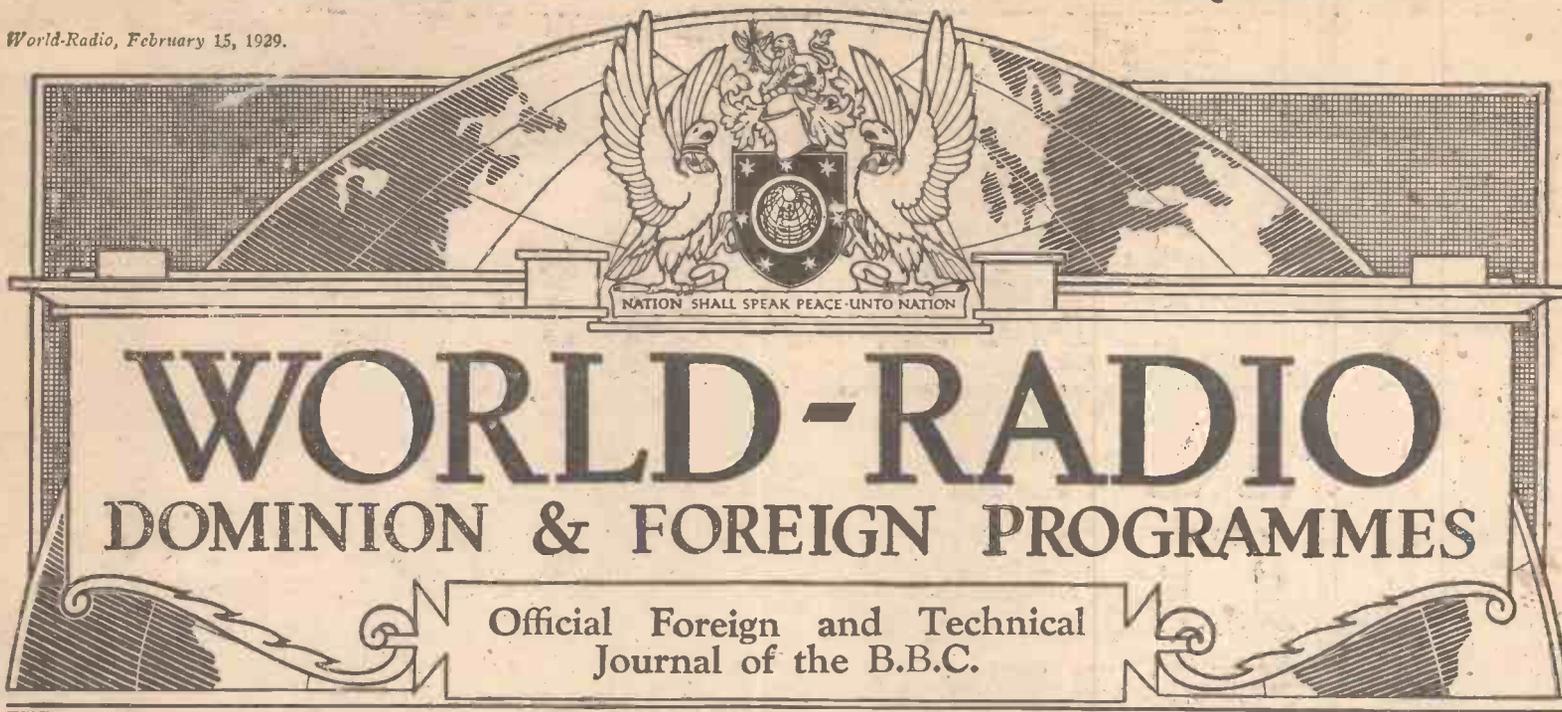


207 Lee

A GUARANTEED LIST OF MEASURED FREQUENCIES

World-Radio, February 15, 1929.



Vol. VIII. No. 186.

Registered at the G.P.O.
as a Newspaper.

FRIDAY, FEBRUARY 15, 1929.

Two Pence

PRINCIPAL CONTENTS

Europe Calling!
by Vernon Bartlett

Via Ether

Grid Leak Detectors

Wireless in British Malaya

The Properties of Variable Condensers—I.

Yugoslavia and Its Listeners

Dominion and Foreign Intelligence

Correspondence

Short Wave List

Which Station Was That

Replies to Queries

WORLD-RADIO

Station Identification Panel

LJUBLJANA (Yugoslavia)

(Revised.)

Frequency: 517 kh.

Wavelength: 580.2 m. Power: 2.5 kw.

Approximate distance from London:
762 miles.

Call: "Hallo, Radio-Ljubljana."

Interval Signal: Cuckoo call. (No
opening signal).

Closes down with: (a) "Na svidenje"
("Au revoir"), given before an
interval. (b) "Lahko noc." ("Good-
night") at the end of the evening
transmission.

On special occasions transmissions are
made in English, French, and German,
as well as in Slovene.

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"WORLD-RADIO," Savoy Hill, Strand,
London, W.C.

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WORLD-RADIO

VOL. VIII. No. 186. Registered at the G.P.O. as a Newspaper

FRIDAY, FEBRUARY 15, 1929

TWOPENCE

Europe Calling

A *Causerie* about Nothing in Particular

I.—The Milliammeter, the Typewriter, and the Hidden £250

By VERNON BARTLETT

IF you have never shown a mongrel at Cruft's or the Kennel Club, or have never wheeled a dilapidated "push-bike" through the Motor Show, you have very little idea of the feelings of the owner of a humble crystal set who is called upon for the first time to write in *World-Radio*. Under the heading "Technical Section," he comes across "Common Faults and How to Find them," and is faced there by all sorts of words which to you are now commonplaces, but to him are uncommon in the extreme. What, for example, is he to make of a *grid bias battery*, a *potentiometer*, or a *milliammeter*, beyond concluding that the last word has somehow got one *m* too many?

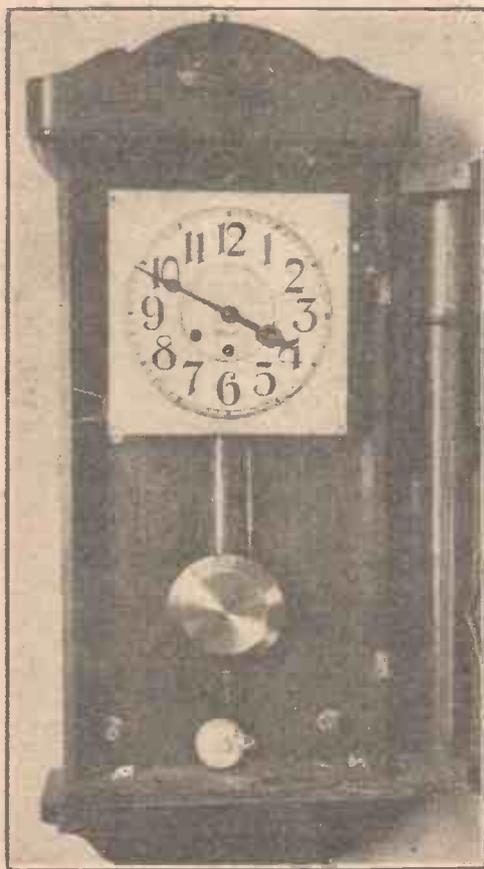
"Romance Steps In."

A little humiliated, he (or, rather, I, since I am writing this article) turns to "Which Station Was That?" and here romance steps in to make him forget his ignorance. For those of you who listen night after night to voices from all over Europe, the glamour of that page may have worn off. Vienna is one sort of noise; Lahti is another. Ljubljana uses a cuckoo call, and some other station, the name of which I have forgotten, can be recognized by the sinister ticking of a clock. To the outsider things are entirely different. He is puzzled by names such as Kosice, Porsgrund, Linköping, or Motala. But he is thrilled to read of Cassel relaying a match from the Nürnberg Stadium between Lower Austria and South Germany, or of Hilversum playing gramophone records of the Wembley Tattoo, or of Hamburg relaying an English lesson from Berlin, or of people hearing a performance at the State Theatre in Moscow, a men's choral recital at Kovno, or the music from a dance hall in Vienna. In time, no doubt, I shall grow accustomed to this odd way of ignoring customs and passport officials at frontiers, as though they were persons of no account. For the moment the very contempt with which you treat frontiers reminds me of the difficulties that I have experienced in crossing them.

The Portable Typewriter.

The time, for example, when, shortly after the War, I bought a portable typewriter in Germany. Everyone I knew had advised me not to, because, wherever else German officialdom had failed since the War, it had

concentrated on the prevention of the export of typewriters. People told me mournful details of their own attempts and failures. But the machine looked so nice and it seemed so cheap that, when I arrived at the German Customs at Bâle, I developed a facility of argument which I had never suspected myself of possessing. The typewriter had been used, I pointed out, and as a journalist I could not



THE CRACOW INTERVAL SIGNAL.

The clock which produces this station's "clock gong" sound—a part of the "romance" mentioned by Mr. Vernon Bartlett.

well travel without one. Besides, I had a letter from the German Foreign Office entitling me to special treatment. Customs officials crowded round me, some declaring that my arguments were useless; others, a little frightened by the

Foreign Office letter, suggesting that an exception must be made in my case. When, finally, the respect for written authority overcame the respect for rules and regulations, I moved along, ridiculously pleased with myself, to that part of the Customs bench which was reserved for the examination by the Swiss. And here I found victory changed to defeat. The Swiss saw the machine as quickly as the Germans had done and they would not allow me to bring it into the country. I had not expected opposition from this quarter and I could think of no useful arguments to support my case. Besides, there was no longer a division of opinion. All the officials were in agreement against me. I could only take the typewriter into Switzerland if I paid duty on it.

The Customs Duty.

While I argued the train filled up and the porters began to close the doors. I had to get to Geneva without delay and it was clear that I must either leave the typewriter behind me or pay duty on it. Bitterly I reproached myself for having bought the wretched thing. What was the good of paying a little money for it in the first place if I had to pay a heavy duty on it before I could get it to my home?

When the last passenger climbed into the train my resistance gave way. "How much," I asked, "shall I have to pay?" Whilst I fingered regretfully two fifty-franc notes, the Customs officials carried the machine away and weighed it. A moment later they were back again with their verdict. I should have to pay, they told me, one franc and twenty centimes.

Under the Mattress.

Or the time when, during the war between Poland and Russia, I hid £250 under the mattress in the sleeping car because I knew that it was a breach of the German regulations to take more than a few hundred marks out of the country with you, and I anticipated all sorts of difficulties in cashing cheques with which to pay for my telegrams to my paper. And, after the Customs examination, I fell asleep, awoke only on arrival at Danzig, and had quite happily left the station before I remembered my precious money under the mattress. To some of you Danzig may be merely a city from which concerts or the like may occasionally be relayed. To me it is both one of the most beautiful cities I have ever seen and a place in which I spent a miserable and anxious half-hour before I had recovered my, or, rather, my paper's precious money.

Let us, then, in this series of articles, compare notes. I shall learn, or hope to learn, where are Kosice and Motala, and what is a milliammeter. In return, I must try to give flesh, blood and colour to a few of those places which some of you know only as voices;

Via Ether

Hamburg's Phonetic Library

IF, having tuned in to a frequency round about 766 kh. to-morrow (SATURDAY) afternoon, you should hear a beating of tomtoms or similar sounds, do not jump to the conclusion that you have found Radio Maroc; though the transmission promises to be somewhat interesting. A German writer, Dr. Heinitz, and his wife are to broadcast poems from his book *Indianischen Fantasie*. The titles of the poems give a clue to their nature; they include such subjects as "Smoke," "Mystery," "The Running Shadow," and "The Feast of the Ancestors." The special interest of the transmission to English listeners will, however, be that part of the broadcast will consist of the playing of gramophone records lent by the Hamburg University, which is renowned for the unique collection of records in its Phonetic Library. In both North and South America steps have been taken to preserve as much material as possible in regard to the traditional music, folk-lore, and legends of the Red Indians, and Hamburg keeps in close touch with the authorities responsible for this work, so that the Indian section of their gramophone library may be as complete as possible. Dr. Heinitz has, therefore, had an excellent opportunity for obtaining a realistic setting for his poems.

Post-Carnival Programmes

As might be expected, programmes on the whole are of a less frivolous character than those of the last few weeks. That is not to say that all the items are "heavy." Light opera is well represented. In SUNDAY'S programmes are to be found such familiar pieces as *Les Cloches de Corneville* from Prague, at 6.30 p.m., *The Bat* from Breslau, at 7 p.m., *The Barber of Baghdad* from Königsberg, at 7.5 p.m., and, an hour later, *The Elixir of Love* from Naples. Although it has been broadcast several times already, Millöcker's *Gasparone* may be new, and therefore more acceptable, to many listeners; it can be heard from Cologne or any of the West German relays at 7 p.m. Vienna is giving a first performance on this evening, at 7.5 p.m., of a *Horspiel* in eight tableaux, entitled *Ballad of the Town*, by Theodor Csokor. Stuttgart includes in its programme, at 8.15 p.m., a mystery play, *Gawân*, in which old acquaintances will be easily recognised in the Germanised forms of "König Artus," "Königin Ginover," and "Kei." Budapest and Zagreb are attempting an inter-relay programme, to which the former station will contribute military music, and the latter a recital of Croatian folksongs.

