on the job, do not forget to examine the valveholders for signs of bad contacts, dirt, or loose sockets. A shilling or two spent on new valveholders may save a lot of trouble in searching for mysterious noises in the future.

Summarising: The claims made for new valves are subject to their being properly used, and may not be realised in old receivers. The benefits of increased range and volume may be obscured by instability and distortion. Be on the watch for unusual features in the set, that have become obsolete. Where necessary adjust the various voltages—filaments, grids, screens, and anodes—to ensure proper operation. In particular, take care of the current consumption of battery valves.

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WHEN we were discussing the output stage of a receiver we saw that the output valve had to be capable of supplying sufficient *current* as well as voltage to operate the loudspeaker. This requirement is different from that in the intermediate low-frequency amplifying stages where the important thing is *voltage*. In these intermediate stages the alternating changes in the anode current need only be small, and the maximum voltage is obtained by these changes flowing through a high value of anode resistance or impedance.

In an output stage, however, the valve must be capable of supplying the necessary alternating current for operating the loudspeaker, and the large changes in the anode current must correspond faithfully with the signal voltage applied to the input of the valve, otherwise there will be distortion. If the input signal voltage is too large the corresponding values of anode current will not lie on the straight portion of the valve characteristic, and will therefore not be a faithful copy of the input signal.

One method of obtaining the necessary current is to use two valves of the same type connected in parallel. The total output current

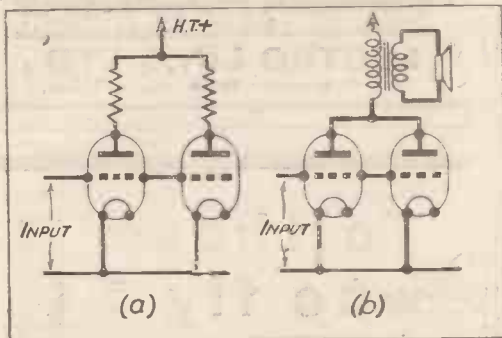


Fig. 1—Two valves can be connected in parallel (a) to give increased current and power output; (b) is the practical arrangement

obtainable will then be twice that obtained from one valve. The two inputs are connected in parallel, and the two outputs are also connected in parallel, as shown in Fig. 1. The optimum load of such an arrangement will be half that of one valve, since we can replace the two output loads which are in parallel by a single load—*viz.*, the loudspeaker. The loudspeaker transformer will, therefore, have to be chosen to have a suitable ratio for making the loudspeaker equivalent to a load of this reduced value. I have already discussed the principles involved in the matching of a loudspeaker to the output stage.

It will be noted that with the arrangement shown in Fig. 1 the total available output from the previous stage is applied to each valve, and both valves behave exactly alike, and have to be worked on the straight portions of the characteristic if distortion is to be avoided.

### Push-Pull Amplification

There is another method of employing two valves to increase the output from a receiver. In this method the two valves are connected in "push-pull." This is really equivalent to connecting the two input circuits in *series* and the two output circuits also in *series* instead of in parallel as in the previous arrangement.

It will be seen from Fig. 2 that if we are to

replace the two separate output loads by a single load represented by the loudspeaker, we require a centre-tapped loudspeaker or loudspeaker transformer of twice the impedance of that necessary for a single valve. Alternatively, we can use a centre-tapped L.F. choke of high inductance through which H.T. is supplied to the valves, and connect the loudspeaker between the two ends of the choke if the loudspeaker has the correct impedance.

The total output current when two valves are connected in push-pull is still the same as that for a single valve, since the current from each valve flows through only one half of the transformer primary, but in the push-pull case we have doubled the voltage applied to the loudspeaker, and doubled the impedance of the loudspeaker in order to maintain this value of current. The total *power* fed to the loudspeaker has, therefore, been doubled (power=voltage × current).

In the push-pull arrangement, therefore, the optimum load is twice that of a single valve, and we require a loudspeaker transformer of a greater ratio to give correct matching. Since the equivalent loudspeaker load is proportional to the *square* of the turns ratio, and we require double the load in the push-pull arrangement, the turns ratio will be  $\sqrt{2}$  times that necessary for a single valve. Similarly, the turns ratio for the parallel case will be  $\frac{1}{\sqrt{2}}$  times that required for a single valve.

### Circuit Arrangements

Special arrangements are required to feed the input voltages to the grids of the two valves connected in push-pull. The total voltage required is twice that for one valve, since the two input circuits are connected in series, and we cannot connect the two grid circuits to the preceding valve in the ordinary way because we have now two separate grid connexions. If we use a transformer, however, we can step-up the voltage from the preceding valve to twice the value, and connect the two grids to opposite ends of the secondary winding, as in Fig. 3. We can apply the necessary grid bias through two similar gridleaks, as shown in this diagram, or we can use a centre-tapped secondary winding and apply a common grid bias through the two halves of this winding.

It will be seen from these arrangements that the potentials of the two grids are always varying in opposite senses when a signal voltage is applied. When one becomes more negative

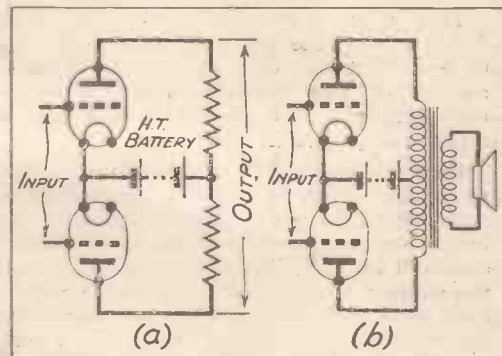


Fig. 2—Theoretical circuit (a) for two valves in push-pull and (b) the usual practical arrangement

the other becomes less negative, since one end of the secondary winding is positive at the instant the other is negative. The two input signal voltages are equal but 180 degrees out of phase, or one valve "pushes" when the other "pulls."

The alternating currents and voltages produced in the two separate anode circuits will

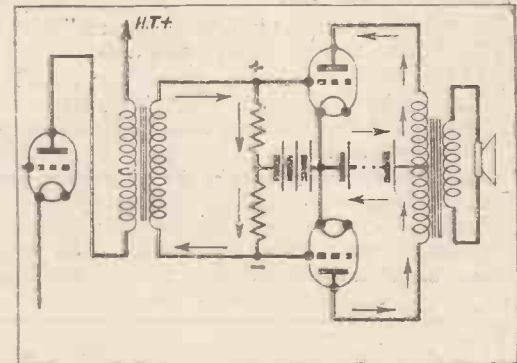


Fig. 3—During one half-cycle one grid is positive and the other negative, and the anode current changes occur in the direction shown by the arrows. During the opposite half-cycle the reverse is the case

similarly be 180 degrees out of phase, but they combine in the common output circuit to give the same effect as a single winding of the output transformer. In the H.T. battery, however, these alternating current changes are 180 degrees out of phase, which means that as the current through one valve increases that through the other valve decreases an equal amount, so the total H.T. current remains constant—*i.e.*, there are no alternating current components flowing through the H.T. battery. Thus there is less likelihood of any alternating voltages being developed across the H.T. resistance of the H.T. battery and being fed back to earlier stages and causing instability.

There is also another advantage of this arrangement, and that is that if the valves are slightly overloaded so that the changes in anode current sweep beyond the limits of the straight portions of their characteristics, or if the characteristics are not quite straight, distortion is considerably less than that produced by a similar amount of overloading in the parallel arrangement.

At any instant when the change in anode current through one valve is greater than it should be, that through the other valve will be less than it should be, so the effect on the loudspeaker transformer will be practically the same as if the two were equal. This is usually expressed by saying that *even harmonics* produced in the valves cancel out in a push-pull arrangement. This means that any distortion which is composed of currents of frequencies of two, four, six, etc., times the frequency of the voltage applied to the grids does not appear in the output circuit. Any odd harmonics which are produced by a characteristic which is not straight do not cancel out. In practice, however, the second harmonic is the one that usually occurs in triode valves, so a push-pull arrangement is beneficial. Pentodes, however, produce a large amount of third harmonic if they are overloaded, and this distortion is not cancelled out by employing push-pull.





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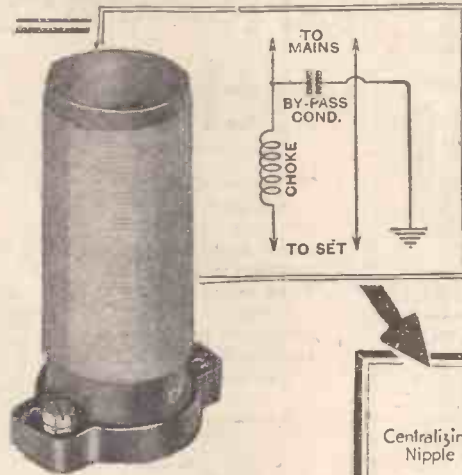
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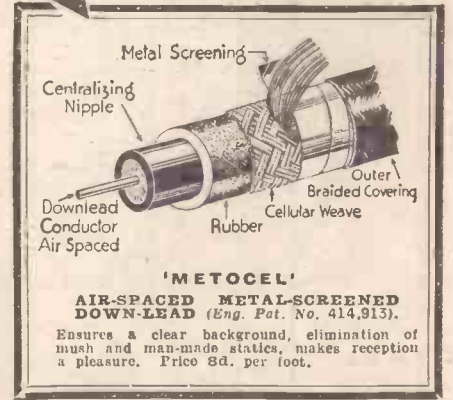
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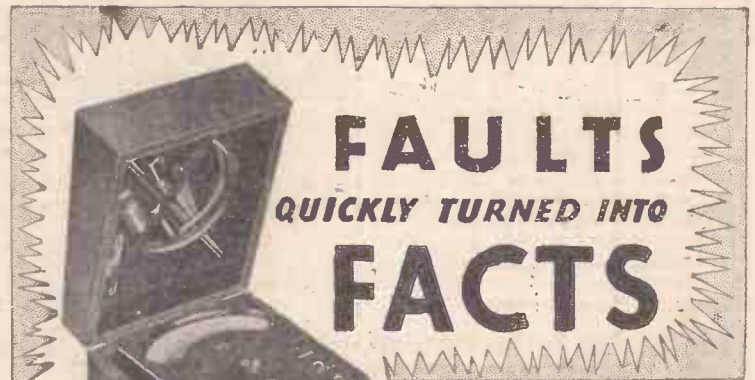
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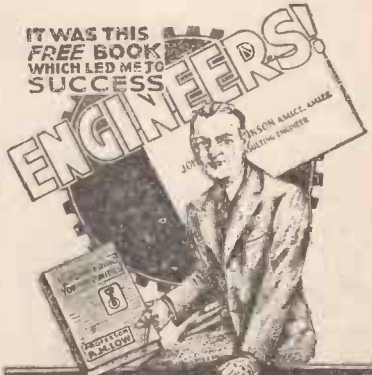
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# Distortion in Gramophone Reproduction (2)

By N. W. McLACHLAN, D.Sc., M.I.E.E.

IN the first article oscillograms were given showing the waveform obtained from constant-tone records using two pick-ups of different design. These illustrated the distortion in waveform which can be obtained, more particularly at low frequencies where the amplitude of vibration is relatively large.

Leaving the record out of it altogether, we can discuss a possible source of distortion in the pick-up itself. In curve (1), Fig. 4, the wave is peaked at the crests and at the troughs, which suggests amplitude distortion since the lateral excursion at low frequencies is relatively large. As the armature of the pick-up approaches the pole pieces of the magnet at each extremity of its swing, the sensitivity increases so the E.M.F. generated is larger than it would be if the action were linear, and harmonics are introduced. When only single frequencies are reproduced, the effect of the harmonics is not distressing, but they do camouflage a pure tone, especially at low frequencies where the ear is relatively insensitive.