A New Aid to Calibration

It will be noticed that our Frequencies and Wavelengths page has undergone a complete transformation this week—a transformation which, it is hoped, will make it of even greater value to distant listeners than it was in its old form. Briefly, the effect is to enable readers to calibrate their sets with a larger measure of accuracy than was possible before this change. The page is divided into two sections: List A and List B. List A consists of those stations, numbering something like eighty, which in the main can be counted on for reception by a considerable proportion of

listeners. The frequencies of as many of these stations as possible will be measured officially each Thursday evening between 5 p.m. and 10 p.m., and the results recorded in this list. A certain proportion of the same list will be measured at other times during the week; these will be distinguished by an asterisk placed against each. All that our readers will have to do, therefore, in order to calibrate their sets, is to note the dial readings at which they receive the stations in List A on Thursday evening, and to compare them with the frequencies given in our list. It must, however, be remembered that owing to the exigencies of publication, the measured frequencies given in each issue of *World-Radio* will be those of eight days earlier. Perhaps it is desirable to add that comparatively modern receivers are visualised in this arrangement.

List B

In response to requests by a considerable number of readers space has been left in this page for dial readings (I fear it will entail the use of small and neat figures, since the lines are necessarily close together). In order to accommodate this additional feature, it is obvious that something had to be sacrificed. Those stations, therefore, which are beyond the reach of even the most powerful and selective sets, such, for example, as the Japanese and South African stations, have been omitted, and will appear in a supplementary list to be published from time to time. List B will contain the remainder of the European stations, the frequencies of which have not been officially measured by the B.B.C. But the list represents the latest information in regard both to wavelengths and power. To sum up, then, the page consists of two lists, one with guaranteed frequencies, the other with frequencies unguaranteed, but, nevertheless, as correct as it is possible to make them. This list will contain, in addition, a certain number of transatlantic stations some of which are heard nightly and others occasionally. If we have evidence that American stations which are not included here are also heard, we shall, of course, add them to the list from time to time.

The Dominions and "Nationalisation"

It will be interesting to see how many of the Dominions will ultimately follow the British broadcasting system. Members of a Canadian Committee of Inquiry are at present on a tour of inspection of broadcasting in this and the chief Continental countries, and their recommendations will not be known for some little time, but I learn that Ottawa is taking a plebiscite of the British Empire Service League upon the question of the nationalisation of Canadian broadcasting. By the same post comes news from Australia to the effect that there is a great deal of uncertainty as to whether the Government will take over those broadcasting concerns at present in the hands of private companies. Formerly, all broadcasting there was conducted by independent companies, but within the past few months all stations in the capital cities (with the exception of Brisbane, Queensland) have been acquired by two companies whose interests are

so interwoven as to make them nearly one. The Brisbane Station 4QG is owned and controlled by the Queensland Government, and not long ago 6WF, Perth, was taken over by the Commonwealth Government.

An 870-Miles-Distant O.B.

Relays by other countries of programmes arranged for broadcast are now a common occurrence, but Norway and Switzerland have taken another step forward in friendly co-operation by wireless. A sporting event was being held in Davos, which the Zurich station authorities did not consider of sufficient interest to their countrymen to justify a commentary. On the other hand, the particular form of sport—races on ice—is one that appeals greatly to Scandinavians. It was therefore proposed that the Oslo station should send a reporter to Switzerland to broadcast a commentary in Norwegian on the contest. Radio Zurich willingly agreed to the proposal, and installed the necessary apparatus for the transmission. So it came about that the Norwegian reporter, seated before a microphone on the snow-covered roof of a local restaurant, was able to tell the dwellers in his homeland what was happening some 870 miles away. The relay lasted about an hour and a half, closing with greetings from three Northlanders who during the meeting had established new records and won the World and European Ice Championships.

The Death Penalty Controversy

The question of the retention of the death penalty has been much discussed of late in Germany, where, as mentioned previously in *World-Radio*, the method of execution is decapitation by a headsman who performs his grim task wearing conventional mourning clothes. Now, a play, *Die Nacht vor dem Beil* (The Night Before the Axe), bearing upon the argument for the abolition of capital punishment, has just been broadcast by the Funk Stunde from Berlin. The "plot" centres in the last night of a man under sentence of death and the efforts of the son of the judge who condemned him to secure a reprieve. The action ends with the moment of execution. The headsman receives the order: "Herr Executioner, do your duty." There is a dull, —and, of course, sickening—thud, followed by his announcement: "The sentence is executed." And the judge's son says: "We must begin to regard life as sacred—we first, before the murderer!" A debatable point, doubtless, but one raised by the play—at any rate, in the broadcast version, it is claimed—in a somewhat objective manner. In this particular murder, there would seem to have been extenuating circumstances. Even a slice of bread at the right moment would have saved the guilty man from his crime, and so the ironic effect is heightened after he is condemned by the privilege granted to him to order anything within reason that his fancy dictates. He gives away to the companion placed in his cell to frustrate any possible idea of suicide the luxuries which are brought to him. *Die Nacht vor dem Beil* is by Alfred Wolfenstein, and was originally produced at Erfurt.

ETHERVIATOR.

Wireless in Malaya

WIRELESS in Malaya has now been placed on a sound footing. The proposal—namely, to instal a wireless broadcasting and relay service for the Peninsula—is about to be submitted to the attention of Government by a Singapore company, and is at present in the hands of the Posts and Telegraphs Department.

In a recent interview, the manager and engineer of the company stated that it was incorporated in the Straits Settlements on September 18, 1928, as a private limited company with a capital of £20,000. Its directors are all British subjects, and representative of the



Rickshaw-pullers enjoying a rest and a smoke

British, Chinese, Indian, and Malay races, while the Chairman of the Board is Mr. Chee Soon Keng. Briefly stated, the chief principles of the scheme are as follows. The company will establish at Singapore a broadcasting station which will be capable of disseminating a broadcast service to cover every part of the Straits Settlements and of the Malay States, federated and unfederated. It is not proposed to employ at the outset more than one kilowatt in power. The possibility of using any wavelength above 85 metres is entirely eliminated in this part of the world by atmospheric disturbances. Tests have shown clearly that the 200 to 545 metre band, which contains the broadcast frequencies in general use in the temperate zones, will not give a reception to satisfy the Malayan listener. For from 15-50 metres no wavelength would give favourable results for local reception, since the skip distances on such high frequencies quite preclude undistorted reception within 500 miles of the transmitter. On a wavelength, however, of 75-85 metres the company expects to provide successful and reliable reception.

For the systematic relaying of short-wave stations, the company proposes to instal a complete receiving system, with necessary filtering and amplifying arrangements, so that the transmissions from these overseas stations can be retransmitted from the Singapore station and received in Malaya on less expensive receiving sets than are needed for their direct reception.

It is the company's purpose to give an average of three hours of broadcasting daily, with the exception of Sundays, when special arrangements will be made. There will be from 30 minutes to one hour given between noon and 1 p.m. daily, consisting of the noon chimes of the Singapore Town Hall clock, commercial and other news supplied by one of the leading local newspapers, and a brief musical programme. The evening

programme, varying from two to four hours, will consist of relayed programmes from abroad, interspersed with local music.

Announcements from the station's studios are to be made in three languages—English, Malay, and Cantonese, and occasional Chinese programmes will be given in dialects other than the last named. All subject-matter will be censored in advance.

It is further proposed that the company be permitted to transmit from its Singapore station, on a wavelength of between 31.2 and 31.6 metres, a nightly Press service consisting of news matter strictly applying to events in Malaya. This will comprise approximately 300 words, covering (a) the main shipping arrivals and departures of the day; (b) local rubber and tin prices, with chief share quotations; and (c) main news items of Malaya for the day. This transmission, it is added, would take the form of a broadcast sent out at 6.30 p.m. each day, and would occupy from 20 to 40 minutes.

With regard to receiving set licences, the company, after careful consideration of the recommendations of the Malayan Wireless Committee, has decided to ask that the suggested taxation be amended as follows:—

That the owner of a receiving set pay an annual tax of \$10, if the set employs from one to four valves; if five valves or more, \$15 per annum; of these amounts, the company to receive \$8 and \$12 respectively. Further, that the most stringent regulations be drawn up to control the sales of receiving companies other than the broadcasting company, in order to prevent the escape from taxation. Failure on the part of a dealer to keep a proper roster of buyers of receivers should be penalised by a heavy fine. Also, that all importers and retailers other than the company should pay an annual licence fee of not less than \$500 per annum to deal in wireless apparatus, four-fifths of which amount would be payable to the company.

The object of the company, it was stated in conclusion, is to inaugurate the service as early in 1929 as can be arranged. And the company feels it may safely promise that within four months of the satisfactory arrangement of the matters it proposes, the broadcasting station can be in operation.

Dated only a week later, however, than the foregoing, comes the announcement that easily the best reception of short-wave telephony by 5SW (Chelmsford) ever experienced in Singapore has been recorded, and that wireless enthusiasts were able to sit down to breakfast to the accompaniment of music broadcast right from the Strand.

Atmospheric conditions from 3 a.m. to 7 a.m. on November 14, it appears, were almost perfect in the Singapore region, and the 5XX out-

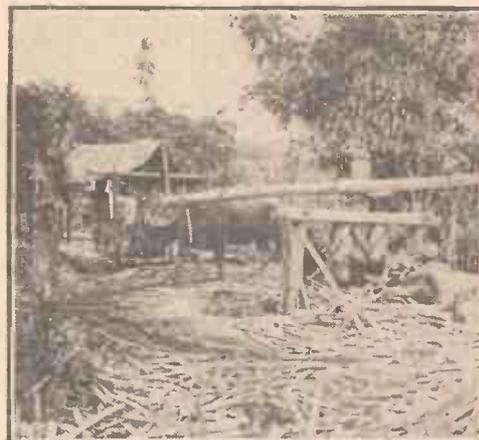


Collecting pineapples for transport to the canning factory

put as re-broadcast on the 24.5 metre short wavelength by Chelmsford station, was heard at good loudspeaker strength. Vaudeville from the Palladium entertained listeners until 10.55 p.m. London time (5.55 a.m. Singapore), and from then onwards till 7 a.m. the orchestra at the Savoy Hotel, London, gave listeners the latest dance numbers; the clapping of the dancers after each number being very clearly received.

The transmission culminated at 7 o'clock in the booming of the midnight chimes from Big Ben. Incidentally, a comparison showed that the Singapore Town Hall clock was nearly two minutes slow!

On the previous Sunday very good reception of the London Armistice Day services was also



[Photos by courtesy of the Malay States Information Agency.]
A Native Sugar Mill

experienced in Singapore, especially the 2.30 p.m. service from the Albert Hall, which came in from 9.30 p.m. to 10.30 p.m. Singapore time. The sermon by the Bishop of London and the music of the massed bands were heard very clearly.
H. S. B.

Radio on the Motor-Bus

The first radio-equipped motor-coach in Australia now runs between Sydney and Goulburn. The receiver is a five-valve one, the aerial being hidden in the ceiling of the coach and earthed to the frame of the chassis. A loud speaker is used, and on the run to and from Goulburn—a distance of about 140 miles each way—passengers are entertained with whatever is "on the air." The test match descriptions, perhaps, have been the most popular items yet radiated. It is understood that there was considerable engineering difficulty in carrying out this installation, but so far the set is giving great satisfaction. It is likely that similar installations will be made on other 'bus routes.

The League's Transmissions via Kootwyk

It is officially stated here that the experimental transmissions on behalf of the League of Nations via the short-wave telephone transmitter of the Government station at Kootwyk undertaken for the purpose of ascertaining the receptivity of the transmission in America, Japan and Australia, will take place for America on Tuesdays, March 12, 19 and 26, for Japan on Wednesdays, March 13, 20 and 27, and for Australia on Thursdays, March 14, 21 and 28. The broadcasts for America will, in view of the season, take place between 10 and 11 p.m. G.M.T., the others being dependent upon the condition of the transmissions between Kootwyk and the Dutch East Indies. It is expected, however, that they will take place about 2.0 p.m. G.M.T.

The Bandoeng (Java) broadcasting station has, we understand, discontinued their Wednesday mid-day concerts. This station now broadcasts two or three gramophone records, generally from 12.40 to 1 p.m. each day before the public telegraphic messages to Holland begin.

Dominion and Foreign Broadcasting Intelligence

AUSTRALIA

(By a Sydney correspondent.)