The real trouble arising from this form of amplitude distortion is its influence upon other frequencies which are present during normal reproduction of speech or music. Since the characteristic showing the relationship between E.M.F. per unit velocity of the needle point and the position of the needle with reference to the pole pieces takes the form shown in Fig. 7, the higher frequencies are reproduced not only on the linear but on the curved part of the characteristic. In the former case distortion is absent, but in the latter the distortion may be of an unpleasant nature so far as our sense of musical perception is concerned. Due to curvature of the characteristic the high frequencies are modulated by the low frequencies.

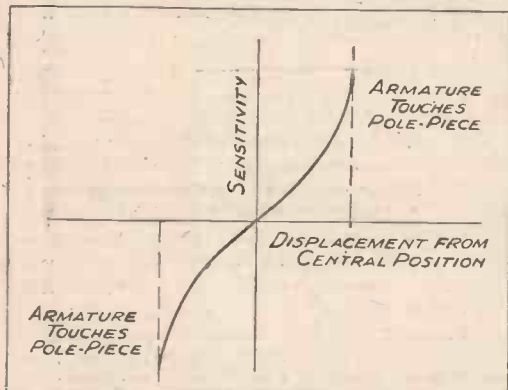


Fig. 7—Typical sensitivity curve of pick-up

Now the process of modulation is accompanied by the creation of new frequencies not present on the record. Many of these frequencies are not harmonics of the principal frequencies in the music—even if they were they would put things out of proportion—so the net result is a degree of harshness and dissonance, which can be alleviated to an extent by reducing the upper frequency range. The wider the range of the loudspeaker and its associated amplifier, the more is this form of distortion accentuated.

This brings back to mind the case of a certain loudspeaker which was a great favourite some years ago. Other speakers tried on the same broadcast receiver were unduly harsh and the reproduction was continually being marred by the above-mentioned form of distortion. The favourite speaker had a poor upper register, whilst the others had good upper registers and gave a truer but, alas, more distressing sound picture of the amplifier performance.

It may now be of interest to turn to the

question of resonances in pick-ups, as these are too frequently a prolific source of distortion. Strange as it may seem, although resonances in a reproducing system are to be avoided as much as possible, they are always there. The designers' business is to use them to the best advantage, but to keep them well in the background by adequate damping. Almost any practical resonant system we like to conjecture has more than one resonant frequency. The applied mathematician uses certain language—parliamentary of course—to describe vibrational systems. In a simple hypothetical system where a mass is concentrated at a point and oscillates on a massless helical spring, as suggested by Fig. 8, the system is said to have one degree of freedom—i.e., there is only one resonant frequency. When there are two resonant frequencies, the system has two degrees of freedom and so on. The system which we propose to discuss is not a simple one by any means, although we shall have to reduce it to an approximate form for purposes of illustration and description.

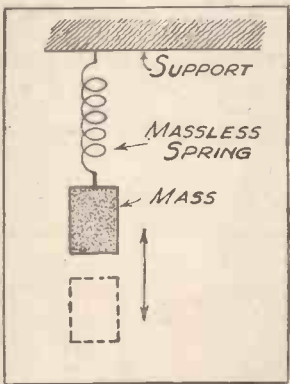


Fig. 8—Illustrating one degree of freedom

The pick-up, by which is meant the tone arm too, is a complex system with an infinite number of degrees of freedom. There are, of course, only a finite number of these within the musical range of gramophone reproduction and only two of them need occupy our attention. The first is a resonance at low frequencies, sometimes used to compensate for the lack of bass on the record, whilst the second occurs above 3,000 c/s and accentuates needle scratch as described in the first article. The remainder of the resonances are negligible by comparison, owing to high damping, although it is possible that they may colour the reproduction due to shock excitation.

### A Simple Analogy

If we hold the head of the pick-up, it is possible to move the needle and its armature from side to side. In doing so, we notice the spring effect due to the armature suspension. By clamping the needle in a vice, moving the pick-up to one side, and letting go, it is possible to obtain vibrations, although special means might be required to make them readily visible. This experiment is suggestive of something simpler and more readily accessible. Suppose we get a carving-knife with a supple blade, hold it at the tip, and move it to and fro—i.e., in a horizontal plane at an ever increasing rate (see Fig. 9). The amplitude of vibration of the handle will increase, and at a certain frequency it will be a maximum—if we are lucky enough to find a knife whose resonance falls within the limits of our personal powers of persuasion.

Now let us turn our thoughts to the pick-up to discover the likeness between the two vibrational systems. The needle of the pick-up is moved to and fro by the grooves, whilst the pick-up head and tone arm tend to remain at rest. But owing to the spring effect of the armature suspension, a certain frequency is reached when the amplitude of vibration of the pick-up head is a maximum. In the ideal

system the pick-up head should not vibrate, since this is the prerogative of the armature and needle. Obviously, vibration of the head means vibration of the magnet system, so the effect is as though the head were stationary, but the armature had a greater amplitude than that cut in the record grooves. As will be realised from the table-knife experiment, the bobbing about of the head from side to side is detrimental to the record and causes undue pressure and wear on the groove walls. This phenomenon is evinced in striking fashion on low-frequency constant-tone records. The amplitude is large and many pick-ups then perform like fleas by jumping all over the record. Further, the amplitude distortion, discussed in article 1, with all its unpleasantness, will undoubtedly be to the fore.

### Needle Resonance

The second resonance of importance is associated with the suppleness or compliance of the needle. If we fixed a needle in a vice, and arranged an alternating current electromagnet near its point, by varying the frequency it would be possible with auxiliary apparatus to show that the needle itself has a resonance frequency in the upper register. In practice it is necessary to take the armature into account also, and its mass reduces the resonant frequency of the combination, whilst the rubber pads exert a damping influence to curb the amplitude. Reverting to our carving-knife analogy, the above resonance can be understood if we imagine the needle to be represented by the blade and the armature by the handle. But now the blade must be very much stiffer than before, in fact, so stiff that the vibration would be invisible to the naked eye and its presence could only be felt by placing one's hand on it. There is no difficulty in seeing that at a certain high-frequency the armature and needle will give rise to a resonance. In this case the mass of the head and tone arm are too great to be of any account.

Now the amplitude of the needle is controlled by the cuts in the record so, as before, the motion of the armature relative to the pole pieces is greatly enhanced. At high frequencies the amplitude is much smaller than at low frequencies, so the possibility of harshness due to amplitude distortion is fairly remote. As at low frequencies this unbridled fury on the part of the armature to move farther and farther away from its central position is damped to an extent by the rubber pads, but there must be an additional pressure on the groove walls to compensate for this behaviour of the system. In the words of the great Newton, "to every action there is an equal and opposite reaction." Taken in conjunction with impulsing of the pick-up, as explained in article 1, this additional lateral pressure due to needle resonance results in enhanced scratch noise.

In a pick-up of good design, it is desirable that both of these major resonances at low and high frequencies should be reduced to a minimum. The effect of this reduction is prolonged life of the record, and, what is more important, improved reproduction, in which much of the harshness associated with average gramophone reproduction, and possibly due to amplitude distortion, would disappear. At the same time, when these resonances have been

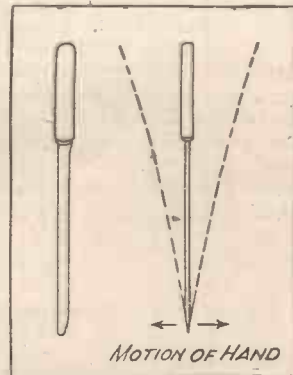


Fig. 9—Resonant frequency demonstrated by means of a knife



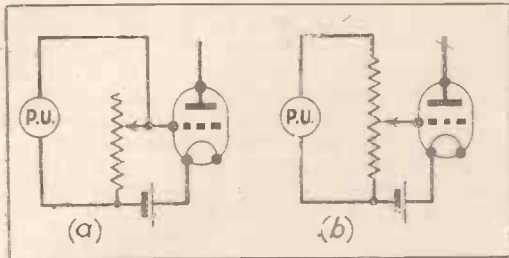


Fig. 10—Applying volume control to a pick-up

adequately subdued, amplitude distortion in the valve circuits and the loudspeaker must not be dismissed without investigation. Apart from any influence due to environment—i.e., the effect of the room where reproduction occurs—there is every reason to believe that appreciable reduction of amplitude distortion and resonances would lead to a higher standard in “canned” music and in broadcasting.

Methods of Volume Control

Finally, it may be of some interest to append a few notes concerning the operation of volume controls for pick-ups. There are two principal ways of connecting the volume control to the pick-up, both of which are illustrated in Fig. 10. In case (a) the pick-up is bridged by a non-inductive resistance whose value can be varied over a wide range, whilst in (b) the resistance is arranged as a potentiometer. The effect of each upon the tone is quite different. When the pick-up acts alone without any control, or if in (b) the resistance is a megohm or so, the circuit can be regarded as substantially open. There is, of course, the self-capacity of the windings and the input impedance across the grid and filament of the first valve, due to the load in its anode circuit, but for simplicity these will be neglected.

Since the circuit is “open,” no current flows, so there is nothing to influence the action of the pick-up, and the output at various frequencies is settled entirely by the mechanical and magnetic features of the design. But when we connect a relatively low resistance across the pick-up as at (a) in Fig. 10, the output characteristic of the device immediately alters. Whereas in case (b) it was merely voltage operated, we have now to take the current into consideration.

Consider the case of a gliding-tone record starting at 250 c/s and ultimately terminating at 5,000 c/s, the cut being graded to give constant voltage output with the pick-up on open circuit. What happens when the circuit is closed as at (a) in Fig. 10? Referring to Fig. 11 (a) which is an equivalent circuit of the apparatus, we have a constant E.M.F. alternator in series with (1) the effective resistance of the pick-up, (2) the effective inductance of the pick-up, (3) the volume control resistance. If the latter is comparable with the impedance of the pick-up at low frequencies, the current through the circuit steadily decreases due to (2) as the record wends its way up the frequency scale. The input to the grid of the valve is the product of resistance R and current I. Since the latter falls with rise in frequency so also does the output

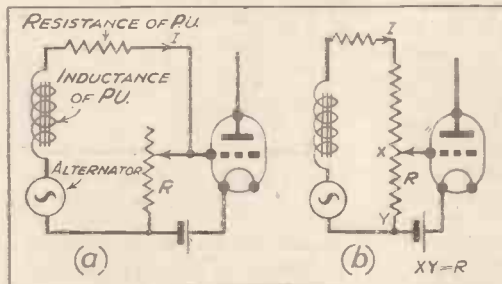


Fig. 11—Equivalent circuits representing the two arrangements shown in Fig. 10

from the pick-up connected as shown. This explains why it is possible to reduce the effect of pick-up resonance and needle scratch by aid of a shunt resistance.

In Fig. 11 (b), since the resistance of the potentiometer is much higher than the impedance of the pick-up, the variation in voltage output across XY, when the position of X is varied, has no sensible effect on the tone, unless the input impedance of the valve is sufficiently small compared with the resistance of XY. The higher the magnification factor of the first valve and the larger its anode to grid capacity, the greater is the possibility of this occurring. A screened-grid valve of some type—e.g., a pentode—reduces the influence of the input impedance to a negligible amount.

Readers' Queries Answered

W.R. 1098. Can a D.C. mains set be operated by a battery or a battery-driven converter? If so, is any alteration necessary to the set?

The current required to operate a D.C. mains set is usually at least a quarter of an ampere and the voltage is generally 200 or more. A battery to give this voltage and current would be too bulky and expensive to be a practicable proposition. Battery-operated machines can be purchased to provide the necessary voltage and current, but in this case also the cost of the machine and battery would be prohibitive and probably be greater than that of the set itself. An alternative method is to re-wire the heaters of the valves in parallel, instead of in series, so that a separate low-voltage battery could be used to supply the heaters, and a higher-voltage battery could be used for the H.T. supply, as in an ordinary battery-operated set. In some D.C. receivers, however, the valves used would not be suitable for this arrangement. The best course is to seek the advice of an experienced wireless engineer who will be able to tell by an examination of the receiver whether the necessary modifications would be expensive.