Licences Increase for 1928

The total number of radio licences in Australia at the end of 1928 was 288,888, an increase for the year of 13,609. There is great rivalry between New South Wales, the oldest and most populous State, and Victoria, which has always held the lead so far as wireless is concerned. The increase in the number of licences in N.S.W. for the year was 19,547, whereas in Victoria it was only 7,065. The figures for New South Wales are now 91,709, while those of Victoria are 141,890. For the four smaller States the figures at the end of the year were: Queensland 25,224, an increase of 791; South Australia 22,120, an increase of 3,328; West Australia 3,828, a decrease of 44; Tasmania 4,117, an increase of 714.

Test Cricket Broadcasts

During the first week of the New Year the Sydney stations 2BL and 2FC created a record by transmitting descriptions of the Third Test Match from Melbourne, the inter-State Match—New South Wales v. Queensland—at the Sydney Cricket Ground, the inter-Empire Tennis Match—England v. Australia—from Rushcutters Bay, the full racing programme over four days from Randwick, and the Pittwater Regatta. When the first Test Match was being played in Brisbane, it was impossible to secure a land-line to the Melbourne and Sydney stations for a continuous description direct from the ground. Arrangements were then made to have periodical conversations with the ground, and progress descriptions were prepared and broadcast. It was decided to enlarge upon this type of descriptive work during the third Test, and the trunk line between Melbourne and Sydney was secured at ten-minute intervals, when the scores, together with an outline of the salient points in the play, were broadcast, thus giving a progressive and continuous story throughout the game. It took one hundred and forty-eight pages of foolscap upon which to write the story, and over forty-six hours were employed in its preparation. Thirteen hours and forty-eight minutes were occupied in telling the story on the air, and the line between Sydney and Melbourne was occupied on one hundred and fifty-four occasions.

Interpolated between the sporting items a musical programme was rendered on each afternoon from both stations.

CANADA

(From our Montreal correspondent.)

MONTREAL, January 28

Canada-U.S.A. Radio Conference Ended

After five days of hard work the North American Radio Conference, which has been meeting in the offices of the Department of Marine and Fisheries in Ottawa, concluded its sessions on Friday, and the delegates from the Governments of the United States, Cuba, and Newfoundland, left for their respective homes. The report drafted by the committee dealing with provisions to prevent interference and enforce the rules on this matter was accepted by the conference, but the report of the second committee, dealing with the division of bands between the various services and the sub-division of the priority channels between the different countries, has yet to be approved. In dealing with this second report new elements, it was officially stated, were introduced, and it was decided that the delegations should have an opportunity of consulting their respective Governments before final action

is taken. It was agreed, however, that whatever decision was reached by the different Governments should be made known not later than February 1.

A New Radio Company.

A radio and wireless company, to be known as Trans-Canada Communications Limited,



"Two-Guns, White Calf," of Glacier National Park Reservation, perhaps the most widely-known American Indian living, enjoys the distinction of having spoken from nearly every important broadcasting station in the United States. In his opinion, radio is quite an improvement on the Indian's smoke signal system of communication.

with headquarters in Toronto, has been incorporated, with a capital of \$1,000,000 (£200,000). Its charter includes everything pertaining to wireless and radio, including power to operate broadcast and receiving stations, to manufacture or deal in wireless, to provide concerts and a general business, including the transmission of news and other information, and provide a regular inter-city radio communication.

Licence Increases

Canadian receiving licences issued for the nine months ended December 31 last totalled 243,768. In all the provinces, a steady increase over the corresponding period in 1927 was maintained in the number of licences granted. Ontario led the list for the period under review with a total of 120,972; Quebec was second with 41,204; while Saskatchewan was third with a total of 22,033. Of the other provinces, official figures give the following as the order: British Columbia, 19,152; Manitoba, 16,127; Alberta, 12,178; Nova Scotia, 6,348; New Brunswick, 5,221; Prince Edward Island, 451; North West Territories, 48, and Yukon, 34.

AUSTRIA

(From Our Vienna Correspondent.)

Programme Alterations

On Wednesday, February 20, at 6 p.m., Wagner's *Lohengrin* will be given in the State Opera, and relayed by Ravag, which follows close upon *Valkyrie* in the Ravag studio on Friday, February 15, at 6.30. The studio performance of Lehár's operetta, *The Tsarevitch*, announced for Sunday evening, February 17, has had to be postponed, owing to difficulties in obtaining a suitable cast. An entirely new opera by Hans Gals called *The Sacred Duck* will be performed for the first time (anywhere) in the Ravag studio, during February. Its setting is Chinese. Sunday, February 24, at 7.5 p.m., has now been fixed for the complete performance of the *Pannicke Case* in the studio, with the competition solution supplied by those who heard the first. On Monday, February 18, at 7 o'clock, Frau Josefina Stransky, the concert singer who is wife of a well-known Professor of Music in Vienna (and who was one of the principal witnesses at the trial of Frau Grosavescu, who was acquitted after shooting dead her husband, Trajan Grosavescu, the famous tenor of the Vienna State Opera), will give a number of songs in the studio.

Graz Reconstructed

The new Graz station, or rather improved station, is expected to be in full operation in the middle of March. It is the old Rosenhügel plant from Vienna which has been modernised. The "strike" of Tyrolese subscribers continues, and they contend that they are justified in withholding their monthly payments until local transmission is improved. The Tyrol Radio Club states that its members have made so many protests that no other course is open to them. Dr. Maritschnig, an Innsbruck advocate, has taken over, gratis, the representation of their case. Ravag is doing its utmost to make Radio Innsbruck satisfactory in every way, and deplors the defects of transmission as much as any of the subscribers. It has made an official announcement to the effect that it has done, and will continue to do, its best. According to the club's representatives, nearly all the transmissions from Vienna are heard quite clearly in the Innsbruck Telegraph Office, and become weak and confused only in the re-transmission thence to the mountain station at Aldrans, now of course surrounded by a yard depth of snow.

BELGIUM

Listeners' Tax for Radio Institute

It is stated that the Belgian Government has under consideration the erection of a radio institute for the broadcasting of first-class programmes made up equally of French and Flemish items with a smaller proportion of items in German for the inhabitants of the annexed areas. The necessary means for this station will, it is suggested, be raised by means of a tax of fifty francs on each receiving set, and also by a tax on all valves payable by the manufacturers. While there are only about 36,000 sets at present registered it is believed that there are actually in existence a much larger number.

GERMANY

(From Our Munich Correspondent.)

Munich's Radio Ball

The artists of the Bavarian broadcasting company organised a ball this year in the old Schwabinger Brauerei, one of the smaller beer
(Continued at foot of col. 3, page 239.)

Yugoslavia and its Listeners

Difficulties the Broadcasting Authorities Have to Face

NOTE.—Yugoslavia is the country chosen as the subject of the next National Programme Broadcast, which is to take place on Wednesday evening next, the 20th instant.

RECENT articles in *World-Radio* have acquainted readers with the present development of broadcasting in and around the three broadcasting stations in Yugoslavia; namely Zagreb, the oldest, erected in 1924; Ljubljana, opened last October; and Belgrade, the capital, to be opened at the end of this present month. The object of this article is to give readers an idea of the actual influence that broadcasting has in Yugoslavia.

The Gulf Between.

We should always bear in mind that in Yugoslavia, especially in the larger, southerly half of the country, there is a great gulf between the general education (the German would term it *Kultur*), of the inhabitants of the towns and those of the villages and open country. Another point to be remembered is that there are very few large towns in Yugoslavia, only three with more than 100,000 inhabitants (Belgrade, Zagreb and Maria-Theresiopel-Subotitz), and then, that only about 5 per cent. of the total inhabitants live in towns, while there are about 40 per cent. in Britain who live in towns with more than 100,000 inhabitants, and about 28 per cent. in Germany.

Remembering these figures we can draw our own conclusions as to the potential number of listeners in Yugoslavia. The number will, for the present at least, never reach figures we are accustomed to in Western, or Northern Europe, or Central Europe for that matter.

The Club-House Set

In Slovenia, and partly also in Croatia, we find listeners outside the two towns with transmitters. But in both these parts the peasant-farmer and the more or less interested population in the villages have been made acquainted with broadcasting through an already-existing cultural organisation. These organisations have club-houses in the larger villages, and here the peasant farmer can listen at leisure, and slowly he will find that he would also like to have one of those instruments. Another factor is that the sets are probably sold to him by the cultural organisation at a reasonable price, and that he has a transmitter near at hand. But even here (perhaps with the exception of Slovenia, where broadcasting is part of the cultural organisation), in the region covered by Zagreb—and this is not so very large—the bulk of the listeners is situated within the town. After four years of hard, uphill work Zagreb can boast of some 10,000 listeners, and for the moment there are no signs of drastic jumps in an upward direction. There is a slow but sure and steady increase, but that is all, and it is a sign of good programmes.

Subsidised Broadcasting for Villages?

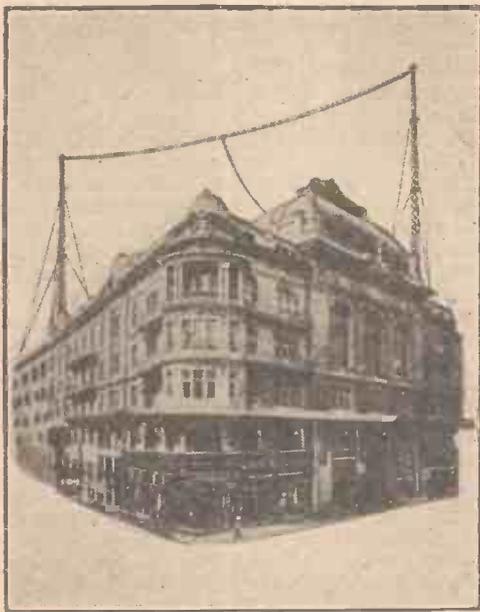
In Russia broadcasting is extensively used, but here again, the listeners are in the towns, while in the villages the inhabitants gather round one single set in the village hall or its Russian equivalent. Now I should not compare Yugoslavia with Russia, the distances being not nearly so great, but the peasant in Serbia—that is the southerly part of Yugoslavia—and even the peasant farmer, will hardly be brought to listen on his own set. Thus, in spite of the great possibilities of broadcasting in countries where, to many of the inhabitants, reading and writing are unknown arts, or, if not unknown, at least seldom practised arts, these possibilities can never be utilised unless there is organisation to furnish villages with central receivers; in other words, unless broadcasting receives subsidies. Yugoslavian broadcasting is working without subsidies and therefore, with the exception of Slovenia, the broadcasting companies in Zagreb and Belgrade have to rely on the listener in the town for their income. In

Belgrade we conclude that the new company is fully aware of this, from the fact that the transmitter is situated in the very centre of the town.

Radio Subsists on the Town Listeners

Broadcasting, especially in southern Yugoslavia, will remain the privilege of the town inhabitant for some years to come, and any educative possibilities for the open country will only be brought into effect under financial sacrifices.

In stressing certain points I do not wish to make the reader believe that broadcasting is a kind of superfluous pastime for the idle inhabitant of the towns in Yugoslavia, but I wish to enable him to visualise the difficulties under which a broadcasting company has to work in Yugoslavia—difficulties quite unknown in Britain. The British are a highly educated people, and poverty such as can be met with in Dalmatia or Serbia is quite unknown to the poorest English tramp. Yugoslavian broadcasting has to live by the town listener, and, if it wishes to take a part in the development of the country, as it certainly does, it has long, hard uphill work in front of it in the country. Generally the priest is the friend of the villager, but this poor man has his hands more than full. But perhaps in Serbia we shall see the same development as in Slovenia, where



[Photo: By courtesy of Radio A.D., Belgrade]

Studio and Transmitter Buildings of the New Belgrade Station.

the priest gathers his flocks round the loud speaker and keeps them at a distance from the public-house and the workhouse.

Belgrade: Yugoslavia's Third Station

AT last Belgrade is to obtain an adequate broadcasting service. The terms of the concession granted to a private company, the "Radio A.D.—Beograd," are much the same as those granted to the companies in Zagreb and Ljubljana. The concession is for a period of fifteen years, with a monopoly for Belgrade and district and Serbia proper, and parts of the other regions of Yugoslavia, making as a total about two-thirds of the whole country.

As already mentioned in previous articles, the licence fee in Yugoslavia is 300 dinars (about 21s.) per annum, of which more than half is

allotted to the broadcasting company. In the case of Zagreb, the oldest station, we have a small private company mostly kept alive by the enthusiasm and devotion of a small group of persons; in Ljubljana broadcasting is in the hands of a powerful, cultural, Roman Catholic organisation; in Belgrade the new company is independent, with a capital of five million dinars (about £18,000) belonging, in the majority, to the Marconi Company, London, and to sources having connection with this company. The executive of the company lies in the hands of Dr. Gustav Braun, and Eng. Robert Weege. These two, with their assistants, will be responsible for the compiling of the future programmes. I say future programmes, as the new Belgrade station will only be in operation by the end of this month.

Valve Sets Only

The present number of listeners in the district to be covered by the Belgrade station is about 7,000. It must, however, be kept in mind that until now Belgrade has not possessed a broadcasting station worthy of the name, and that the seven thousand listeners are solely owners of valve sets. With the new Marconi transmitter, with 2½ kw. in the aerial, working on the proposed wavelength of about 460 metres, matters will very suddenly change. Belgrade had over 150,000 inhabitants four years ago, and the latest total is greater.

The transmitter and studios are situated in the very centre of the town in the Akademija Nauka. The Akademija Nauka is the Academy of Science in Belgrade. The studios consist of one very large, one medium sized, and one smaller room. The aerial masts are on the top of the building.

A Sign of Serious Interest

The new company is by far the largest broadcasting company in Yugoslavia, and its financial backing, and the names behind that, certainly promise good service. Belgrade will or should be able to be received very well even in Britain, when once it is working. But quite apart from distant and very distant listeners this new station is the best sign that Yugoslavia; or rather the capital and all that that implies, is taking broadcasting seriously, and at last giving it a chance to develop in the most backward (as far as the peasants are concerned) part of the country. I hope to give readers further particulars when the station is opened next month.

A. A. G.

(Continued from page 238.)

halls in the artists' quarter of Schwabing.

The ball was, of course in costume, and anybody daring to appear in evening dress was promptly smothered in coloured aprons covering chest and back. In spite of the nature of the ball very few original costumes applicable to wireless or broadcasting could be observed. There was a valve set and a crystal set complete with aerial, and two futuristic radio costumes. The Press appeared in the usual black, the Radio Press mostly in costume. *World-Radio* appeared, or rather its correspondent, as a wandering radio-paper stall, with most of Europe's radio periodicals sewn on to him.

Professor Einstein

(From our Berlin Correspondent.)

It is sometimes asked whether the Dr. Einstein, whose name is often to be seen in the programme of the *Deutsche Welle* in connection with lectures on musical subjects, is Dr. Einstein of the Relativity theory. The answer is "No." Professor Albert Einstein, the great mathematician and physicist, is a keen devotee of the violin (he describes himself as a "*leidenschaftlicher Geiger*") and has performed in public for charity, but he has not hitherto lectured in public on his hobby. The lecturer is Dr. Alfred Einstein, the music critic of the *Berliner Tageblatt*.

Correspondence

As Southern England Hears Europe

To the Editor of WORLD-RADIO.

SIR,—Mr. A. S. Robertson, in his letter in this week's *World-Radio*, gives a very interesting account of his reception of foreign transmissions, and invites, I see, a Southerner's experience.

Here is mine. But I think it right to qualify my records by a statement as to my set, as much depends upon the power here as to how stations are received. Mine is a conventional transformer (HF) coupled four valve, with one neutralised H.F. and two L.F. valves, so I do not get much L.F. amplification, though tone and purity are excellent.

Barring one station above Munich, which I have not yet identified, Munich is my highest reading, which is received fairly well, Vienna intermittent. Brussels excellent, with fading as received in the north. Milan poor, Oslo fairly good; 5GB always accompanied with interference, and seems to lose strength at times. Langenberg fair to excellent; Stockholm very poor; Frankfurt always fine with a clear background, with Katowice as well as I should expect. Berne and Glasgow are fair to poor; Hamburg always good, though I confess it is heterodyned by an unknown station just above it.

Toulouse, where are you? A station I have constantly received at excellent strength has for the last week failed me entirely. What is the reason here, I wonder? Stuttgart good and clear, Leipzig can only be received when 2LO is shut down. Barcelona poor, Göteborg poor to good, Prague fair. Copenhagen is very difficult to get, but Gleiwitz and Breslau are always strong, and never seem to be interfered with. The former is always stronger. Aberdeen fair. Then I can get about six stations below here, three of which are English relays, but I have not found it easy to identify them.

Königsberg is fair, and now comes Turin. How I hope that station will keep going, as I see it is an experimental one. It comes through beautifully clear, and the Italian is a treat to hear. Why do we receive it so well, considering that it is the other side of the Alps? Münster and Cologne are nearly always good, but I confess I cannot say that I have ever been able to separate them, which is rather what one would expect as they receive the same programme, and there is only one metre difference.

Malmö, Toulouse, and Lille fair; Newcastle often very loud; and then I come to Nürnberg. Here, I think it should be printed in capital letters, as I have to turn down the filament of the H.F. valve (my form of volume control) and no reaction, to reduce it to a convenient volume, as it is overpowering.

I completely fail to understand this. No interference, clear, with often a fine acoustic effect. This is my star turn. And when you consider my set, and the fact that my aerial is very short and badly screened with oak trees quite close (10 feet), I am more than surprised. Even in the daytime I can get this station well. Here's to Nürnberg! Lastly, Cork is variable.

As "Northernner" says, the interference is worse below 300 metres.

On the higher waves my best stations are Hilversum, Kalundberg, Motala, Lahti, Daventry, Berlin, Paris, and Huizen.

Paris and Lahti are the best, apart from 5XX of course, being equal in power of reception, though I see Lahti is 1,200 miles away!—Yours faithfully,

W. A. SOWDEN HILLS, L.D.S., R.C.S. Eng.
Pinner, Feb. 9, 1929.

To the Editor of WORLD-RADIO.

SIR,—I was more than interested in Mr. Alexander S. Robertson's letter in this week's *World-Radio*. Perhaps a log of stations received here will be of interest to your readers. My set is a four valve, 2 S.G., detector and pentode, and situated about three-quarters of a mile

from the local station, 5PY Plymouth. Below I give a list of stations which can be received almost any day at full loud speaker strength. Stations marked * are much too powerful when set is worked "all out." A coil speaker is used with a 3 ft. square baffle, and this can be made to give such volume on the stations marked * that vibrations can be felt in the flooring. The stations received are as follows:—Huizen; Radio Paris*; Königswusterhausen ("Zee")*; Daventry 5XX*; Lahti, spoilt by 5XX; Paris (FL)*; Moscow varies; Warsaw good; Motala*; Kalundborg*; Hilversum very powerful, but usually accompanied by morse and mush; Budapest* but often jammed by morse; Munich same; Vienna*; Brussels* when received clear of mush; Milan good; Zurich*; Daventry 5GB*, no fading in daylight but at night sometimes blotted right out, I think through someone violently oscillating, for it is not a fade. Berlin usually jammed; Lyons similar; Langenberg*; Paris varies; Rome* when clear of mush; Madrid; Brünn good when not jammed. Frankfurt*; Katowice varies either good or bad; Dublin good; 5PY; Toulouse* most nights; Manchester good when clear; Stuttgart*; Leipzig*; London either too powerful or else a whisper; Barcelona varies; Göteborg*; Prague* when clear; Copenhagen and Naples either good or very poor; Gleiwitz*; Cardiff better in daylight; usually swamped by Gleiwitz and Breslau at night. Aberdeen, Belfast, Hanover,* when no interference; Swansea good in daylight; Bournemouth* if clear; Königsberg, Dresden, Ghent, Bremen, Kaiserslautern, all good if free from mush; Cologne*, Kiel, Cassel, Toulouse, good if clear; Newcastle*; Nürnberg*; Cork usually spoilt by mush; Flensburg*.

Your correspondent appears to be little troubled with morse, while here we get more than our share. The only thing that limits the number of stations received at full loud speaker strength is some sort of interference, either morse, heterodyne or some clever person or persons giving what they think a star turn with their reaction controls. Although I have reaction on detector valve it is never used on any station mentioned.

—Yours faithfully,
WALTER L. SPILLMAN.
Stoke, Devonport, Feb. 8, 1929.

An Englishman's Reception at Wiesbaden

SIR,—Perhaps I had better begin by saying that I am a British soldier stationed in Bad Schwalbach, Germany, and, being a married man, living out of barracks, my only hobby during these cold, dreary months has been to listen to the things thrown over the ether.

It will help also if I state that Bad Schwalbach is situated on the north-western slope of the Taunus Range, 1,043 feet above sea level. It is about 10 miles from Wiesbaden.

My receiver is a five-valve long-range receiver, and was purchased at Wiesbaden.

My local station is Frankfurt, and this station can be relied upon to deafen at almost any time, without interference. 5GB is very fickle. I have sat from tea-time until bedtime on some occasions, and listened to 5GB at her very best, but, I regret to say that she is very unreliable, and, like Mother Hubbard, I have often found practically nothing. Fading is very common, and during the period between sunset and darkness little is heard. I was interested in this respect to read an article some time ago regarding the effect of the numerous natural springs, to be found in this part of the globe, on radio reception.

5GB, I might add, is the only English station I get on this band. Whether I should get more I do not know. Budapest, Vienna, Langenberg, Toulouse, Brussels, and sometimes Cracow, are the only other stations I have logged on my

chart at present, and I find that Brussels, Vienna, 5GB, and Langenberg are hard to keep distinct from each other (one is invariably heard behind the other, whilst Toulouse is very inconsistent). On the higher wave-band Königswusterhausen is the bane of my existence, for it is jammed between Paris and 5XX, and on many a Sunday evening I have been contentedly listening to the Church service, only to be rudely interrupted with a loud "Achtung! Achtung!" followed by jazz music.

5XX is very consistent, and fading is not noticeable to a great extent. Königswusterhausen, being more local, is always dependable and, like Frankfurt, has to be shut down a little. Paris, as has been stated, suffers from interference from the German station, but is generally worth listening to, for one becomes accustomed to the mumbling behind. Hilversum is not troubled with interference, but is fairly weak in comparison, and is not used much by me for this reason. Stamboul is erratic, and only occasionally do I turn my dials in this direction. Eiffel Tower and Motala seem to be put out by 5XX and Königswusterhausen, and to try to get a programme from these is only to try one's patience.

I hope all this information will be of some interest to you, and if I might add in passing, I am only a mere "novice" in radio reception, and am hoping for better results from my set when I can instal it in England.

Yours faithfully,
B.A.O.R., Wiesbaden. "SPEEDY."

(Continued from page 242.)

VOCABULARY: *D-ro*, doktoro, doctor; *brodkastos*, will broadcast; *Esperanta*, about or relating to Esperanto; *leciono*, a lesson; *lai*, according to; *speciala*, special; *metodo*, method; *dato*, date (day, etc.); *vendredo*, Friday; *februaro*, February; *p.t.m. posttagmeze*, p.m.; *li*, he; *legas*, will read; *pri*, about; *hejma*, home, domestic; *vivo*, life; *kun*, with; *konversacio*, conversation; *skribu*, write; *via*, your, yours; *raporto*, report; *al*, to, towards.

We have seen that nouns end in *o*, adjectives in *a*, and that *j* is added to the noun to make the plural. The letter *j* is added also to an adjective whenever it belongs to a plural noun: *via raporto*, your report; *viaj raportoĵ*, your reports (*via* is a possessive adjective); *la leciono estas interesa*, the lesson is interesting; *la lecionoj estas interesaj*, the lessons are interesting. This agreement of nouns and adjectives is the first check.

In every sentence we make a statement or ask a question about somebody or something. That somebody or something is the subject of the sentence. In many sentences the subject does an action which directly affects somebody or something else. That somebody or something else is the direct object of the sentence. In Esperanto the letter *n* is added to the direct object: *mi vidas la domon*, I (subject) see (action or verb) the house (direct object); *angloj brodkastoj interesas la germanojn*, English broadcasts interest the Germans; *la angloj ŝatas muzikon*, the English like music.

The letter *n* is also added to the adjectives which belong to the direct object, if they are in the same sentence: *li havas belan domon*, he has a beautiful house; *mi aŭdas interesajn brodkastojn*, I hear interesting broadcasts. These words ending in *n* are said to be in the accusative case. The accusative is the second check on misunderstandings.

Examples for translation: *La dramoj estas famiaj*. *Mi ŝatas la faman dramon*. *La saĝulo skribas belajn alegoriojn*. *Mi aŭdas anglajn kaj germanajn brodkastojn*. *La lecionoj estas facilaj (easy) kaj interesaj*. *Germanaj stacioj uzas (use) Esperanton*.

RADIO-DUO.

A series of talks in Esperanto is to be given from the Leipzig station every alternate Friday from 5.5 to 5.20 p.m. The first of the series was broadcast on February 8, and the second will follow next Friday. The subject of the talks is "The Work and Ideals of Dr. Zamenhof."

Foreign Languages Aids to Listening FRENCH

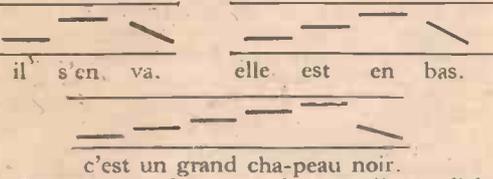
Accent musical du français

Les différentes syllabes d'un groupe de sons se distinguent les unes des autres, non seulement par leur durée et par la force avec laquelle elles se prononcent, mais aussi, et surtout, par la modulation de la voix. Dans le langage parlé, la voix passe continuellement d'une note musicale à une autre note musicale plus élevée ou plus basse.