A CORRECTION

In the article “Radio Science Progress: Radiance” which appeared on page 433 of our issue of September 28, the sentence beginning on line 8, paragraph 3, should read as follows: “It is proportional, not to the rate of change of current (i.e. di/dt in the language of the calculus), but to the rate of rate of change of current (i.e. to d<sup>2</sup>i/dt<sup>2</sup>).”

WORLD RADIO RESEARCH LEAGUE

To become a member of the World Radio Research League, fill in the coupon below and send it to the address indicated, in an open envelope with a half-penny stamp.

Please write in block capital letters.  
TO RALPH STRANGER, (W.R.15)

Hon. Secretary, W.R.R.L.,  
C/o Editor, World-Radio, B.B.C.,  
Broadcasting House, Portland Place,  
London, W.1, England.

Please enrol me as a member of the W.R.R.L.

Name (Mr., Mrs., Miss).....

Address .....

Scientific Qualifications (if any).....

Type of receiver available.....

(State type and make of set, number of valves and if battery or mains supply)

Type of Transmitter (if any).....

..... Call Sign .....

Space and Matter

By “NEUTRON”

Exhibition of Inventions

I PAID a visit last week to the tenth International Exhibition of Inventions at the Central Hall, Westminster, which ends on October 13. Although there are many interesting exhibits, only three or four are of a wireless nature, and these are mainly concerned with tuning scales. There was an interesting application of electromagnetism, however, which attracted a good deal of attention, thus demonstrating its possibilities for shop-window displays, etc. A number of steel balls of various sizes were shooting across a board in all directions. The board sloped gently to the centre, underneath which was an electromagnet. As a ball rolled towards the centre under the force of gravity, it made contact between the edge of a small, thin copper disc, mounted in the centre of the board, and a metal ring let into the board below the disc. This completed an electrical circuit which energised the electromagnet and caused the steel ball to be attracted to the centre of the disc, thereby breaking the contact again. The energy imparted to the ball, however, was such that it shot across the disc to the other edge of the board. On another stand combinations of colours were thrown on a screen as a piano was played, each key of the piano controlling a corresponding colour.

Time Signals in the Antarctic

The British Graham Land Expedition, which recently left England for the Antarctic under the leadership of Mr. John Rymill, will be spending nearly three years south of the Antarctic Circle, with the principal object of exploring

the 1,000 miles of almost unknown coast-line between Luitpold Land and Charcot Land. The exploration is expected to determine whether the Antarctic continent exists, or whether there are two continents or a series of islands. In order to determine the longitude of its position at any time the expedition will employ a method which is now being widely adopted by explorers in all parts of the world. Time signals will be received from Buenos Aires and compared with the local time as ascertained by astronomical observations, the difference giving the degree of longitude. Specially designed Marconi short-wave receivers are being used for the purpose. The wave range of these receivers is 25 to 50 metres, and current is obtained from batteries of the inert type. The range of reception will vary from 2,200 to 3,000 miles. Three receivers in all will be used by the exploring parties, by the party on board the expedition ship *Penola*, and, during the dark months, at the winter base on the ice.

Artificial Lightning

In order to study means of protecting electrical and other equipment against lightning new apparatus has been installed in the high-voltage laboratory of the International General Electric Co. at Pittsfield, Mass. Discharges of approximately 250,000 amperes at a pressure of 150,000 volts, lasting for eight millionths of a second are obtainable. This corresponds to a power of 30 million kilowatts. Condensers in series-parallel are used, three 50,000-volt condensers being connected in series to give 150,000 volts, and there are thirty-two of these banks of condensers connected in parallel. The condensers are charged from a 110-volt 60-cycle supply, and the voltage is stepped up to 75,000 volts peak and converted to 150,000 volts D.C. by means of two rectifier tubes in series.



# WIRELESS TOPICS by "ION"

**"GOLSTONE" IRON-CORED TUNING COILS**  
I HAVE received from Messrs. Ward and Goldstone, of Pendleton, Manchester, particulars of their iron-cored tuning coils.

Messrs. Ward and Goldstone tell me that improvements to telephones, such as increasing the high note response, brought about improvements in the iron-core compositions, notably in decreasing the hysteresis and eddy-current losses, at the same time maintaining permeability.

Recent experiments have been successfully concluded in adapting telephone repeater coils to radio frequencies higher than 100 kilocycles per second. The cores have been produced in the form of square bars about  $1\frac{1}{8}$  in. long, and about  $\frac{1}{8}$  in. square. The iron particles are magnetically, and to some extent electrically, insulated from each other, which is shown by the fact that the D.C. resistance of a bar from end to end measures between 7,000 to 10,000 ohms, and this despite a mechanical pressure of about 200,000 pounds per square inch during manufacture.

The makers tell me that, after carefully investigating the technical merits of the various cores available, the straight-bar type was chosen for the following reasons: (1) Mechanical strength; (2) Non-oxidisation of the surface particles; (3) The permeability factor of 11 to 13 provided for a coil having a sensibly constant high-frequency resistance at various frequencies; (4) A "closed" core which gives only 15 per cent. greater efficiency than the bar type costs twice as much and thus increases the charge for a coil out of proportion to its technical value.

I understand that the iron-powder agglomerate (core) and the winding details on "Goltone" iron-cored coils, have been the independent work of two renowned doctors of science. For the medium waveband the coil is wound with Litz wire, silk-covered throughout, and has an inductance of 157 microhenries. Corrosion, dielectric losses and self-capacity are reduced to minimum limits by the use of a sectionalised transparent cellulose acetate bobbin. The self-capacity is 17 micromicrofarads. On the long-wave section a substantial solid double silk-covered wire is employed on a similar bobbin staggered at 90 degrees, and with 1 in. between centres of the cores. Self-capacity in this case, and including the medium-wave section, is 26 micromicrofarads for a total inductance of 2,200 microhenries.

A variation of 7 per cent. of inductance, by sliding the cores in their bobbins, allows the coils to be matched to within plus or minus 0.25 of 1 per cent. during manufacture.

Dielectric losses in the support materials surrounding the coils tend to increase the high-frequency resistance, and this has the undesirable effect of impairing selectivity. Similarly, it has been found that using Litz wire, with each strand double silk-covered instead of single-covered, tended to produce a more bulky coil and a greater H.F. resistance. For this reason, unique coil supports were evolved with a minimum of material in the fields of the coils.

The H.F. resistance measurements are stated to be as follows:

<i>Medium waveband, 157 microhenries (screened)</i>					
Frequency in kilocycles/sec.	550	800	1,000	1,200	1,500
H.F. resistance in ohms.	3.2	5.0	6.8	10.0	18.0
<i>Long waveband, 2,200 microhenries (screened)</i>					
Frequency in kilocycles/sec.	150	200	250	310	
H.F. resistance in ohms.	27	39.8	57.2	84.5	



A Tibetan Lama before the microphone in Shanghai

It should be noted that the above figures apply to the complete coil unit.

Messrs. Ward and Goldstone claim the following advantages of the "Goltone" iron-cored coils. They say that there are two important features which make iron-cored coils of value in H.F. circuits. The first is that given two coils, one air-cored and the other iron-cored, of approximately equal physical dimensions and inductances, the iron-cored version will display a lower high-frequency resistance owing to the smaller amount of copper wire employed and consequent lower copper losses, and also greater magnification.

In the second instance it is possible to reduce the physical dimensions of an iron-cored coil to about one quarter of the air-cored version for an equivalent efficiency factor. Where space is a consideration, this second point becomes of vital importance.

The "Goltone" iron-cored range of coils provides maximum efficiency with reliable standard-sized cores.

Full details of iron-core applications and circuit diagrams are supplied by the makers on receipt of letter.

The following types are available:—

*R11/G.I.C.2.* Aerial coil with low tapings on medium and long-wave sections. Separate reaction windings with optional centre-tap for short-circuiting long-wave section. Reaction can be used as primary, if desired. The normal reflected aerial capacity makes little difference to the tuning range of this unit.

*R11/G.I.C.3.* Coil as above without reaction windings. Suitable for aerial, anode, or grid coupling.

*R11/G.I.C.4.* H.F. transformer with separate primary windings, and reaction. The turns ratio is 4:1, which is suitable for all modern H.F. valves, and compromises on the question of selectivity.

*R11/G.I.C.5.* Band-pass coil for link-over filter scheme. The tuned windings are tapped for direct aerial connexion.

*R11/G.I.C.6.* A secondary band-pass coil (no tapings) for use with G.I.C.5.

*R11/G.I.C.7.*—Oscillator coil unit for pentagrid or heptode valves for superhet receivers. Values of inductance are correct for superhet condenser units and long-wave padding condensers.

Price per iron-cored coil unit (all types), 9/6.

Two-coil switch chassis, and any two coils, complete with Q.M.B. 750-watt switch and knob, *R/G.I.C.22.* Price 25/-.

Three-coil switch chassis, any three coils, complete with Q.M.B. 750-watt switch and knob, *R/G.I.C.23.* Price 36/6.

Four-coil switch chassis, any four coils, complete with Q.M.B. 750-watt switch and knob, *R/G.I.C.24.* Price 47/6.

## TIBETAN LAMA USES THE MICROPHONE

I am indebted to Messrs. Philips Lamps, Ltd., for the photograph which is reproduced on this page. It shows the Panchen Lama, one of the two supreme pontiffs of the Buddhist faith who rarely leave their capital, Lhasa, the "forbidden city" of Tibet, during his visit to Shanghai.

A microphone and loudspeaker equipment were installed in front of the Town Hall, so that his Holiness could address the assembled multitude of Chinese and bestow upon them his priestly benediction. This is thought to be the first instance of amplifying apparatus being used at a religious gathering of Buddhists.

## DUBILIER MOTOR RADIO SUPPRESSORS

Messrs. Dubilier Condenser Co. (1925), Ltd., of Ducon Works, Victoria Road, North Acton, London W.3, have sent me particulars of their motor radio suppressors. They tell me that complete satisfaction from motor radio can only be obtained by eliminating all electrical noise originating in the motor vehicle. Minute sparking which always exists at the car generator brushes is a common source of interference. A 1-microfarad Dubilier suppressor condenser should be connected as close to the brushes as possible (a diagram of connexions can be obtained from the makers on application). If sparking is bad the commutator should be cleaned with glass-paper and brushes properly bedded.

The spark occurring at the interrupter of the ignition coil is another source of noise. A 1-microfarad Dubilier suppressor condenser should be connected as close as possible to the interrupter. One terminal of the suppressor condenser is connected to earth.

The chief sources of interference are found at the sparking plugs and the distributor. The sparks generate radio waves which are radiated by the sparking plug cables acting as an aerial. This trouble may be eliminated by connecting a Dubilier plug-type suppressor at each plug and connecting a Dubilier distributor suppressor at the distributor. The plug suppressors are made to fit either vertically or horizontally with respect to the plug, alternative fixing holes being provided. The plug cable should be removed and connected to one end of the plug suppressor, which can then be tightly fixed to the sparking plug terminal in the most convenient manner. The distributor feed cable should be removed from the distributor and connected to one end of the distributor suppressor, the other end being plugged into the distributor. The clearance between the distributing brush and the contacts should be kept as small as possible to facilitate noise suppression.

The suppressors are packed in cartons in sets as follows:

*For four-cylinder cars.* Four plug suppressors and one distributor suppressor, 10/6 per set.

*For six-cylinder cars.* Six plug suppressors and one distributor suppressor, 15/6 the set.

A choke-filter unit is available for insertion in series with generator leads to eliminate interference borne along these wires. Type 56003 for use with 12-volt equipment only. Price £3 each.

## New B.B.C. Studio at Maida Vale

Next week's WORLD-RADIO will contain a special illustrated article describing the new B.B.C. Studio and equipment at Maida Vale.