Ce phénomène prend le nom d'intonation. A première vue, si l'on se rend compte que chaque syllabe prononcée se dit presque toujours sur une note différente de celle qui la précède et de celle qui la suit, on semble se trouver en présence de difficultés à peu près insurmontables. Il n'en est rien cependant, car les traits caractéristiques du système d'intonation de n'importe quelle langue, peuvent s'analyser correctement, et s'exprimer à l'aide de certaines règles assez claires.

Je vais tâcher d'expliquer ici, d'une façon aussi simple que possible, le genre d'intonation dont nous nous servons en français, dans une phrase positive ou négative, lorsque nous ne désirons pas mettre en relief, c'est-à-dire ne pas renforcer pour une raison spéciale, un seul des mots de cette phrase. C'est donc de l'intonation normale ou non emphatique que je vais vous entretenir.

Prenons une phrase complète, ou une expression, constituant un seul groupe de sens et composée de trois syllabes au moins; l'intonation sera comme suit:

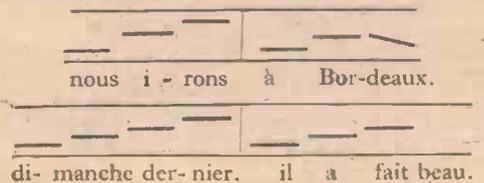


Comme vous le voyez, la première syllabe du groupe a toujours un ton assez bas, l'avant-dernière syllabe a le ton le plus élevé. Quant à la dernière syllabe du groupe, elle se prononce sur un ton très bas, à la limite extrême de la voix. De la première syllabe à l'avant-dernière, le ton s'élève par intervalles musicaux à peu près égaux; chose extrêmement difficile pour les Anglais. Autre chose de toute importance, il faut maintenir le même ton pendant toute la durée de la syllabe française, en d'autres termes, il ne faut ni abaissement, ni élévation du ton, pendant que se prononce la même syllabe.

Je recommande à mes lecteurs de s'exercer à chanter (ce qui est bien entendu une façon de parler) les phrases et expressions suivantes en s'efforçant d'imiter les modèles donnés plus haut:

- 3 syllabes : ils s'en vont ; elle en a ; le voici ; les voilà ; avant-hier ; c'est à moi ; s'il vous plaît ; je veux bien ; un grand chien.
- 4 syllabes : ils sont partis ; elle n'arrive pas ; quand vous voudrez ; mon père est là ; le vieux docteur ; du bœuf rôti ; ce sont des chats.
- 5 syllabes : elles n'en auront pas ; la salle à manger ; une chambre à coucher ; nous allons partir ; ils ne viendront pas ; vous irez bientôt.

Si la phrase ne peut pas se dire en un seul groupe, elle se divise, selon le cas, en deux, trois, quatre groupes, etc. Ces petits groupes de sens sont aussi des groupes d'intonation, et nous procédons comme suit:



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quand j'au-rai fi-ni mon tra-vail.
 Vous remarquerez que le principe est le même, quel que soit le nombre des petits groupes de sens ou groupes grammaticaux qui constituent la phrase à prononcer.

Que les conseils suivants vous servent de guide :

(1) Abaissez le ton jusqu'à la limite extrême de la voix à la dernière syllabe d'une phrase affirmative ou négative.

(2) A partir de la première syllabe, qu'il faut prononcer sur un ton assez bas, élevez le ton, de syllabe en syllabe, jusqu'à l'avant-dernière du groupe, de façon à produire des intervalles musicaux à peu près égaux.

(3) Veillez surtout à ce que le ton reste le même pendant la prononciation d'une syllabe quelconque, autrement dit, une fois que vous avez attaqué une syllabe, quelle qu'elle soit, chantez-la sur la même note.

(4) Ne donnez pas la même hauteur musicale aux dernières syllabes des différents groupes. Cette hauteur musicale varie selon l'importance de chaque groupe ; plus ce groupe est important du point de vue du sens, plus l'arrêt que l'on peut faire après ce groupe est marqué, et, par suite, plus le ton de la dernière syllabe de ce groupe est élevé. Par exemple, dans la phrase citée plus haut, "j'irai vous voir demain, quand j'aurai fini mon travail," la syllabe *main* du mot *demain* a le ton le plus élevé pour la raison que je viens de donner.

(5) Enfin, veillez à ceci : que l'accent musical de l'avant-dernière syllabe du dernier groupe soit inférieur à celui de la dernière syllabe du groupe précédent. Vous n'avez qu'à étudier attentivement la représentation graphique de l'intonation des phrases : "Nous irons à Bordeaux. Dimanche dernier il a fait beau. J'irai vous voir demain,

quand j'aurai fini mon travail," et vous remarquerez que la syllabe *Bor* du mot *Bordeaux* se dit sur un ton plus bas que la syllabe *rons* du mot *irons* ; que la syllabe *fait* a une hauteur musicale inférieure à celle de la syllabe *nier* du mot *dernier*, et que la même observation s'applique aux syllabes *tra* de *travail* et *ni* de *fini*.

Pour terminer, voici pour vous entraîner à ces exercices d'intonation, quelques phrases qui se divisent en deux, trois, quatre groupes ou plus :

2 groupes : C'est lui | qui l'a fait. Il est arrivé | à trois heures. Mon crayon | est sur la table.

3 groupes : Il a vécu à Paris, | à Berlin | et à Madrid. Nous nous levons | tous les matins | à sept heures. Hier après-midi | elle est allée | au cinéma.

4 groupes : Elle n'a pas | assez d'argent pour acheter | toutes ces belles | choses.

Nous avons encore | pas mal de temps, | avant de partir | pour la gare.

5 groupes : Un jour, | en traversant le parc, | j'ai vu un écureuil | qui mangeait des glands | au pied d'un chêne.

E. M. STÉPHAN.

ITALIAN

Una Florente Industria Italiana

ATUTTI è noto che l'industria serica (silk industry) è una delle industrie tradizionali italiane : ma non tutti sanno, forse, qual è il posto che essa occupa nell'economia nazionale, rispetto alle altre attività industriali. Non è difficile, però, farsene un'idea ; basta che ci venga detto che le esportazioni della seta portano in Italia il diciotto per cento del totale delle esportazioni nazionali, per rendersi facilmente conto della sua grandissima importanza. A questo si aggiunga che il numero di operai che tale industria assorbe si aggira intorno ai 130.000 ; un numero certamente ragguardevole.

L'Italia conserva tuttora il primo posto in Europa per la seticoltura. Purtroppo le condizioni del mercato mondiale son tali che gli industriali italiani devon tener bene aperti gli occhi se non vogliono perder terreno. I concorrenti (competitors) ci sono, e sono formidabili. Infatti, mentre fino a poco tempo fa la nostra industria occupava il secondo posto nel mondo, dopo la Cina, ora è al terzo, perchè il Giappone le ha strappato (snatched from her) quasi tutto il mercato nord-americano. E c'è anche un altro concorrente, d'un'altra sorta, ma non meno temibile : la seta artificiale !

Non deve dunque far meraviglia se in Italia si prendan delle misure per cercare di aumentare la produzione dei bozzoli (cocoons), mediante un allevamento (breeding) più razionale del baco da seta (silk-worm). Infatti la bachicoltura conserva in Italia (naturalmente con le debite eccezioni) un carattere domestico ; ed è quindi capace di grandi progressi se sarà possibile indurre i coltivatori a mettere in pratica gli ultimi perfezionamenti tecnici e ad approfittare delle più recenti ricerche scientifiche. Molta propaganda si fa a tale scopo (end, aim). Per esempio, da quasi tutti era creduto che fosse possibile un solo allevamento di bachi all'anno, in primavera. Ma gli esperimenti fatti dimostrano che un secondo allevamento in agosto-settembre non solo è possibile, ma rende una seta di qualità egualmente buona ; onde ora si cerca di combattere il vecchio pregiudizio. Sono state inoltre prese misure di carattere pratico, come per esempio la trasformazione in gelseti (mulberry-groves) di terreni in cui non crescevano che cespugli di piante selvatiche. Ben due milioni di piantine (young plants) di gelso sono stati distribuiti, giusta (according to) il principio che non è possibile ottenere una fiorente bachicoltura senza un'abbondante gelsicoltura. Infine si cerca di estendere quest'industria, che finora è concentrata specialmente in Altra Italia (Northern Italy), anche al Mezzogiorno della Penisola.

Ma a molti miei lettori, più che questi dati di carattere troppo economico, piacerebbe forse che io ricordassi qualcosa della vita di questo miracoloso animalletto : il baco.

Il baco subisce (undergoes) tre metamorfosi : nasce allo stato di bruco (grub), diventa poi crisalide, racchiusa nel bozzolo, per cambiarsi infine in farfalla (moth). Lo stato di bruco dura circa cinque settimane, durante le quali il baco muta di pelle quattro o cinque volte. Queste mute (moultings) avvengono mentre il baco si trova in uno stato di assopimento (drowsiness) che si estende fino a ventiquattro ore. L'allevamento dei bachi richiede gran pazienza e cura, perchè, essendo il baco voracissimo, è necessario dargli dei pasti di foglie di gelso ogni tre o quattro ore, secondo l'età : e naturalmente anche di notte ! Dopo il trentacinquesimo giorno il baco, sceltosi (having chosen) un posticino (nook) fra i rametti (twigs) che gli sono stati messi vicino, si ferma e comincia ad avvilupparsi (to wrap itself up) in un velo di seta, il quale, facendosi a poco a poco più spesso, finisce poi col formare il bozzolo. Passato quindi mezzo mese, il bozzolo s'apre per lasciare uscire la farfalla.

Ma, ahimè ! son poche le farfalle che vedon la luce ! Perchè infatti i bachicoltori non lascian vivere che solo un numero ristretto di crisalidi : quelle che servono alla riproduzione. Le altre, per mezzo d'un processo speciale, sono uccise quando sono ancora nel bozzolo. La ragione di questo massacro sta nel fatto che se fosse permesso alla farfalla di venir fuori, il bozzolo andrebbe distrutto ; ed allora, addio seta !

L'industria della seta in Italia riposa ormai su una tradizione millenaria. Poco si sa come fosse introdotta tra noi, dalla lontana Cina. Ma le leggende anche in questo campo non mancano. Si racconta, per esempio, di due monaci persiani, che nel VI secolo d.C. sarebbero fuggiti dalla Cina (la quale cercava di serbare il segreto di quest'industria) portando, nascoste dentro i loro bastoni di bambù, delle uova di baco. Arrivati a Costantinopoli le regalarono all'imperatore Giustiniano ; e se dobbiamo credere a questa leggenda, le centinaia di generazioni che da allora son nate e vissute e morte in Europa discenderebbero da quelle uova. E c'è anche un'altra leggenda, più poetica, perchè ci sta di mezzo una donna. Si racconta che una Principessa cinese, andata in isposa ad un Principe indiano, prima di partire per la nuova dimora, prendesse con sé delle uova per regalarle al suo amato sposo. Se fosse proprio così dovremmo esserle davvero grati pel suo eccesso d'amore coniugale, e per la sua mancanza d'amor patrio.

S. BREGLIA.

ESPERANTO—3

WHEN people representing different language groups—for example, Japanese and English—speak to each other, their different thought processes may easily cause misunderstanding ; and it is obvious that the greater the difference between their mother tongues, the greater must be the chance of misunderstanding. Even in a simple and logical language this risk is present.

To reduce this risk to the minimum, Esperanto has some linguistic "checks" or "safety catches ;" these are very effective and necessary, although they are at first a little difficult for Englishmen.

The first of these is the agreement of nouns and adjectives, and the second is the use of the accusative case. As the basis of our explanation of these two points we shall take the following announcement of an Esperanto broadcast : Stuttgart (374 m., 4 kv.) kaj Freiburg (577 m., 0.7 kv.). D-ro Vogt brodkastos Esperantan lecionon laŭ speciala metodo. Dato : vendredo, 22 februaro. Tempo : 5.0—5.10 p.t.m. (angla tempo). Li legos lecionon pri la hejma vivo, kun interesaj konversacioj. Skribu viajn raportojn al Süddeutsche Rundfunk A.G., Charlottenplatz 1, Stuttgart.

(Continued on page 240.)

1878

1928

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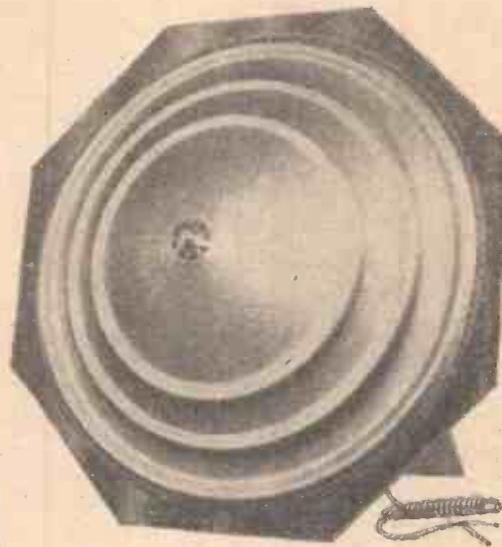
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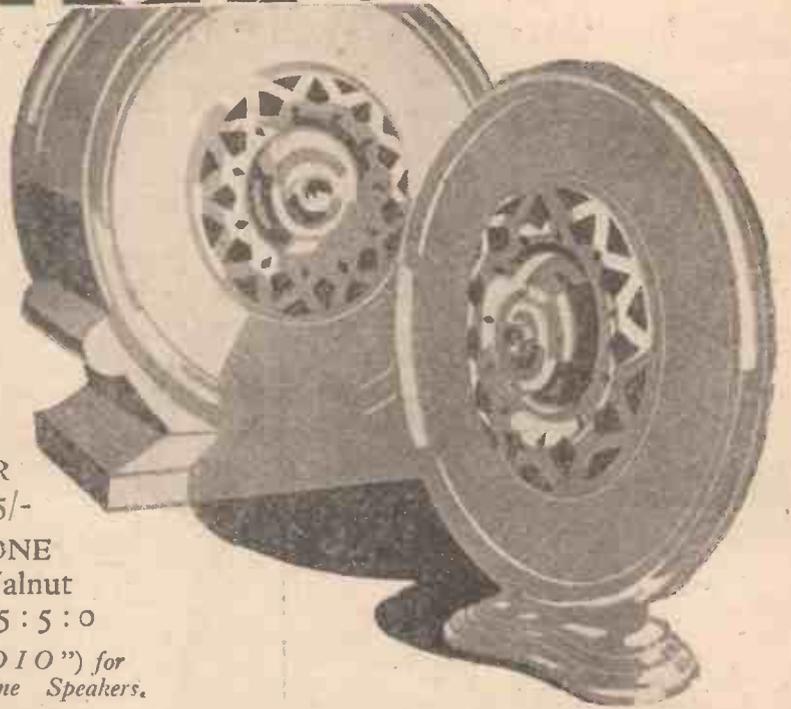
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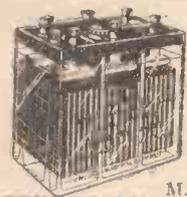
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PROGRAMME SECTION

Continental Programme Events

SUNDAY, February 17.

- Concerts.**
 7 p.m. Ljubljana: Balalaika orchestra.
 7 " Berlin: Orchestral.
 7 " Munich: Orchestral.
 7 " Oslo: Orchestral.
 7.45 " Cracow: Chamber music and songs.
 7.45 " Huizen: Orchestral.
 7.55 " Hilversum: Orchestral.
 8.15 " Brussels: Orchestral.
 9 " Copenhagen: Orchestral.

Operas and Operettas.

- 6.30 p.m. Prague: "Les Cloches de Corneville."
 7 " Breslau: "The Bat."
 7 " Hamburg: "Wildfeuer" (Bortz).
 7.5 " Königsberg: "The Barber of Baghdad."
 8.2 " Naples: "The Elixir of Love."

Play.

- 8.15 p.m. Stuttgart: "Gawain" (Stucken).

MONDAY, February 18.

- Concerts.**
 7 p.m. Leipzig: Hans Pfitzner conducting his own works.
 7 " Riga: Popular concert.
 7.15 " Frankfurt: Church music from the 16th to 18th centuries.
 7.15 " Stockholm: Swedish music.
 7.20 " Eiffel Tower: Orchestral.
 7.30 " Warsaw: International concert (relayed by Berlin, Prague, and Vienna).
 7.50 " Berne: Organ recital.
 8.10 " Hilversum: Jewish night.
 8.15 " Frankfurt: Verdi.

Opera.

- 6.30 p.m. Copenhagen: "Tannhäuser."

TUESDAY, February 19.

- Concerts.**
 6.40 p.m. Lahti: Orchestral.
 7.15 " Breslau: Violin recital by Florizel von Reuter.
 7.30 " Oslo: Orchestral.
 7.40 " Vienna: Popular concert.
 7.45 " Copenhagen: Yugoslavia.
 9 " Copenhagen: Robert Schumann.

Operas and Operettas.

- 6.20 p.m. Katowice: "Tannhäuser" relayed by other Polish stations.
 7.45 " Rome: "The Pearl-Fishers."
 8.30 " Radio Paris: "La Traviata" (Verdi).

Plays.

- 8.30 p.m. Frankfurt: "Oedipus" (Sophocles).
 8.30 " Stuttgart: "Chamber music" (Ilgenstein).
 9.10 " Huizen: "Pilatus" (Frencken).

WEDNESDAY, February 20.

Yugoslavian National Evening: Special programmes from Munich (6.30 p.m.) and Hamburg (7 p.m.), Breslau (8.30 p.m.).

Concerts.

- 6.30 p.m. Stuttgart: Symphony.
 7 " Königswusterhausen: East and West Prussian programme.
 7 " Copenhagen: Band of the Royal Life Guards.
 7 " Oslo: Orchestral.
 7.15 " Cologne (and relays): The Immortal Voice—Caruso (3).
 8 " Hamburg: Symphony.
 8 " Leipzig: Modern Austrian Chamber Music.
 8.30 " Brussels: Relay from Antwerp.

Operas and Operettas.

- 6 p.m. Vienna: "Lohengrin."
 7 " Frankfurt: "Undine" (Lortzing).

- 7 p.m. Ljubljana: Opera (title not given).
 7.5 " Königsberg: "Der Frauenfresser" (Eysler).
 7.45 p.m. Hilversum: "Cavalleria Rusticana" and "I Pagliacci."

Plays.

- 8 p.m. Radio Paris: "The Taming of the Shrew" (Shakespeare).
 8 " Cologne (and relays): "As poor as a Church mouse" (Feodor).

THURSDAY, February 21.

Concerts.

- 6.30 p.m. Munich: Mozart.
 6.30 " Prague: Czech Philharmony.
 6.30 " Vienna: Symphony.
 7 " Copenhagen: Relay from Axelborg.
 7.30 " Oslo: Violin and vocal recital.
 7.30 " Warsaw: Weber.
 7.45 " Rome: Symphony.
 7.55 " Hilversum: Orchestral.
 8.15 " Frankfurt: Waltz Music.
 8.15 " Brussels: Works of Messenger.
 8.30 " Radio Paris: Symphony.

Operas and Operettas.

- 7 p.m. Riga: "La Bajadera" (Kálmán).
 7 " Berlin: (1) "Die Maienkönigin" (Glück), and (2) "Versiegelt" (Blech).
 7 " Stuttgart: "Turandot."
 7.45 " Milan: "Isabeau" (Mascagni).
 8.2 " Naples: "La Poupée."

Plays.

- p.m. Barcelona (EAJI): Selections from "Caridad" and "Las Campanilleros."

FRIDAY, February 22.

Concerts.

- 7 p.m. Langenberg: Orchestral.
 7 " Oslo: Symphony.
 7.15 " Posen, Warsaw: Symphony.
 7.15 " Stockholm: Organ recital.
 7.30 " Milan: Symphony.
 8.40 " Hilversum: The Utrecht Quartet.

Operas and Operettas.

- 7 p.m. Berne: "Martin der Zaubergeiger" (Offenbach).
 7.45 " Rome: "La Bajadera" (Kálmán).
 8.2 " Naples: "Ruy Blas" (Marchetti).
 8.15 " Brussels: Selections from "The Barber of Seville."

Plays.

- 7 p.m. Hamburg: "Etagenhaus" (Pallitzsch).
 8 " Munich: "Das Galgenmännchen" (Schildt).

SATURDAY, February 23.

Concerts.

- 7 p.m. Berne: Bach Fugue.
 7 " Hamburg: Revue.
 7 " Ljubljana: Slovene national songs.
 7.30 " Copenhagen: Hawaiian music.
 7.30 " Munich: Orchestral.
 7.45 " Rome: Military band.
 8 " Brussels: Orchestral.
 8 " Huizen: Choral and Orchestral.

Operas and Operettas.

- 5.30 p.m. Lahti: "The Barber of Seville."
 5.30 " Budapest: "Siegfried."
 6.30 " Riga: "Rigoletto."
 6.30 " Stockholm: "Don Juan."
 7 " Posen: "Paganini" (Lehár).
 7.30 " Stuttgart: "Indra" (Flotow).
 7.45 " Milan: "Isabeau" (Mascagni).
 8.10 " Vienna: "Salon Pitzelberger" (Offenbach).
 8.40 " Prague: "The Poacher."

Play.

- 10.2 p.m. Madrid: "Seraphin the Self-satisfied" (Foglietti-Roig).

(Continued from page 252.)

louse. A.C. 2 (E. 17): Lille. THE GREY SEAL (Ainwick); Warsaw. F. C. G. (Surrey): Toulouse. TRINITY (Edinburgh): Apparently a test; we cannot trace. TAMPSKI (Edinburgh): Toulouse. SANDROCK (Wallasey): Huizen. RIOPSE (Ipswich): Yes, test from 5XX on 197 kh. RADIAND (Treorchy): Budapest. STOCKY (Hulme): Moscow. TARD DEVI (St. Leonards): Yes, Rjukan. YOUNG ENTHUSIAST (Hull): Kalundborg. F. H. (Acton): See details on our identification coupon which you did not enclose. NONREY (M/C): If German station, then Flensburg. FOUR VALVE (Exmouth): Toulouse. AMY (Chadwell Heath): Zurich; (2) Toulouse. R. B. L. (Denny): WGY. G. C. H. (Bournemouth): You must give some details of position, wavelength and programme, and also enclose a coupon. ARDARA (Donegal): Probably a Russian Station between Kiev and Leningrad, but your wavelength estimate is too vague. SATAN (Andover): Toulouse; (2) Radio Maroc. VESUVIUS (Dublin): (1) WGY (Schenectady); (2) WGN (Chicago); (3) KDKA (Pittsburg). QUERY (Wainfelin): Toulouse on new frequency of 602 kh. CELA (Essex): Lille PTT. MAC (Porto): Riga. OSBORNE (Cheltenham): This is likely to have been Radio España, Madrid. SUPER EIGHT (Helensburgh): The name of the Opera is never advertised in advance. POSSIBLE III (Plymouth): Turin. GLENGARIFF (Hove): Toulouse. PETROS (Cardiff): Toulouse on 602 kh. NIPPER (Lincoln): Frankfurt (gymnastic exercises). VULCAN (Devon) Yes, direct but WJZ (zee) not WJD. MELODY (Stafford): WPG, (Atlantic City). FRANK (Harringay): Yes, WPG, direct. BM/LOYC; ENTHUSIAST (Herne Bay); RADIO (Somerset): Toulouse on 602 kh.

The Alternative Postal Service

Whilst retaining in *World-Radio* the usual free published service of "Which Station Was That?" we have instituted a paid postal service, which enables a reply to be posted within forty-eight hours of receipt of details and a stamped addressed envelope. Each enquiry must be accompanied by a coupon and 6d. in stamps or P.O. Each query should be numbered in order to facilitate reply and time transmission was received and whether a.m. or p.m. should be clearly stated. Letters must be addressed to the Editor, "World-Radio," Savoy Hill, London, W.C. 2, envelopes to be marked in left-hand top corner "Postal Query Service."

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

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

A Radio-Music Thief

A listener who possessed more ingenuity than desire to spend his money was, three months ago, brought before the magistrates at Roermond on a charge of "stealing radio-music." The magistrates have just arrived at the decision that he performed the act complained of, but that such act is not punishable under Dutch law. What he had done was to attach one end of a copper wire to the aerial belonging to a neighbouring club and the other end to his own receiving set.

(Continued from page 250.)

have improved. PCJ on the Thursday was more or less up to normal strength, though this transmitter is at rather close quarters to give consistent results. All reports show that at long distances he is well heard. On the same evening, W.2XO, was at even greater strength between 7.0 and 9.0 p.m., quality and a minimum proportion of fading time being outstanding features. Picture transmissions at rather higher wavelength continue to come over strongly. W.2XAF, although at slightly improved volume, is not very clear on either speech or music, and is consequently difficult to follow. I see that W.8XK is now quoted as being on 25.4 metres, that is, below G5SW. If this is actually the case, a station I have sometimes heard rather higher than the latter would appear to be CJRX, Winnipeg, but this I must verify. Huizen on 16.88 metres and with 130 kw. sounds interesting. How many complete world circuits may be anticipated?