## WORLD RADIO RESEARCH LEAGUE: SECRETARY'S REPORT

## The "Luxembourg Effect"

- How to Make the Tests
- A Report from Australia

WE now know from Professor Appleton's article, published in the last issue of WORLD-RADIO, that the "Luxembourg Effect," as we may call it for want of a better name—*i.e.*, interference between two stations working on widely differing wavelengths—occurs only at night and that it occurs only, according to Dr. van der Pol, when the great circle joining the wanted station and the point of observation passes the unwanted or interfering station at a distance not greater than 250 or 300 kilometres.

If we are to familiarise ourselves with this effect, and make sure for ourselves that it exists, we must carry out a number of immediate tests during the next fortnight. Let our "unwanted" stations be Athlone, Droitwich, and Luxembourg. While everybody should listen and report at the same time, I shall divide members of the W.R.R.L. into three groups as follows:—

**GROUP I.—Unwanted Station: Athlone**

**Ireland:** The following towns should listen to Dublin as the "wanted" station, and see if there is a background of Athlone transmission during the time of listening: Ballinasloe (Galway), Clara (Offaly), Edenderry (Offaly), Celbridge (Kildare), and Dublin.

**Great Britain:** Wanted station: Northern National transmitter at Moorside Edge, near Huddersfield. Listening towns: Dewsbury, Wakefield, Pontefract (Yorks), Barton-on-Humber (Lincolnshire) and Patrington (York).

**Germany:** Wanted station: Hamburg. Listening towns: Bremenhaven (Hanover), Waren (Mecklenburg Schwerin), Dramburg (Pomerania), Ortelsburg, and Iohanisburg (E. Prussia).

**Holland:** Wanted station: Hilversum. Listening towns: Hilversum, Het Loo (Gelderland), Deventer, and Delden (Overijssel).

These stations may be summarised as follows:—

Station	Wavelength	Power
Athlone	531 m.	60 kW
Dublin	222.6 m.	1 kW
North Nat.	296.2 m.	50 kW
Hamburg	331.9 m.	100 kW
Hilversum	301.5 m.	20 kW

**GROUP II.—Unwanted Station: Droitwich**

**Ireland:** Wanted station: Athlone. Listening towns: Oughterard (Galway), Athlone, Enfield, and Dunboyne (Meath).

**Great Britain:** Wanted station: Brookmans Park (London National on 261.1 metres). Listening towns: Tillingham, Purleigh, Ongar, Epping, and Waltham Abbey (Essex); Potters Bar (Middlesex); Nuneham (Oxfordshire), Lechlade (Glos.), Tintern, Usk, Pontypool, Aberbeeg (Monmouth); Aberdare, Rhesolfen, Grinaut, and Llandeiltotalybon (Glamorgan), and Milford (Pembroke).

**Germany:** Wanted station: Berlin (356.7 metres). Listening towns: Lingen (Westphalia), Spandau, Berlin, Kustrin (Brandenburg), Schwerin, and the following towns in Poland: Birnbaum, Gnesen, and Plotzk.

**Belgium:** Wanted station: Brussels No. 1. Listening towns: Ypres, Brussels, and Maastricht.

The stations in group II may be summarised as follows:—

Station	Wavelength	Power
Droitwich	1,500 m.	150 kW
Athlone	531 m.	60 kW
London Nat.	261.1 m.	50 kW
Berlin	356.7 m.	100 kW
Brussels No. 1	483.9 m.	15 kW

**GROUP III.—Unwanted Station: Luxembourg**

**Great Britain:** Wanted station: Cologne (Germany). Listening towns: Grays (Essex),

Central London, Ealing, Henley, Maidenhead, Swindon, Malmesbury (Wiltshire), Wickwar (Gloucester), and Swansea (Glamorgan).

**Germany:** Wanted station: Cologne. Listening towns: Cologne, Gera (Thuringia), Hirschberg, and Brieg (Silesia).

**France:** Wanted station: Paris (Ecole Supérieure). Listening towns: Falaise, Ivry, Paris, Montmirail, St. Mihiel, and Hagenau (Alsace).

This may be summarised as follows:—

Station	Wavelength	Power
Luxembourg	1,304 m.	150 kW
Cologne	455.9 m.	100 kW
Paris (Ecole Sup.)	431.7 m.	7 kW

**Test Procedure**

The procedure in the case of each group is the same. Members in each group will first of all familiarise themselves with the wanted and unwanted stations, find their exact position on the dial, and mark them so that they can go over from one station to another at a moment's notice. Having done this, they should study the programmes of the two stations between 9 p.m. and 11 p.m. on the day of listening. For the purpose of the test, find two contrasting programmes, so that there can be no doubt whatsoever as to the item broadcast normally from each station. Listen to the wanted programme, and see if there is a background of any other programme present. Having

**TIMES OF W.R.R.L. TESTS**

The test transmissions in connexion with the problem of echoes of long delay which is being investigated by the W.R.R.L. are being radiated from the Empire transmitter, GSB, on a frequency of 9,510 kilocycles per second (31.55 metres). The signals are sent out at the following times: 6.30–6.55 a.m.; G.M.T., Sundays, Tuesdays, and Thursdays. The letters of the alphabet are sent in morse at intervals of a minute, and are modulated signals having a frequency of approximately 1,000 cycles per second.

discovered such a background, go over several times quickly to the programme of the unwanted station in your group, and see if the background on the wanted station is the same as the programme of the unwanted station. Having discovered the identity of the station interfering, report as follows:—

**GROUP I (II, or III):**

Date . . . . . Time of listening . . . . .  
 Receiving Station . . . . . Town . . . . .  
 County . . . . . Country . . . . .  
 Distance from wanted station . . . . . (name station) . . . . . miles. Distance from unwanted station . . . . . (name station) . . . . . miles. Name . . . . . Qualifications . . . . .  
 Type of receiver . . . . . Observations (here report exactly what has happened during the period of observation, stating every kind of interference that occurred).

If your town is not included in any of the three groups, state at the top of the report: Group: Nil.

It is highly important that every member not included in any of the groups should report after listening to any one of the "wanted stations." These reports on interference should be sent in weekly with other reports. The first tests will start on Saturday, October 13, and will be completed on Saturday, October 27.

These are preliminary tests, so that everybody can familiarise himself with the phenomenon under investigation.

**Echoes of Long Delay Tests**

I have now accumulated a large number of reports from distant parts of the Empire. A member residing at Harvey, Western Australia, in sending in his reports for the second part of August, says: "Since the commencement of the tests from Daventry (GSB) I have endeavoured to pick up the signals, but have met with no success until August 12. This being the case, I have listened every day that the tests have been made from that transmitter since that date. The result of nine days' listening is as follows:—

August 12, 1934.—R1/XX. August 14, R1/XX. August 16, R3/XX. August 19, R3/XX. August 21, R4/X. August 23, R4/X. August 26, R5/X. August 28, R1/X (later half of test only). August 30, R1/X (only K to Z audible).

"There was no sign of echoes at any time. The signals have not been strong so far, but I am sure that the strength will materially increase from now until December, when they will reach their maximum. There has been no sign of an echo in any way, and if there had been I should not have heard it, as the original signal was so weak, especially on August 12 and 14." The member's name is Charles Fielder.

Mr. Colin H. Ellet, of P.O., Kitale, Kenya Colony, sent in some excellent reports on fading and his first report on our GSB tests. The average strength of signals on September 23 was R4/R5, with atmospherics being prevalent throughout the test. He observed an echo after the letter M at an interval of 13 secs. at R2. It appears that in Mr. Ellet's locality GSB is received very well from 6 p.m. G.M.T.: the average signal strength taken at 7 p.m. G.M.T., over a period of three months, is R9. The early morning transmission on GSB, taken at 5.15 a.m. G.M.T., shows an average of R2, for a period of twenty days.

Mr. W. S. Ollis, of East London, S. Africa, has failed up to the present to pick up our tests, although he gets GSD regularly, which since August 15 has been received at R8 to R9, on transmission 4, at 6.0 p.m. G.M.T. It will be interesting to see how our Dominion members will get on with the new times of transmissions from GSB.

**To Our Foreign Representatives**

I should be greatly obliged if our foreign representatives would be good enough to send me more regularly copies of the local official organs of the W.R.R.L.: *in duplicate*, as well as any notices in connexion with our work appearing in the local Press. I am keeping a comprehensive archive of all such material, which will be included in the final monograph on the work of the W.R.R.L. Returns of membership numbers are also wanted, brought up to date, from all countries.

In conclusion I should like to congratulate Mr. F. Michel de Champourcin on his excellent work on our behalf in Spain.

**Reporting**

I have prepared a special six-page leaflet dealing with the methods of reporting in connexion with the echoes of long delay and fading, *i.e.*, the first and second problems. Newcomers to our League can obtain these leaflets by sending a post-card to me.

**W.R.R.L. Booklets**

I have written a twenty-four-page booklet explaining our aims and work. Many of these booklets have been distributed during exhibitions, but supplies are still available. A post-card will also bring this.

RALPH STRANGER.



## Below 100 Metres

By "MIDLANDER"

(September 30—October 6)

THE first two days of the week saw the continuation of the very bad conditions experienced by the commentators in last week's review.

Sunday, September 30, was almost completely blank, but on Monday conditions improved somewhat. At 2.50 p.m. DJA (31.38 m.) was of excellent strength and quality. From this time on there was complete silence on the 16-m. and 19-m. bands, except for an occasional telegraphy station. At 10.30 p.m. a station presumed to be W8XK was just audible on 25 m. W1XAZ (31.35 m.) was a fairly good signal at this time, but fading badly, while W3XAU (31.28 m.) was also audible, but of little programme value.

Tuesday saw an improvement of conditions on the shorter waves, for DJB (19.73 m.) was a very good signal shortly before 3 p.m. A few minutes before 9 p.m. W2XAD (19.56 m.) was a surprisingly loud signal, easily 100 per cent. intelligible. Just over an hour later W1XAZ (31.35 m.) was a fair signal, suffering from high noise level. At this time OXY (49.5 m.) was of a signal strength with full programme value and little fading.

At 3.10 p.m. on Wednesday DJA (31.38 m.) was quite a loud signal and fully intelligible. At 5.20 p.m. Jelöy (31.45 m.) was heard at good strength for the first time this week, although quality was rather poor. At 10.10 p.m. W3XAL and W8XK (19.72 m.) were of excellent signal strength, the former suffering from zero fading, the latter being 100 per cent. intelligible. Switching over to the 31-m. band, I was just in time to hear W2XAF (31.48 m.) "wishing you good afternoon" at excellent strength, and then closing down. W1XAZ (31.35 m.) was also of fair strength with slight fading.

I think the remaining three days of the week might well have been given over entirely to American transmitters, as will be seen from the following notes. On Thursday at 5.30 p.m. W3XAL (16.87 m.) was of good strength with a little fading. W8XK (19.72 m.) was also plainly audible, but less intelligible than W3XAL. The quality of gramophone records played by Jelöy at this time was really wonderful, with no fading. At 8.55 p.m. W3XAL, W2XAD, and W8XK were all good signals giving a commentary on the American ball game, with "upwards of 45,000 people present."

Just before 3 p.m. on Friday W8XK (13.93 m.) was just audible on 'phones. First time heard this year. From 8.55 p.m. to 9.15 p.m. W3XAL, W2XAD, and W8XK were heard at good strength, the latter being the strongest. FYA (25.25 m.) was also heard, suffering from the usual fluttering fade. On the 49-m. band Moscow, DJC, and OXY were all excellent signals. A station just above OXY I thought was Vienna OER2 a little high in wavelength. Between 10.10 p.m. and 10.25 p.m. the three American stations on the shorter wavelengths were all very good signals. Those on the 31-m. band were also highly intelligible, full marks going to W2XAF. RNE (25 m.) was an unexpected signal of good strength at this time, while CT1AA (31.25 m.) was another signal of excellent strength, but very bad quality. Moscow, DJC, and OXY were all highly intelligible signals on the 49-m. band.

At 2.50 p.m. on Saturday a station was heard weakly on 'phones which, although not definitely identified, must have been Eindhoven (16.88 m.). W8XK (13.93 m.) was again heard—a little stronger than yesterday but still quite weak. The half-hour after 8.30 p.m. was particularly lively, W3XAL, W2XAD, and W8XK all being good. EAQ (30.43 m.) was also a loud signal, with poor quality.