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SHORT WAVE STATIONS

| M. | Kh. | |
|-------|--------|---|
| 80 | 3750 | —Nogent-sur-Seine (F8AV). 0.4 kw. |
| 70 | 4285 | —Springfield (Mass.) WBZ. |
| 70 | 4285 | —Vienna (OHKz). (Transmits on SUN. for 15 minutes after each hour from 5 p.m. till midnight). |
| 67.65 | 4434 | —Döberitz (AFK) 5 kw. MON., WED., and FRI., 10—11 a.m. and 6—7 p.m. |
| 66.04 | 4542 | —Cleveland (Ohio) W8XF, 0.5 kw. from mdnt. |
| 65.18 | 4602 | —Newark (New Jersey), 0.5 kw. W2XBA Relays WAAM between 12 midnight and 5 a.m. TUESDAYS, THURSDAYS and SATURDAYS. |
| 62.5 | 4800 | —Pittsburgh East (Westinghouse Electric) W8XK 40 kw. Relays KDKA daily from 10 p.m. |
| 62 | 4838 | —San Francisco (Cal.) W6XAR. 0.5 kw. Relays KJBS from 12 midnight. |
| 61.03 | 4913 | —Council Bluffs (Iowa) W9XU. 0.5 kw. Relays KOIL. |
| 61 | 4918 | —Paris (Radio LL) F8GC. |
| 53.5 | 5123 | —Richmond Hill, N.Y. (W2XE). Relays WABC. Weekdays 11 p.m. to 5 a.m. SUN. 3.50 p.m. to 5.30 p.m. |
| 56.7 | 5291 | —Nauen (AGJ) occasionally after 6 p.m. |
| 54.02 | 5553 | —Columbus (Ohio). W8XJ. Relays WEOA. |
| 54 | 5555 | —Brooklyn (N.Y.) W2XBH, 0.15 kw. Relays WCGU, from 11 p.m. |
| 52.02 | 5767 | —Cincinnati (Ohio) W8XAL. Relays WLW from 11.50 p.m., except Friday and Saturday. |
| 52 | 5775 | —Bergedorf (Germany) AFL, 3 kw. |
| 50 | 6000 | —Karlsborg (Sweden) SAJ. |
| 50 | 6000 | —Moscow, RFN. TUES., THURS. and SAT., 12 noon—1 p.m. |
| 44.4 | 6756 | —Vienna, 0.24 kw. |
| 44 | 6818 | —San Lazaro (Mexico) XC51, 8 a.m. & 8 p.m. |
| 43.5 | 6896 | —Rome (Italy) IMA. SUN., 4—6.30 p.m. |
| 42.8 | 7008 | —Constantine (Tunis) 8KR. SAT., 10 p.m. to midnight. |
| 42.6 | 7042 | —Nairobi (Kenya) 7LO. Daily, 4—7 p.m. Relays 5SW occasionally from 7—8 p.m. |
| 40.2 | 7463 | —Lyons (Rhône) YR. Daily except SUN. from 4.30—5.30 p.m. |
| 37 | 8108 | —Radio Vitus. WED., FRI. and SUN., 9 p.m. to 10 p.m. |
| 37 | 8108 | —Vienna (EATH). MON. and THURS., 9.30—11 p.m. |
| 32.9 | 9118 | —Perth (W.A.) 6AG. 11.30 a.m. and 4 p.m. |
| 32.5 | 9231 | —Sydney (2BL). |
| 32.5 | 9231 | —Copenhagen (7MK). TUES. and THURS. |
| 32.5 | 9231 | —Paris, Eiffel Tower (FL). Time Signal 7.56 a.m. and 7.56 p.m. |
| 32 | 9375 | —Berne (Switzerland) EH02C. |
| 32 | 9375 | —Pontiac (Mich.) W8XAO. 0.75 kw. Relays WJR—WCX. |
| 31.8 | 9494 | —Melbourne (3LO). SUNDAYS, 7—8 p.m. |
| 31.48 | 9529 | —Schenectady (General Electric Co.), N.Y. W2XAF, 10 kw. (Aer.). MON., 11 p.m. to 5 a.m. TUES., 11 p.m. to 4.30 a.m. THURS., 11 p.m. to 5.30 a.m. SAT., 11 p.m. to 5 a.m. Relays WGY. |
| 31.4 | 9554 | —Hilversum, Holland. PCJ. THURS., 6 p.m.—8 p.m., in English; 11 p.m.—12 p.m., in Spanish. FRI., 12 mdnt.—1 a.m., in Portuguese; 1—3 a.m., in Spanish; 6—8 p.m., in English. SAT., 12 mdnt.—1 a.m., in Dutch; 1—4 a.m., in English, French, and Spanish; 4—6 a.m., in English. |
| 31.25 | 9600 | —Bergen LGN. |
| 30.91 | 9706 | —New York (W2XAL). TUES., 12 midnight to 5 a.m. WED. 12 midnight to 2 a.m. FRI., 12 midnight to 4 a.m. SAT., 12 midnight to 3 a.m., 0.5 kw. |
| 30.75 | 9756 | —Agen. TUES. and FRI., 10 to 11.15 p.m. |
| 30.7 | 9772 | —Madrid (EAM). |
| 30 | 10,000 | —Bergen (Norway) LGN. |
| 28.5 | 10,526 | —Sydney (2FC). |
| 25.6 | 11,718 | —Winnipeg (Canada) CJRX. 2-kw. DAILY (except SUN.), from 10.30 p.m.—12.30 a.m., (SAT.) 6 a.m.—7 a.m. |
| 25.53 | 11,751 | —Chelmsford (5SW). 15 kw. (Aer.) DAILY (except SAT. and SUN.) from 12.30—1.30 p.m., and from 7 p.m.—12 mdnt. |
| 25.4 | 11,814 | —Pittsburgh East (Westinghouse Electric) W8XK, relays KDKA. Sundays 4.30—5.30 p.m.: Church Service; 6—8 p.m.: Concert. |
| 24.5 | 12,244 | —St. Assise (France) FW. |
| 22.8 | 13,158 | —Fort Wayne (Indiana) WOWO. 1 kw. After 11 p.m. |
| 22.48 | 10,526 | —Rocky Point (N.Y.) |
| 22.2 | 13,513 | —Vienna. 0.24 kw. |
| 21.96 | 13,706 | —Schenectady (General Electric Co.) W2XAD. SUN., 8.30 p.m. to 4 a.m. MON., WED. and FRI., 11 p.m. to 5 a.m. Relays WGY. |
| 17.2 | 17,441 | —Nauen (AGC). |
| 17 | 17,647 | —Bandoeng, Java (Radio-Malabar) PLF, 30 kw. |
| 16.88 | 17,779 | —Huizen (Holland) PHOHI, 130 kw. Times of transmission irregular. |
| 15.74 | 19,059 | —Bandoeng, Java (Radio Service) PLE WEDNESDAY, 12.40 to 2.40 p.m. |
| 15.5 | 19,354 | —Nancy (France), 9 to 10.0 p.m. |

Last Week's Log

By "NORTHERNER"

MY general conclusion on conditions experienced during the past week is that there has been a very slight but noticeable diminution of signal strength from the majority of stations, the extent of which, by no means great, must warn us that the exceptionally good conditions recently holding could not continue indefinitely, and also that the longer hours of daylight are commencing to give effect.

This diminution in volume has been more prominent on the medium waveband, and amongst others, transmitters such as Brussels, Prague, and Munich have been perceptibly weaker since I last made up this log. Langenberg has been very variable, mostly powerful, but on one or two days much afflicted with sudden fading. On one such evening I was rather surprised to hear Aachen, one of the Cologne relays, at a strength not much less than that of Langenberg. Budapest also has lost somewhat in volume, whilst Frankfurt, like many other Continental stations, is very badly jammed. Hamburg is almost clear of this trouble, but San Sebastian is so near that a heterodyne is only just avoided.

To my mind the most unfortunate change to be reported is that of Toulouse, which for so long was just below Hamburg. The long jump by this French station ended disastrously since he came down almost exactly, so far as I could judge, on the top of Oslo, which latter, after a long stay in a very uncomfortable and much interfered-with position, had at last become one of the reliable transmissions in my district. After this change, neither station was in the least intelligible on either speech or music. On the Friday I noticed that Toulouse was not on this wavelength, nor on his late one, and though I searched for a short time for him, I had no success. Perhaps the limited time at my disposal was not sufficient, and I cannot, therefore, say whether or not he was actually in operation. Zürich, by the way, continues to come in very well and consistently, a welcome improvement after his long stay so near the 600 metre Morse.

I think that there can be no doubt that the best and most reliable transmission to be heard is that from Göteborg, whose volume and quality, with almost complete absence of fading, make it worth tuning whenever in operation. Aberdeen and Belfast both show signs of heterodyne, but Cardiff, sandwiched between Breslau and Gleiwitz, which both relay the same German programme, seems to get through without any trouble, though, as always, at extremely low strength, except upon occasions of freak reception.

In my last report I referred to Turin, and this transmission is still reaching me at very good volume and appears to be always steady, with scarcely any fading. Although I have no information, his test period would now seem to have passed and a regular daily programme put in force, since one may hear news bulletins broadcast. Of the Italian stations I find this one easily the most powerful. The Newcastle-Nürnberg situation has been very much improved so far as I can judge, and on one evening I was able to tune in either of these stations, and also Nice and Rjukan, each separately and without actual heterodyne. The Norwegian relay, however, was rather overshadowed by the Newcastle programme.

Long waves have shown little or no fall in strength but Hilversum has varied very markedly from day to day. One may wonder whether the very intense cold spell over the Continent and Eastern Europe generally can explain the fall in volume to which I referred earlier. Ice and snow on the aerial systems would no doubt lower the radiation efficiency, and according to some news I heard from Toulouse one evening on this subject conditions on the eastern portion of the Continent have been extreme.

During the week short waves fortunately

(Continued on page 249.)

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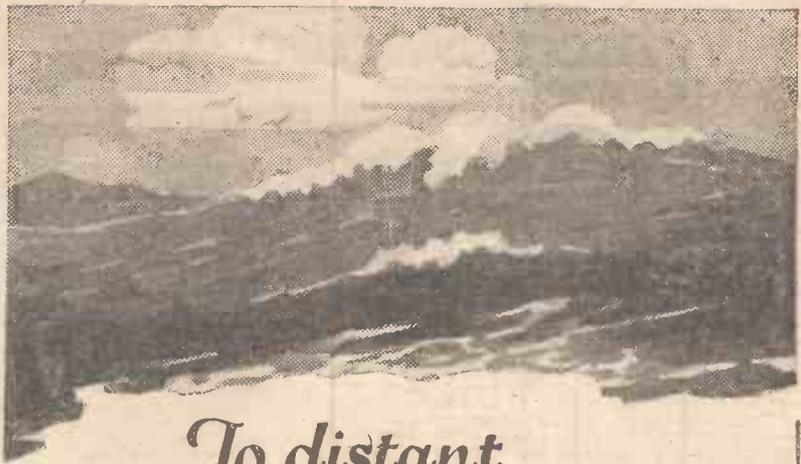
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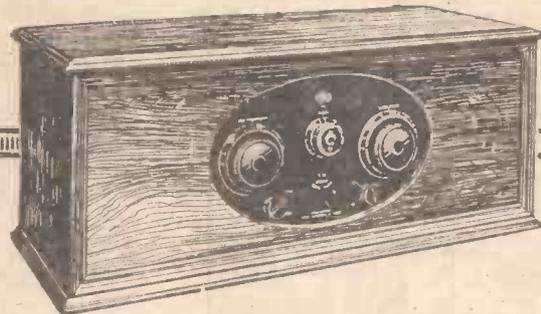


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Which Station Was That?

ANSWERS TO CORRESPONDENTS.