## Short-Wave News Reel

### American Baseball Championship:

HEARING an announcement from W2XAD, on Tuesday evening (Oct. 2), that the first round of the National Baseball Championship would be relayed on the following day from 1.15 p.m. Eastern Standard Time, I decided to listen to this match. I heartily enjoyed listening for the first time to the American national game, and I could soon follow the general run of the game. At 9.40 p.m. (B.S.T.) the Detroit Tigers—the home team—had their "backs to the wall," having won only two matches to the St. Louis Cardinals' eight. Manager "Micky" Cochran was doing all in his power to avert defeat, assisted by such stalwarts as "Chick" Fullis and "Hank" Greenberg, who thrilled his home supporters by hitting a wonderful home run and making the score 8—3. He could not, however, last long against the attack of "Rip" Collins, "Jo Jo" White, and "Dizzie" (not Dixie!) Dean, who was evidently the star of the match.

At 10.5 p.m., it was announced that the St. Louis Cardinals had defeated the Detroit Tigers, and thus ended a very thrilling game.

This first game of the 1934 World-Series Baseball Championship came from Detroit, home of the Ford, and the commentary was presented through the courtesy of this great car company, who cordially invited me to listen-in to-morrow at the same time and, in the meantime, "watch the Fords go by."

Douglas, I.O.M. G. C. W. A.

### The Duce's Speech

I was alone at about 3.45 p.m. on Saturday, October 6, and as I "twiddled" around the long-wave band I suddenly heard Radio-Paris saying in French, "... to the United States, Argentine, and Paraguay!" Guessing that there was to be a relay I immediately switched on the short-wave converter and tuned to W3XAL (Bound Brook), on 16.87 m. At 4 p.m. it was announced that Signor Mussolini's speech was to be relayed from Italy and afterwards would be summarised in English. After a break in the programme of only a moment or so, the voice of an English commentator in Italy was heard but he said little of importance. Mussolini was then heard for about fifteen minutes, after which the cheering lasted for quite three or four minutes.

We were next transported back to the U.S.A. In the English summary the announcer said that the Duce had mentioned France, Germany, and disarmaments, also that he had stated that he thought Fascism was one of the greatest events in the history of the world. The summary only lasted about two minutes. The actual relay was wonderfully clear, when it is remembered that the speech had been twice across the Atlantic.

Bristol.

D. J. J.

### Antarctic Broadcasts

One of the most interesting broadcasts to be heard on the short waves is given every Saturday night from station W2XAF (31.48 m.), when programmes to and from the Byrd Antarctic Expedition are broadcast. In the broadcasts to the expedition a programme of musical items is given, followed by reading of the most important news of the past week, after which correspondence is read to the men from their wives and relatives. These broadcasts of real life adventure make interesting programme fare for the world's radio listeners.

Sometimes one is able to hear Admiral Byrd speak, when he is in an ice hut 100 miles away from the main base. He is equipped with a portable transmitter-receiver, and it is by this means that he can keep in touch with the main base. His voice is re-transmitted by

the main base station KFZ, picked up in Buenos Aires, re-transmitted again, by station LSX, picked up in U.S.A. and broadcast over a network of about fifty stations. The best one heard in England is W2XAF (31.48 m.).

Whitefield, Nr. Manchester. R. L.

### Lawn Tennis Championships

The series of running commentaries of the U.S.A. Lawn Tennis Championships, broadcast via W2XAD, were well worth hearing without the added interest that England was represented by F. J. Perry. The final was a great game. No one could fail to be thrilled by the frequent roar of the spectators accompanied by the commentator's remarks—"Just hear that crowd giving Perry a hand." "He can get his teeth in this game and go ahead just when he likes." There was plenty of fun in some of these remarks of the quick-fire commentator. For instance, "Perry is wearing very wide trousers; he keeps falling over them. Oh! what wide trousers. (*sotto voce*) Evidently from Piccadilly." Was it a tribute to the English when, between sets, the commentator said: "Perry is actually drinking a cup of tea. Who but an Englishman could drink tea on such an occasion?"

This final match ran from 8.45 p.m. till 10.55 p.m. (B.S.T.) and the station closed down at the most exciting moment with Perry leading Allison in the final set—4 games to 2. Reception on each occasion was at full loud-speaker strength with very little fading. Where are the people who say that short-wave listening is not worth the candle?

Catford, S.E.6.

F. W.

*In order to stimulate interest in short-wave broadcasts from the "programme" point of view, we invite contributions describing interesting events or items heard on the short waves, for publication in this column. Contributions should not exceed 250 words; they should be clearly marked "Short-Wave News Reel," and must reach us by the first post each Monday. Payment of 10s. 6d. will be made for each contribution published.*

## Correspondence

### The Brazilian Station

To the Editor of WORLD-RADIO

SIR,—I hope this letter will throw some light on the question of the Brazilian short-wave station working on 31.56 metres. I heard this station on September 5, 6, 7, 19, and 20, 1934, at R6 in every case. Each night I heard the announcement at 12.15 a.m. B.S.T., when this station closes down. The call-sign used was PRF5, no mention being made of either PSK, PRA3, or PRBA. PRF5 was used in every case, and on September 6, at 11.35 p.m., the call was given as PRF5, F for Friday, working on 9,505 kc/s. Listeners abroad were asked to send reports to: Short-Wave Station, PRF5, Rio de Janeiro, Brazil, S.A.

Yours faithfully,

Birmingham.

F. W. H.

To the Editor of WORLD-RADIO

SIR,—In reply to the letter of F. A. B., I am pleased to see reception of station on 49.75 m. I first received this station on March 9 of this year, reception being R3-5/FFS/X, on SG—v—pen. with headphones, at 9.50 p.m. From the end of April I did not receive this station again until August 28, reception then being R4-5/FFR/X, at 10.45 p.m. At the hour announcements are given, these being followed by a clock chiming and then striking the hours, S.A. time. No call-sign is given by this station.

Yours faithfully,

N. Wembley.

R. P. C.



# SHORT-WAVE BROADCASTING STATIONS

This list includes stations which broadcast regularly on wavelengths below 100 metres. Where ascertainable the times of operation are given in G.M.T.

m.	kc/s	kW	Station	Dial Readings	m.	kc/s	kW	Station	Dial Readings
84.67	3543	0.15	Mozambique (East Africa) CR7AA. THURS., SAT., 6.30-8.30 p.m.	MON.,	46.53	6447	0.3	Barranquilla (Colombia) HJ1ABB. Daily, 4.15-6 p.m.; 11 p.m.-3 a.m.	.....
83.3	3600	0.05	Ponta Delgada (Azores) CT2AJ. SAT., 10 p.m.-12 m'nt.	WED.,	46.3	6480	..	Cali (Colombia) HJ5ABC.	.....
80	3750	0.5	Lisbon (Portugal) CT1CT. SUN., 2-4 p.m.	.....	45.38	6610	10	Moscow RW72 (Russia). MON., WED., FRI., SAT., 9-10 p.m.	.....
73	4110	0.5	Quito (Ecuador) HCJB. Daily (ex. TUES.), 12.30-3 a.m.	.....	45.31	6620	..	Riobamba (Ecuador) PRADO. Fri., 2-4 a.m.	.....
70.2	4273	20	Kharbarovsk RV15.	.....	45	6667	0.15	Guayaquil (Ecuador) HC2RL. SUN., 10 p.m.-1 a.m.; TUES., 2-5 a.m.	.....
58.31	5145	..	Prague OK1MPT. Experimental.	.....	43	6976	0.2	Constantine (Algeria) 8KR.	.....
58.03	5170	..	Bandoeng (Java) PMY.	.....	41.9	7150	0.2	Madrid EA4AQ. TUES., SAT., 10 p.m.	.....
52.7	5692	0.5	Tananarive (Madagascar) FIQA. D'ly. (ex. SUN.), 8-8.45 a.m.; 3-4 p.m.; SAT., 5.30-7 p.m.; SUN., 7.30-8 a.m.	.....	41.8	7177	0.5	Manizales (Colombia) HJ4ABB.	.....
50.42	5950	..	Medellin (Colombia) HJ4ABE. 12 m'nt-4 a.m.	.....	41.6	7211	0.2	Lobito (Angola) CR6AA. WED., SAT., 7.30-9.30 p.m.	.....
50.26	5969	10	Vatican City (Italy) HVJ. Daily, 7-7.15 p.m.; SUN., 10-10.30 a.m. also.	.....	40.3	7444	..	Tenerife Radio Club EA8AB.	.....
50.08	5990	..	Caracas (Venezuela) YV4RC.	.....	38.48	7797	20	Radio Nations (Switzerland) HBQ.	.....
50	6000	0.3	Barcelona Radio Club (Spain) EAJ25. SAT., 8.30-9.30 p.m.	.....	37.33	8935	10	Radio Nations (Switzerland) HBP. SAT., 10.30-11.15 p.m.	.....
49.96	6005	2.5	Bucharest (Romania).	.....	36.65	8186	..	Rabat (Radio Maroc) CNR. SUN., 8-9 p.m.	.....
49.92	6010	..	Moscow RW59. 9-11 p.m.	.....	31.56	9505	..	Rio de Janeiro (Brazil) PRA3. 10.30-11.30 p.m.	.....
49.9	6012	..	Montreal VE9DR. D'ly. (ex. SUN.), 12.30 p.m.-5 a.m.; SUN., 5.30 p.m.-4.15 a.m.	.....	31.55	9510	3	Rio de Janeiro (Brazil) PRF5	.....
49.83	6020	8	Montreal VE9DN. 4-6 a.m.	.....	31.48	9530	40	*Davenport GSB.	.....
49.67	6040	3	Havana (Cuba) COC. 2.30-4 p.m.; 9-10.15 p.m.	.....	31.45	9540	1	Melbourne (Australia) VK3ME. WED., 10-11.30 a.m.; SAT., 10 a.m.-12 n'n.	.....
49.59	6050	2.5	Singapore (S.S.) ZHI. MON., WED., THURS. 10.40 p.m.-1.10 a.m.; SUN., 3.40-6.10 a.m.	.....	31.38	9560	8	Schenectady (N.Y.) W2XAF. 12.25-4 a.m.	.....
49.43	6069	0.007	Zeeseen (Germany) DJC. 10.30 p.m.-3.45 a.m.; 5-9.30 p.m.	.....	31.36	9565	4.5	Jeløy (Norway) LCL.	.....
49.42	6070	..	Boston (Mass.) W1XAL. 10.45 p.m.-12.15 a.m.; SUN., 12.30-2.30 a.m.	.....	31.35	9570	10	Zeeseen (Germany) DJA. 1-4.30 p.m.; 10.15 a.m.-2.15 p.m.; SAT., 9-10.30 a.m.	.....
49.4	6072	0.02	Miami Beach (Florida) W4XB. 1p.m.-5 a.m.	.....	31.32	9580	20	Bombay (India) VUB. 4.30-5.30 p.m.	.....
49.34	6080	0.5	*Davenport GSA.	.....	31.28	9590	20	Springfield (Mass.) W1XAZ. Daily, 12 n'n-6 a.m. (SUN. from 2 p.m.).	.....
49.26	6090	0.1	Cincinnati W8XAL. 12.30 p.m.-1 a.m.; 4-7.30 a.m.	.....	31.27	9595	18	*Davenport GSC.	.....
49.22	6095	0.5	Nairobi (Kenya) VQ7LO. Daily, 4-7 p.m. (SAT. to 8 p.m.); TUES., 8-9 a.m.; THURS., 1-2 p.m.	.....	31.25	9600	..	Lindhurst (Victoria, Australia) VK3LR. Daily (ex. SUN.), 8.15 a.m.-12.30 p.m.	.....
49.18	6100	5	Philadelphia (Pa.) W3XAU. 1-4 a.m.	.....	31.17	9624	2	Philadelphia (Pa.) W3XAU. 5 p.m.-1 a.m.	.....
49.08	6112	0.2	Skamleback (Denmark) OXY from 6 p.m.	.....	30.43	9860	20	Sydney (Australia) VK2ME. SUN., 5.30-7.30 a.m. 9.30 a.m.-1.30 p.m. 2.30-4.30 p.m.	.....
49.02	6120	10	Santo Domingo (D.R.) HIX. TUES., FRI., 1-3 a.m.; SUN. at 12.40 p.m.	.....	29.04	10,330	20	Radio Nations (Switzerland) HBL. SAT., 10.30-11.15 p.m.	.....
49	6122	5	Vancouver (B.C.) VE9CS. SAT., 4.30-5.45 a.m.; SUN., 4 p.m.-4 a.m.	.....	28.98	10,350	..	Mexico City XETE. 7 p.m.-7 a.m.	.....
48.9	6130	..	Maracaibo (Venezuela) YV5RMO. 5-6 p.m. 10.30 p.m.-3 a.m.	.....	28.36	10,578	..	Lisbon (Portugal) CT1AA. TUES. and FRI., 9.30 p.m.-12 m'nt.	.....
48.86	6140	21	Vienna Experimental OER2. D'ly 2-10 p.m.	.....	25.65	11,695	0.2	Madrid (Spain) EAQ 10.30 p.m.-12 m'nt; SAT., 5-7 p.m.	.....
48.78	6150	..	Chicago (Ill.) W9XAA. Daily (ex. SUN.) 8-9 p.m. (TUES., THURS., and SAT., to 6 a.m.); SUN., 4.30 p.m.-2.15 a.m.	.....	25.63	11,705	15	Ruysselede (Belgium) ORK. 7.45-9.30 p.m.	.....
48	6250	..	La Paz (Bolivia) CP5. 12 m'nt-3.30 a.m.	.....	25.57	11,730	20	Buenos Aires LSX. Daily, 8-9 p.m.	.....
47.5	6316	..	St. John (New Brunswick) VE9BJ. Daily 12 m'nt-1.30 a.m.	.....	25.53	11,750	20	Paris (France) FYB. Time Sig., 8.26 a.m. and 8.56 p.m.	.....
46.69	6425	18	Bowmanville (Canada). VE9GW. MON., TUES., WED., 8 p.m.-5 a.m.; THURS., FRI., SAT., 12 n'n-5 a.m.; SUN., 6 p.m.-2 a.m.	.....	25.51	11,760	8	Caracas (Venezuela) YV3RC.	.....
			Bound Brook (N.J.) W3XAL. MON., WED., and SAT., 11.30 p.m.-6 a.m.	.....	25.49	11,770	2	Radio Colonial (Paris) FYA. 12.15-3 a.m.; 4-6 a.m.	.....
			Chicago (Ill.) W9XF. TUES., THURS., FRI., 10.30 p.m.-2 a.m.; WED., FRI., SAT., 3.30-8 a.m.	.....	25.45	11,790	5	Eindhoven (Holland) PHI.	.....
			Calcutta (India) VUC. D'ly (ex. FRI. and SAT.), 3.30-6 p.m.; FRI., 2.30-3 p.m.; SAT., 5.45-9 p.m.	.....	25.4	11,810	9	*Davenport GSD.	.....
			Halifax (N.S.) VE9HX. SAT. and SUN., 10 p.m.-4 a.m.; W'kdays, 2.30-5 p.m.; 9 p.m.-4 a.m.	.....	25.36	11,830	1	Zeeseen (Germany) DJD. 5-9.30 p.m.; 10.30 p.m.-3.45 a.m.	.....
			Caracas (Venezuela) YV1RC. Daily (ex. SUN.), 4-6.30 p.m.; 10.45 p.m.-3.30 a.m.; SUN., 2-4.30 p.m.; 7-11.30 p.m.; 12.30-3.30 a.m.	.....	25.29	11,860	20	Winnipeg (Canada) CJRX. Daily 2-5 a.m.	.....
			Wayne (N.J.) W2XE. 11 p.m.-4 a.m.	.....	25.27	11,870	21	Boston (Mass.) W1XAL (ex. SAT.), 11 p.m.-12.45 a.m.; SUN., 12.30-2.30 a.m.	.....
			Johannesburg (S.A.) ZTJ. D'ly (ex. SUN.), 4.30-5.30 a.m.; 8.30-12 n'n; 2-8 p.m. (9.45 p.m. SAT.), SUN., 1-3.15 p.m.; 5.30-8 p.m.	.....	25.2	11,870	21	Rome (Italy) 2RO.	.....
			Kuala Lumpur (Fed. Malay States) ZGE. SUN., TUES. and FRI., 11.40 a.m.-1.40 p.m.	.....	25	12,000	20	Wayne (N.J.) W2XE. 8-10 p.m.	.....
			Pittsburgh W8XK. 10.30 p.m.-6 a.m. (SUN. to 5.45 a.m.).	.....	24.83	12,082	0.5	*Davenport GSE.	.....
			Caracas (Venezuela) YV3RC. 8.30 p.m.-1.30 a.m.	.....	23.39	12,825	10	Pittsburgh W8XK. 10.18 p.m.-4 a.m. (SUN. to 5.45 a.m.).	.....
			Bogotá (Colombia) HJ3ABF.	.....	19.84	15,123	10	Radio Colonial (Paris) FYA. 1.30-5 p.m.	.....
			Santo Domingo (D.R.) HI2.	.....	19.82	15,140	15	Boston (Mass.) W1XAL. SUN., 3.50-6.30 p.m.	.....
			Bound Brook (N.J.) W3XL. Experimental.	.....	19.73	15,200	8	Wayne (N.J.) W2XE. 4-6 p.m.	.....
				.....	19.72	15,210	18	Schenectady W2XAD. Daily 7.30-8.30 p.m.	.....
				.....	19.68	15,243	15	Riobamba (Ecuador) PRADO. SUN., 10-11 p.m.	.....
				.....	19.67	15,250	5	Bound Brook (N.J.) W3XL. Irregular	.....
				.....	17.33	17,310	20	Zeeseen (Germany) DJE. 4.30-7 p.m.	.....
				.....	16.87	17,780	15	Bound Brook (N.J.) W3XAL. 3-11 p.m.	.....
				.....	16.86	17,790	15	*Davenport GSG.	.....
				.....	13.97	21,470	15	*Davenport GSH.	.....
				.....	13.93	21,540	18	Pittsburgh W8XK. 12 n'n-8 p.m.	.....

\* The Empire Transmitters are occasionally interchanged.

For Long and Medium-Wave Stations see page 510.



## Short Waves on the Continent

By "CENTRAL EUROPEAN"

(September 30—October 6)

SHORT-WAVE reception conditions during last week were only mediocre. Again it was established that while transmissions coming from a certain direction—in this case from South America—came through very well, and this despite the fact that the transmitters operate with a very low power, those emanating from the powerful North American stations were much weaker. This phenomenon is, in my opinion, a useful subject for investigation by the W.R.R.L., to discover, if possible, the laws governing these phenomena.

Reception was best on Friday evening, when a number of South American stations, which had never before been heard, appeared suddenly on the 48-49 metre band. I first of all noted a Spanish-speaking station on 48 m. It was only a weak signal, but probably it must be identical with Bogotá (Colombia), HJ3ABF. A little higher on the dial I recorded the second South American station, Caracas (Venezuela), YV3RC (48.78 m.). This proved a much better signal so that I heard the announcements clearly. The programme, by the way, consisted entirely, as in the case of all the other South American transmitters heard on that evening, of gramophone records of South American origin. The next transmitter which I heard was La Paz (Bolivia), CP5. Its audibility was poor and I was only able to identify it occasionally by the Spanish announcement and its wavelength of 49.34 m. 10 kc/s farther away I recorded reception of Maracaibo (Venezuela) YV5RMO. A splendid signal, it reached at times a strength of R8. Its announcement was as follows: "Aquí estación YV5RMO Maracaibo, 'Echo de Venezuela.'"

Finally, I heard yet another station from the Northern part of South America, Barranquilla HJ1ABG (49.75 m.). Although it came through only at R4, reception was perfectly clear and unblemished. From this I concluded that, on that day, at any rate, the Brazilian station mentioned in the last issue of WORLD-RADIO by F. A. B. Ridgewell, Essex, was not present.

In order to round off, as it were, the South American "invasion" of this evening I recorded reception after midnight of Rio de Janeiro (31.56 m.) and Barranquilla, HJ1ABB (46.53 m.). This enabled me to get an alternative programme from Barranquilla. Of U.S.A. stations only W8XK (48.86 m.) came through at R5 on that evening, none of the others reaching beyond R3.

Reception of U.S.A. stations was little better on the other days. It improved on Wednesday only, when W2XAF, W1XAZ, and W2XE (25.36 m.) came through at R6, but after midnight this strength decreased rapidly. W2XE, which leaves its wavelength at 10 p.m., reached its maximum at 9.45 p.m.

## Short-Wave Report

To the Editor of WORLD-RADIO

SIR,—Not having seen a report from this district for a long time perhaps the following may be of interest to other readers:—

- B.S.T.
- Oct. 5—6.0 p.m. W3XAL (16.87 m.). R7/FFS. Call.
  - " 5—6.20 p.m. W8XK (19.72 m.). R6/FFS. Stock report.
  - " 5—6.22 p.m. W2XE (19.64 m.). R7/FFS. Dance music.
  - " 5—6.30 p.m. DJC (49.83 m.). R9+/FS. German march.
  - " 5—7.40 p.m. GSD (25.53 m.). R7/FFS. Song.
  - " 5—8.0 p.m. DJD (25.51 m.). R8/FFS. English news.
  - " 5—8.10 p.m. GSB (31.55 m.). R6/FFS. Music. Talk.
  - " 5—8.19 p.m. FYA (25.25 m.). R9/FS. Talk.
  - " 5—8.20 p.m. LCL (31.45 m.). R9+/FS. Opera.
  - " 5—8.35 p.m. W2XAD (19.56 m.). R9+/FS. Baseball.
  - " 5—9.38 p.m. CT1AA (31.25 m.). R9/FFS. Call.
  - " 5—10.38 p.m. W8XK (25.27 m.). R4/FFS. Baseball.
  - " 5—10.40 p.m. W2XAF (31.48 m.). R9+/FS. Baseball.
  - " 5—10.53 p.m. RW59 (50 m.). R9/FFS. Call in English.
  - " 5—11.0 p.m. OXY (49.5 m.). R9/FFS. Talk.

Receiver is o-v-2 with 'phones.

Yours faithfully,

S. Nutfield, Surrey.

W. M.

## Short Waves from South Africa

SOUTH AFRICA appears to be one of the most difficult countries to hear on the short waves, and short-wave listeners may be interested in the following information about the stations there.

Last year, many listeners may remember, reception was not quite so difficult, as the station VQ7LO came through at good strength. This year, however, very little has been heard of it. VQ7LO is situated at Nairobi in Kenya Colony and is owned by the Imperial and International Communications, Ltd., P.O. Box 777, Nairobi, Kenya Colony. They operate on 49.5 metres, with a power of 0.5 kW.

The next short-wave station in importance in South Africa is at Johannesburg—station ZTJ, which is owned by the African Broadcasting Company, Ltd., P.O. Box 4559, Johannesburg. They operate at irregular intervals from 4.30 a.m. until 8 p.m. G.M.T. daily, on 49 metres with a power of 5 kW. Although they use a greater power than VQ7LO, they are not by any means better received in England; in fact, of the two, VQ7LO is generally the better signal.

There are two other stations in South Africa, but very little is heard of them. One is CR7AA, which is situated at Lourenço Marques and is owned and operated by the Gremio dos Radiofilos da Colonia de Moçambique, Caixa Postal No. 594, Lourenço Marques, Portuguese East Africa. The other station is CR6AA, at Lobito, owned and operated by the Estacao Radio Difusora CR6AA, Caixa Postal 118, Lobito, Angola, Portuguese West Africa.

## Lindhurst Short-Wave Station

It is announced at Canberra that the Commonwealth Government may shortly discontinue to radiate programmes through the short-wave long-distance station established at Lindhurst, Victoria, five months ago. The idea of this station was to reach persons living in remote parts of Australia, and a measure of success has been achieved, but short-wave listeners are not numerous in the back country and the question of expense is involved. The Government is considering, as an alternative to the short-wave broadcaster, the establishment of a powerful station on the band between 1,000 and 2,000 metres.

## Ultra-Short Waves in the United States

(From a Correspondent)

ULTRA-SHORT waves are now being put to use in the United States, and the following allocations have been made: 10—7.1 m., experimental; 7.1—5.4 m., television; 5.4—5.0 m., amateurs; 5.0—3.5 m., television; below 3.5 m., experimental. Broadcast programmes can be heard below ten metres. W3XE is relaying WGAL Lancaster, Penna., on 9.7 m. and W8XH is relaying WBN Buffalo, N.Y., on 7.3 m. The ultra-short waves are being used by the networks for mobile and portable outside "pick-ups." Fifteen television stations have been licensed to operate below ten metres, and among those now "on the air" are W2XF (6.8 m.), the NBC New York station in the Empire State Building, and W6XAO (6.8 m.), Don Lee Los Angeles station.

LETTERS and reports regarding short-wave reception have also been received from E. N., London, N.2; A. O. H., Newbury, Berks; C. C., Watford; A. J. H., Trowbridge, Wilts; H. M. C., Twickenham; W. E. F., Sidcup; H. F. L., Lowestoft; R.L.R., Blackwater, I.O.W.; F.L.R., Swindon.

A COMPLETELY new edition (new in presentation, revised and brought absolutely up to date in every particular) of the World-Radio Station Identification Panels booklet has just been issued by the B.B.C. If you listen to foreign stations then you will find this booklet indispensable: it gives every possible detail for the identification of elusive stations, both on the normal, long, and medium wave bands and on the short waves. A large and very useful "Radio Map of Europe" is included (size 16½ in. by 21 in.). The price of the booklet is One Shilling (post free) from the B.B.C. Publication Department, Broadcasting House, W.I.

## BOOKS

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# STATIONS IN ORDER OF FREQUENCIES AND WAVELENGTHS

Corrected in accordance with the latest official information available at the time of going to press

kc/s	m.	kW	Station	Dial Readings	kc/s	m.	kW	Station	Dial Readings
<i>Band No. 1. 150-300 kc/s</i>									
155	1935	7	Kaunas (Lithuania)		814	368.6	50	Milan I (Italy)	
		7	Huizen (Holland)		823	364.5	12	Bucharest (Romania)	
160	1875	50	Kootwijk (Holland) (Transmits Huizen prog. after 3.40 p.m.)		832	360.6	100	Moscow IV (U.S.S.R.)	
					841	356.7	100	Berlin (Germany)	
		20	Brasov (Romania)				1	Bergen (Norway)	
166	1807	40	Lahti (Finland)		850	352.9	0.35	Aalesund (Norway)	
174	1724	500	Moscow I (U.S.S.R.)				0.7	Porsgrund (Norway)	
182	1648	75	Radio-Paris (France)				1	Sofia (Bulgaria)	
185	1621	5	Istanbul (Turkey)		859	349.2	1.5	Valencia (Spain)	
191	1571	60	Deutschlandsender (Germany)				10	Simferopol (U.S.S.R.)	
200	1500	150	Droitwich (Gt. Britain)		868	345.6	15	Strasbourg (France)	
		35	Minsk (U.S.S.R.)		877	342.1	16	Poznań (Poland)	
208	1442	16	Reykjavik (Iceland)		886	338.6	50	London Regional (Gt. Britain)	
		13	Eiffel Tower (Paris) (France)				7	Graz (Austria)	
215	1395	30	Motala (Sweden)		895	335.2	10	Helsinki (Finland)	
216	1389	100	Novosibirsk (U.S.S.R.)		904	331.9	0.5	Limoges (PTT) (France)	
217.5	1379	120	Warsaw (Poland)				100	Hamburg (Germany)	
224	1339	150	Luxembourg		913	328.6	10	Dniepropetrovsk (U.S.S.R.)	
230	1304	7	Ankara (Turkey)				60	Toulouse (Radio - Toulouse) (France)	
232	1293	20	Kharkov (U.S.S.R.)		922	325.4	32	Brno (Czechoslovakia)	
238	1261	75	Kalundborg (Denmark)		932	321.9	15	Brussels II (Belgium)	
240	1250	0.5	Vienna Experimental (Austria)				12	Algiers (North Africa)	
245	1224	100	Leningrad (U.S.S.R.)		941	318.8	10	Göteborg (Sweden)	
256.4	1170	25	Tashkent (U.S.S.R.)		950	315.8	17	Breslau (Germany)	
260	1154	60	Oslo (Norway)		959	312.8	100	Poste Parisien (France)	
271	1107	100	Moscow II (U.S.S.R.)				20	Grenoble (France)	
280	1071.4	35	Tiflis (U.S.S.R.)		968	309.9	10	Odessa (U.S.S.R.)	
<i>Band No. 2. 300-500 kc/s</i>									
		10	Finmark (Norway)		977	307.1	2	Ukhta (U.S.S.R.)	
355	845	20	Rostov-on-Don (U.S.S.R.)				50	W. Regional (Gt. Britain)	
375	800	50	Sverdlovsk (U.S.S.R.)		986	304.3	10	Genoa (Italy)	
392	765	0.6	Östersund (Sweden)		995	301.5	2	Cracow (Poland)	
401	748	1.3	Geneva (Switzerland)		1004	298.8	20	Hilversum (Holland)	
		100	Moscow III (U.S.S.R.)		1013	296.2	13.5	Bratislava (Czechoslovakia)	
413.5	726	0.6	Boden (Sweden)				50	North National (Gt. Britain)	
431	696	10	Voroneje (U.S.S.R.)		1022	293.5	5	Tchernigov (U.S.S.R.)	
436	688	2	Oulu (Uleaborg) (Finland)				3	Barcelona EAJ15 (Spain)	
		10	Ufa (U.S.S.R.)		1031	291	0.7	Oviedo (Spain)	
<i>Band No. 3. 500-1,500 kc/s</i>									
			Tartu (Estonia)		1040	288.5	60	Königsberg (Germany)	
518	579	0.7	Hamar (Norway)				5	Pareda (Portugal)	
519	578	0.5	Innsbruck (Austria)		1050	285.7	10	Leningrad II (U.S.S.R.)	
		5	Ljubljana (Yugoslavia)		1059	283.3	2.5	Rennes (PTT) (France)	
527	569.3	13	Viiupuri (Finland)		1068	280.9	50	Scottish National (Gt. Britain)	
		0.5	Finnish Common Wave		1077	278.6	20	Bari (Italy)	
536	559.7	1	Bolzano (Italy)				4	Tiraspol (U.S.S.R.)	
		16	Wilno (Poland)		1086	276.2	12	Bordeaux Lafayette (France)	
546	549.5	120	Budapest (Hungary)				2	Falun (Sweden)	
556	539.6	100	Beromünster (Switzerland)		1095	274	0.7	Zagreb (Yugoslavia)	
		60	Athlone (Irish Free State)				7	Madrid EAJ7 (Spain)	
565	531	4	Palermo (Italy)		1104	271.7	10	Vinnitsa (U.S.S.R.)	
574	522.6	100	Stuttgart (Germany)				1.5	Naples (Italy)	
583	514.6	15	Riga (Latvia)		1113	269.5	50	Madona (Latvia)	
592	506.8	120	Vienna (Austria)				11.2	Moravská - Ostrava (Czechoslovakia)	
601	499.2	6.5	Rabat (Morocco)		1122	267.4	1	Belfast (N. Ireland)	
609	492.6	10	Sundsvall (Sweden)				6.2	Nyiregyháza (Hungary)	
620	483.9	20	Florence (Italy)		1131	265.3	0.25	Alexandria (Egypt)	
		15	Brussels I (Belgium)		1140	263.2	10	Hörby (Sweden)	
629	476.9	20	Cairo (Egypt)				7	Turin (Italy)	
		20	Trøndelag (Norway)		1149	261.1	50	London National (Gt. Britain)	
638	470.2	15	Barcarena (Lisbon) (Portugal)				50	West National (Gt. Britain)	
		120	Prague I (Czechoslovakia)		1158	259.1	2.6	Kosice (Czechoslovakia)	
648	463	15	Lyons (La Doua) (France)		1167	257.1	15	Monte Ceneri (Switzerland)	
		10	Petrozavodsk (U.S.S.R.)		1176	255.1	10	Copenhagen (Denmark)	
658	455.9	100	Cologne (Germany)		1185	253.2	10	Kharkov II (U.S.S.R.)	
668	449.1	50	North Regional (Gt. Britain)				1.5	Cassel (Germany)	
677	443.1	25	Sottens (Switzerland)		1195	251	17	Frankfurt (Germany)	
686	437.3	2.5	Belgrade (Yugoslavia)				5	Freiburg-in-Breisgau (Germany)	
695	431.7	7	Paris (Ecole Supérieure) (France)				1.5	Kaiserslautern (Germany)	
704	426.1	55	Stockholm (Sweden)		1204	249.2	2	Trier (Germany)	
713	420.8	50	Rome (Italy)				5	Prague II (Czechoslovakia)	
722	415.5	36	Kiev (U.S.S.R.)		1213	247.3	0.1	Tromsø (Norway)	
		3	Madrid (Radio-España) (Spain)		1222	245.5	5	Lille (PTT) (France)	
731	410.4	1.5	Seville (Spain)				10	Trieste (Italy)	
		20	Tallinn (Estonia)		1231	243.7	5	Gleiwitz (Germany)	
740	405.4	100	Munich (Germany)				1	Cork (I.F.S.)	
749	400.5	5	Marseilles (PTT) (France)		1240	241.9		Swedish Relay Stations	
		0.5	Pori (Finland)				2	Juan-les-Pins (Radio Côte d'Azur) (France)	
758	395.8	12	Katowice (Poland)		1249	240.2			
767	391.1	25	Midland Regional (Gt. Britain)				1	Rome III (Italy)	
		10	Stalino (U.S.S.R.)		1258	238.5	3	San Sebastian (Spain)	
776	386.6	2	Toulouse (PTT) (France)				2	Augsburg (Germany)	
		0.7	Fredrikstad (Norway)		1267	236.8	2	Nürnberg (Germany)	
785	382.2	120	Leipzig (Germany)				0.5	Bodö (Norway)	
		5	Barcelona, EAJ1 (Spain)		1276	235.1	0.5	Christiansand (Norway)	
795	377.4	16	Lwów (Poland)				0.5	Stavanger (Norway)	
804	373.1	50	Scottish Regional (Gt. Britain)		1285	233.5	1	Aberdeen (Gt. Britain)	
							1.5	Dresden (Germany)	
					1294	231.8	0.5	Linz (Austria)	
							0.5	Dornbirn (Austria)	



STATIONS IN ORDER OF FREQUENCIES AND WAVELENGTHS (Continued)

Table with columns: kc/s, m., kW, Station, Dial Readings, kc/s, m., kW, Station, Dial Readings. Lists various international radio stations and their technical specifications.

DEVIATIONS

The following are the actual deviations from the official frequencies as measured at the Tatsfield Checking Station during the past week.

Table showing frequency deviations for stations like Grenoble (France), Budapest II (Hungary), and Radio Vitus (France).

For list of Short-Wave Stations see page 508.

Which Station Was That?

Replies to Queries

N BED (Dublin): (1) XOA, Shanghai, on 24.75 m. (12,120 c/s), 15 kW; transmissions destined to Europe; (2) not published; these abbreviations are used by commercial transmitters only; (3) can trace the following call-signs (wavelengths are given where possible): GGC, Mull of Kintyre Lighthouse (1,008 m.); XGD5, Shanghai; XOD, Shanghai, 50.42 m.; VKP, Rocky Point (N.Y.), 43.17 m.; TFA, Reykjavik (Iceland), 2,098 m.; KPH, Bolinas Radio (Cal.); KWT, Palo Alto (Cal.), 21.82 m.; SUE4, Siwa (Egypt), 85.96 m.; LGN, Bergen (Norway), 770 m.; FOM, Ile-aux-Marins (S. Pierre et Miquelon Islds.), 25.4, 600 m.; FZT, Tananarive (Madagascar), 16.77 m. WATTN-THE-AIR (E.6): Scheveningen-Haven (Holland) on 1.224 m.; commercial reports only. AMATEUR (N.W.10): Call-sign apparently incorrect; regret, cannot trace prefix "YX." CLERIC (Dublin); GREEN HAT (Boscombe): Heston Airport, on 202 m. SCAT (Leeds): Ship-shore telephony, (trawlers). VOICE (King's Langley): Vienna, OER2. DUNO (Bromley): GLO, amateur transmitter, Bromley. PUZZLED (Hove): Cairo, on 483.9 m. WABERITH (Belvedere): (87) can trace the following call-signs (wavelengths are given where possible): WHH and WK1, Sayville (N.Y.), on 43.5 and 20.39 m. respectively; WOE, Palm Beach (Fla.), advertised on long waves, so apparently you heard this through another station; FTY, St. Assise (Paris); EAZ, Madrid-Aranjuez (Spain); WJF, Sayville (N.Y.), 64.24 m.; LCI, Jeløy (Norway), 30.06 m.; LCI, also Jeløy, is on 50.8 m.; SPW, Warsaw, 22 m.; cannot trace FXO, but if FXN, Beyrouth (Syria), on 16.67 m.; FYN, Lyon T.S.F. (France); GLO, Ongar, 27.45 m.; JNJ, Nagoya (Japan), 21.51 m.; (108) believe this to be the Radio Club of Brazil (Rio de Janeiro) transmitting through Marapicu. KNOB TWISTER (Portsmouth): Possibly ORK, Russselede (Belgium), on 29.04 m. AMBITIOUS (Cardiff): (1) Brussels; slightly altered programme; (2) Leipzig; interval signal, four notes: B. A. C. H ("H") = German "B". SCOTIA (Scotland): W2GQC, Atlantic Broadcasting Corporation, Wayne (New Jersey). PHONATIC (Kent): (1) LA3C, Bergen (Norway); (2) IITV, Italian amateur; write: Associazione Radiotecnica Italiana, Viale Bianca Maria 24, Milan, Italy. CUBA (Dawlish): Regret, cannot trace call; if G6GC, South Shields, Durham. QUERY (Nuneaton): Skamleback, relaying Copenhagen; apparently times of programme slightly altered. TELEGRAPHY (Leeds): Ships, ZMGK, "Southern Princess"; VPNL, "Coronada"; the former belongs to New Zealand and the latter to the Falkland Islands; distance from London to the Falkland Islands is approximately 8,600 miles. REDWOOD (Leeds): Cairo. ENQUIRER (Worthing): Scheveningen-Haven (Holland); commercial reports only (1,224 m.). OTLIENSAN (Ottley): LR3, Radio-Nacional (Buenos Aires), 315.8 m. SHORT-WAVE (Tamworth): You say between 50°-55° and 37.8°, which represents approximately 40-49.5 m., yet you estimate 45° to be 49 m., which is apparently incorrect; regret, cannot trace any station to tally with details given. LOVE IN BLOOM (Higher Bevington): Can trace the following: G6LI, Horncastle (Lincs); G6KO, Bulwell (Notts); G6DO, Birkenhead; G5YV, Dewsbury (Yorks); G2LV, Gloucester; PAOASD, Amsterdam (Holland); PAOHJ, Tiel (Holland); FBDA, Perregaux, Oran (Algeria); FBHP, Deauville, France; ZAP, Albanian call, but cannot trace. WONDERING (Ramsay): (1) Warsaw; dance music relayed from Restaurant Gastronomica; started at 11.55 p.m.

B.S.T.; (2) a list of stations performing special services, including lighthouse beacons, etc., is published by the Bureau of the International Telecommunication Union, Bern, Switzerland. H. A. C. (Tottenham): Can trace the following call-signs, but as many wavelengths you give do not tally with those advertised, you may have heard the calls through different channels: PCU, The Hague (Holland), 33.94 m.; RPA, Tashkent (U.S.S.R.), 20.83 m.; RTB, apparently Moscow, on 21.98 m.; IBE, Roma S. Paolo (Italy), 32.02 m.; EAP, Cabo de Palos Radio (Spain); 600, 730, and 800 m.; SPL, Warsaw; OYH, Sukkertoppen Radio (Denmark), 180 m.; DIU, Königs Wusterhausen (Germany), 31.95 m.; LCP and LCI, Jeløy, on 20.62 and 20.06 m. respectively; FZE, Djibouti (French Somaliland), 39.29 m.; DKB, Königs Wusterhausen; GFK2, Croydon Airport, 53.57 m.; FCW, Ksar-es-Souk (French Morocco), 55.5 m.; FCA, Rich (French Morocco), 58.5 m.; ICJ, Bengasi (Tripoli), 77.22 m. DODKI (Grimsby): Regret, cannot trace. FHG2K (Crouch End): Can trace the following: F3CV, Sanvic (Seine Inf.) France; F8DN, Lyons, France; F8NX, Parthenay (Deux-Sèvres), France; PAOHG, PAOMT, Gouda (Holland); ON44P, Perennes-lez-Binche, Belgium; ON4BZ, Brussels; G2JD, Ruislip; G2JG, Leyton, E.10; G2AX, Bexhill-on-Sea; G2FG, Golders Green, N.W.11; G6BO, Harrow; OK2DM, Lhota, Posta Lipnik nad Beovou, Czechoslovakia; W1BAO, South Norwalk (Conn.); W2TF, Nutley (N.J.); W3GF, Baltimore (Md.); W5ACP, Frederick (Okla.); W5AHI, Valmora (New Mexico); W5ALI, Muskogee (Okla.); W5DDE, Okolona (Miss.); W5LA, New Orleans (La.); W6MS, Los Angeles (Cal.); W9AJ, Bloomington (Ill.); W9AHT, Chicago (Ill.). OLD MALVERNIAN (Liverpool): (291) believe this to be the Radio Club of Brazil (Rio de Janeiro), working through Marapicu; (2) regret, cannot trace. A. P. C. (Neasden): Call-signs appear to have been misunderstood; apparently Dutch, e.g., PAOVR (experimental transmitter at Schiedam). LENOC (Kirkcaldy): (1) MCWC, s.s. "Brenda"; GKPM, s.s. "Freya." DUNO (Bromley): (1) HB9B, Radio Club, Basle (Switzerland); (2) British experimental transmitter; write to R.S.G.B., 53, Victoria Street, S.W.1; G2NR, Bromley (Kent); RAGS (Runcorn): (1) GSD, Empire transmission on 25.53 m.; (2) DID, Zeesen (25.51 m.). BLACK (N.21): (1) OER2, Vienna; (2) HB9B, Radio Club, Basle; (3) cannot trace; (4) cannot trace; (5) you do not say whether a.m. or p.m.; (6) Tiffis (1,071.4 m.); (7) Hungarian relays taking Budapest programme; (8) Basle and Berne, relaying dance music broadcast by Sottens.

NOTE—Further details of amateur transmitters in various parts of the world will be found in "The Radio Amateur Call Book Magazine," copies of which may be obtained, price 6s. post free, from the Secretary, The Radio Society of Great Britain, 53, Victoria Street, London, S.W.1.

The Alternative Postal Service

In addition to the free service of "Which Station Was That?" printed in these columns, replies to queries regarding station identification can be obtained within forty-eight hours of

receipt of details, on payment of 6d. per query in stamps or P.O., accompanied by stamped addressed envelope (marked in left-hand top corner "Postal Query Service"), and coupon as per conditions for "Free Queries."

Free Query Service

Each query should be numbered and the questions on the coupon carefully answered. Letters must be addressed to the Editor, WORLD-RADIO, Broadcasting House, London, W.1.

Times of Reception

The identification of stations will be greatly facilitated if readers, in answering the first question in the Identification Coupon, will always add a.m. or p.m. to the hour of reception, —e.g., 12.5 a.m. to indicate 5 minutes after the start of a new day.

IDENTIFICATION COUPON (No. 296)

This coupon is valid for ONE QUESTION only, and should be cut out and attached to a separate sheet, upon which the following questions should be answered in the order shown, and, in the case of FREE queries, a copy of the answers should be enclosed. No coupon more than one month old is valid. (In the case of readers living in countries outside Europe who desire identification of transmissions, no coupon is necessary.)

- 1. Time and date of reception.
2. Approximate frequency in kilocycles per sec. (or wavelength in metres).
3. Nearest known stations, above and below.
4. Call or interval signal, if heard.
5. Language.
6. Type of receiver in use and strength of signals.
7. Details of programme or signal received.
8. Name and address.
9. Nom de plume. (Proprietary names must not be used.)





# THE Devoted Daughter of Newcastle

A Lady "GOOD SAMARITAN"  
whose Good Deeds Began at Home  
Restored Her MOTHER

TO HEALTH  
Conquered Her Own  
ANÆMIA  
Stopped All Her Friends'  
HEADACHES

## READ THIS LETTER

Newcastle-on-Tyne.

Dear Sirs,—I feel I must write and thank you for the benefit I have received after taking your wonderful Yeast-Vite Tablets. I have been under treatment and all said I was Anaemic. After taking many different kinds of medicine I felt no better, in fact I was getting worse. None of them did me any good. At last I decided to try your Tablets and after the first bottle I felt a great deal of difference. My Mother was also very ill a few weeks ago. She was sick all day and we gave her one Yeast-Vite Tablet every hour the first night. They stopped the sickness and she was quite well again in a few days. I have recommended Yeast-Vite Tablets to all my friends and I have been told by them they have been cured of Headaches from which they had suffered for years. We are never without a bottle in the house and I always carry some in my handbag in case I might meet some friend who may be ailing. I shall always recommend Yeast-Vite wherever I go.

Yours faithfully, (Sgd.) Miss H.

## YEAST-VITE

Relieves

- NERVE PAINS
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- INDIGESTION
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- CONSTIPATION

THE love of a Mother for her Daughter is a wonderful thing, but that love must surely be strengthened when it is returned in such a practical manner as this letter reveals.

How many hundreds of Daughters are there at this present minute, equally as anxious to save their Mothers' suffering . . . wondering what they can do to see the parent they love once more restored to health and strength?

Let them follow this young lady's wise example and invoke the aid of "Yeast-Vite," the Wonder Tonic!

And how many Mothers are there with Weak and Ailing Daughters?

How many Husbands with Anæmic, Strengthless, Nerve-Tortured Wives?

How many Wives who daily watch their Men suffering Pain, losing Strength . . . maybe facing the problem of losing their employment through Poor Health?

To them, too, this grateful letter will come as an inspiration . . . a "light" which clearly points out the means by which they can once more bring health and happiness into the home!

Why suffer when "Yeast-Vite" has made the way to New Health, New Happiness, New Buoyancy such a rapid and an easy one? Grasp now the means which is ready to your hand . . . accept the veritable New Life which awaits you in "Yeast-Vite" Tonic Tablets.

## OUR OFFER

Simply obtain a 1/3 bottle of "YEAST-VITE" Brand Tonic Tablets, and if you are not THOROUGHLY CONVINCED of the WONDREFUL POWER, PERFECT SAFETY and TONIC PROPERTIES of "YEAST-VITE" return the empty carton to Irving's Yeast-Vite Ltd., Watford, and your money will be refunded in full.

# Yeast-Vite

Brand Tonic Tablets, Sold Everywhere, 3d., 6d., 1/3, 3/- and 5/-