SEARCHER ANGUS II. (Caenaster): Warsaw. Police and Sports news. **KUT** (Cheadle Hulme): Probably **8XK FELIX** (Derby): Copenhagen is on 883 kh. **SCREENED THREE** (Oxford): Grenoble. **INVINCIBLE FIVE** (Burnley): An amateur station. **PORTABLE** (Yorks.): Cork. **MICHEL** (Lee): Budapest. **VICKESSES** (N.W. 11): We cannot deal with amateur stations. **AFGAN** (B' head): Revue from Hamburg. **BIG BEN** (Bolton): Probably Vienna. **BATAVIAN** (S.E. 16): Madrid. **BM/MBSP** (Manchester): Bordeaux or Limoges relaying Ecole Supérieure. **CHIMES** (Notts.): Must have an estimate of wavelength to identify. **SEARCHER ANGUS** (Carnoustie): Probably Moscow (208 metres). **THREE VALVER** (St. Lytham): Schenectady, WGY. **DITTO** (Hull): Impossible to identify with no guidance. See conditions. **GINEC** (E. 5): If kh. approximately correct, Stuttgart; but why "between Cork and London"? **SEMIANANSA** (N.W. 6): Details given are too vague, but probably Dublin. **CLAR-POLIC** (Hove): Katowice. **SEARCHER** (Manchester): Munich, dancing lesson. **H. F.** (Boothe): If your stations are correct, then Angora, but this is doubtful. **ROBIN** (Mans. field): (1) you say "between Hilversum and Kaiserslautern. Do you mean this? If so, we cannot trace; (2) probably Madrid, but your estimate of frequency is absurdly vague. **SEIM JIM** (Purley): Details too vague. It is one of the French PTT stations. **A. G.** (Farncombe): Aeroplane in communication with Croydon aerodrome. Proprietary names must not be used. **SAMBO** (Bloxwich): Eiffel Tower. **W. G. E. 4** (Newcastle): (1) possibly Leningrad; (2) Lahti, Finland. **SHELLY II.** (Wills): W2XG is an experimental station at Rocky Point, U.S.A. It transmits on several wavelengths. **ULSTER** (B'ham.): Surely it was Radio Toulouse. **CAIRO** (L. 19): Eiffel Tower. **SALOPIA** (Hilford): Königswusterhausen. **MARISTOW** (Stroud): Yes, this was 7LO, Nairobi. **F. H. C.** (Leicester): Dublin. **SHORT WAVE COMP** (Bristol): W2XG Rocky Point (U.S.A.). **A. G. I.** (E. 17): If language Spanish, probably Almeria. **SPA** (N.W. 4): Riga. **CANTAB** (Birmingham): Kovo. **PORTABLE FIVE** (Herts.): If above 5XX, Radio Paris. **VALVO** (Leicester): Yes, Eiffel Tower. **SAPPER DAN** (Weston): Katowice. **BM/ZWSJ** (Colchester): Huizen. **THREE VALVES** (Yarmouth): Scheveningen. Haven giving news. **SILLY SUSSEX** (Chichester): Turin. **V. G. W.** (Birmingham): Eiffel Tower. **CURIOS** (Sidcup): Too wide an estimate; possibly Barcelona. **EDWARD** (Eastbourne): W2XG is an experimental station at Tuckerton (U.S.A.). **CURIOS** (Exeter): Gleiwitz. **LANMORE** (Cardiff): Budapest. Grieg concert from Opera House. **ARCHIMEDES TWO** (Herne Hill): 2XG at Rocky Point, testing. **WRECKER** (Sheffield): Bordeaux Lafayette. **VARIO CRYSTAL** (Kent): These were tests from 2LO, London. **ADMIRALTY** (N.W. 6): Norddeich (Germany) shipping and weather news. **A. B.** (Diss): Glasgow. Proprietary names must not be used. **IRON-MONGER** (Derby): Flensburg. **BASH** (W. 12): Turin on 275 metres. **BM/SNMR**: Lille. **PENTODE** (Hue): W2XG, short-wave experimental station of General Electric Co. Schenectady (U.S.A.). **MAC** (Sheffield): Relay of foreign stations by Copenhagen. **ACHTUNG** (Glasgow): Stuttgart relayed from Freiburg. **MARCH III.** (S.E.): Eiffel Tower. **RELDAS** (Minehead): W2XG is located at Rocky Point, U.S.A. **MAC** (Sheffield) and **CURIOS** (Leicester): Bordeaux Lafayette. **SPARKS** (Bristol): Radio Toulouse has changed its frequency to 602 kh. **ROBIN** (Paignton): Eiffel Tower. **SLINGER** (Redhill): Limoges. **ARDLUI** (Northampton): Göteborg. **MEHERALLY** (Thorpe): Eiffel Tower on 202 kh. **ENQUIRE** (Cardiff): Flensburg relaying Hamburg. **JOYCE** (Llanely): Bournemouth testing. **M. O. C.** (Broughty Ferry): You give no estimate of wavelength. **E. D. E.** (Cardiff): Cassel. **LONG FURROWS** (Essex): Riga. **DAWN** (Sunderland): No French station near that wavelength. **HAL** (Cheshire): WJZ (Bound Brook). **SNIGGLES** (N. 16): Ljubljana. **FOUR VALVE** (I.F.S.): Posen. **ALPHA BETA** (E. 4): Turin. **M. O. N. K.** (Bucks.): Bordeaux Lafayette. **SPÉLITE** (Glasgow): Leeds. **FIRST TIMER** (Ashford): Posen. **TREVONNE** (S.E. 27): Breslau, but surely your estimate of position is in error. **A. G. R.** (Aines): (1) WJL or WPG; (2) if above 400 metres WSB; (3) given favourable conditions you should hear several U.S.A. stations on I.S.S. but headphones will help to identify them. **BM/DLM 2**: Toulouse on 602 kh. **GYMRO** (Manchester): This is Hörby on 1,150 kh. **LENRO** (Liverpool): This is Rome. **EVERYMAN** (Waterloo): Toulouse on 602 kh. **SEARCHER** (Glasgow): Riga. **CAMBERIA** (S.W. 11): Yes, Budapest. **V. B.** (Wokingham): 7LO is located at Nairobi, Kenya, and transmits on 42.5 m. between 4 and 7 p.m. **SPIKE** (Manchester): Flensburg relaying Hamburg. **PORTLAND BILL** (Dorset):

(1) yes; (2) no record of this transmission. **PAROLE** WJZ (Bound Brook). **DRIVE** (Southport): No Italian station here, perhaps you mean Lahti. **KNAB** (S.E. 16): Yes, Leningrad. **BAD CALIGRAPHER** (Co. Antrim): WGY (Schenectady) on 700 kh. **L. E. H.** (Hilford): Insufficient evidence of wavelength. Possibly Madrid. Coupon must be enclosed with query. **GOLFER** (Starbeck): Turin. **ENOS** (Radstock): Dresden relaying Leipzig. **SAXOPHONE** (W. 6): This was Brussels. **THEMISTOGLES** (Liverpool): This was Huizen. **EAGLE** (Lincoln): (1) yes; (2) Monday and Thursday at 5 p.m. G.M.T. **MILFORD**: No record of this and you give no wavelength. A coupon must be enclosed with each query. **E. J. M.** (Glasgow): Petit Parisien. **NIGHT** (Kent): Huizen. **ERBERT** (Birmingham): Riga. **COSMOPOLITAN** (York): Huizen. **ATLANTIAUY** (S.E. 18): Possibly 2XAD. **ANGORA** (Pelham Avenue): Are you sure this was not Huizen? **TWIDDLER** (Sheffield): WJZ (Bound Brook). **UNLIMITED THREE** (Stratford): There is a French station here, but it is unidentified as yet. **CHOPIN** (Saltash): Toulouse. **ONE VALVE** (Wills): Most German stations close with the hymn "Austria." **MULLARD** (Newcastle): Milan. **A GOOD SET** (Bolton): Radio Vitus. **LAWRENZO** (Glos.): Dublin. **JUAN** (Stockton Heath): Hörby. **SCREENED THREE** (Sidcup): Kalundborg. **F. R. F.** (Sheffield): Yes, Leningrad. **E. I. B.** (N. 1): If not on same tuning position then you were receiving direct. **THREE VALVER** (N.W.): Possibly Seville. **TAFFY** (Langley Green): Brussels. **3 STAR** (Worthing): WPG, Atlantic City (U.S.A.) on 273 metres. **F. W. B.** (Kent): Stuttgart broadcasting a six days' cycle race. **COSSOR** (Notts.): Probably Turin. **COSMOPOLITAN** (York): Huizen on 890 kh. **BELLSGROVE** (Glasgow), **FOUR TUBE** (Wick), **TOURIST** (Westgate), **GUNNER** (Essex), **NEWCOMER** (Maldon), **SELECTUS** (E. 4), **VALUATION** (Southend-on-Sea): This was Brussels. **POPSY BRASSEHAET** (Antwerp): Posen, which was working on 890 kh. **FIVER** (Brondebury): Probably Leningrad. **KENTAL** (Sheffield): Eiffel Tower relaying Paris PTT. **3 VALVER** (Bexhill): Dublin. **SCOW** (Hants): Newcastle. **ATABOY** (Beds): Dublin. **RED ROSE** (Lincoln): Leningrad. **MAYFIELD** (Acocks Green): Cologne. **GISSY** (Hamstead): Possibly Kaiserslautern at 22 and Nürnberg at 11. Both relaying Munich at this time. **THREER** (Bow): Probably Eiffel Tower. **LADY ENTHUSIAST** (Herts): Barcelona. **CASABIANC** (Grantham): (1) Barcelona, (2) probably Madrid, (3) Vienna. **TETRAOTOB** (W. 11): Leningrad. **SUPERHET 7** (Bristol): Riga. **NEMO** (Cambridge): This is nothing unusual. **J. G. R.** (Glasgow): There is no WMM station. **IMPERIAL** (S.W. 6): Hörby. **JUNCTION** (Bath): Toulouse. **BM/PWM 4**: (1) Riga, (2) yes, Vienna, (3) yes, Munich. **ATLIN** (Haywards Heath): Radio LL. **TWIN** (Forest Gate): Amateur station. **CURIOS** (Tynemouth): Stuttgart. **HOT DOG** (Cheltenham): Experimental station. **SHORT WAYER** (Eton): (1) Rome working on 43.5 metres, (2) experimental trans-Atlantic telephony from Rocky Point (U.S.A.). **F. J. T. R.** (Torquay): Possibly WIOD (Miami Beach), but impossible to identify by programme. **AJAX** (Widnes): Kiel. **BM/DLM 2**: Turin. **GRID** (Manchester): Probably Moscow. **POPSY BRASSEHAET** (Antwerp): Why not Göteborg? **TEL. E. PHONE**: (1) Scheveningen Haven, (2) Eiffel Tower. 3-4 (Bristol): Hörby. **CENTRAL Evesham**: Limoges. **GYMRO** (North Wales): Göteborg. **B. F.** (Enfield) **SOUTHERNER** (Manchester): **KEWRIOS** (S.W. 17): **CAMPANOL** (Ipswich): Yes, Brussels. **SONOMA** (Hants): Bordeaux Lafayette. **O.V. 2** (Birmingham): Copenhagen. **MURRAY** (S.E. 6): Probably Lille PTT and Bordeaux Lafayette. **MELODY**: Lyons. **DINGO** (Suffolk): Cannot trace a European station working at this time. **BRUCE** (Leyton): (1) Gleiwitz; (2) Hilversum; (3) Münster; (4) yes, Motala; (5) Moscow on 1,450 metres. **WRECKER** (Gäster-on-Sea): No French station near this frequency. **PORTLAND BILL** (Dorset): (1) Posen; (2) Paris PTT; (3) Radio Vitus; (4) cannot trace. **NOVICE** (Cardiff): Turin. **SEMLOW** (S.W. 16): You give no details. Possibly Toulouse. **ROSCOE** (W. 11): WJZ (Bound Brook). **SCHOOLHOUSE** (Edinburgh): Radio Toulouse now on 602 kh. **NIGHT BIRD** (Hove): Eiffel Tower. **LITTLEWOOD** (Woldingham): (1) Ljubljana; (2) Turin. **COQUET** (Morpeth): Nürnberg. **TITIAN** (Bury): WJZ (Bound Brook). **ABBEY CRAIG** (Stirling): (1) WGY probably direct; (2) WJZ (Bound Brook) **SENOCKE** (Sevenoaks): Yes, probably WGY. **BM/BSD**: If below Nürnberg, then Flensburg. **TONY** (Hull): WJZ (Bound Brook). **NOBLE PARKER** (N.B.): Eiffel Tower. **3 VALVER** (Salop): WGY (Schenectady). **ELEMESS** (Glasgow): Turin. **I. G.** (Harrogate): Very likely WGY (Schenectady). **UNIVERSAL** **THREER** (Wycombe): Ljubljana. **RAMONA** (Neath): WJZ (Bound Brook). **PIEBALD** (Westfield): 2XG is a telephony station. **OMAR** (Brighton): Eiffel Tower on 202 kh. **ETHER SEARCHER**: Yes, Toulouse is now on 602 kh. **PUZZLEO** (Essex): Eiffel Tower, but below 5XX. **DIMIC FOUR** (Notts.): Direct. **RANGER** (Cardiff): Stuttgart, but probably it relayed Frankfurt. **PUZZLED** (Ipswich): We cannot trace a French station here, but highly probable. **ECOLE** (Gillingham): W2XG. **BUCKO** (Teddington): You must have miscalculated the wavelength, probably Turin. **NO. 5** (M'bro): WJZ (Bound Brook). **MALMAN PINK**: You give no clue to the wavelength, if near 6XX, then Eiffel Tower. **BIG BEN** (Bolton): WJZ (Bound Brook). **ERNIE** (Fallsforth): Berlin, probably relaying Munich. **NEVER TIRED** (Stratford): (1) must have an idea of wavelength; (2) estimate of wavelength too vague; (3) impossible to answer your questions since you give no idea of the wavelengths. **B. S. V.** (Plymouth): Leipzig. **D. A. L.** (Emlayn): Berlin. **OOJAH** (Midhurst): (1) WPG; (2) probably WEAF. **SCREENED GRID 3** (Ibstock): Huizen was giving an English lesson at this time. **S. G. C.** (Norwich): Gleiwitz relaying Breslau (Gramophone records). **GLASSFRY**: Interesting, but we have no record of this relay. **WORRIED CRYSTAL** (S'ham): Nürnberg. **BETA** (Putney): Possibly Huizen, but unable to identify from such a vague estimate. **BM/DLM 2**: Seville and Stuttgart were both giving opera. **ODNO** (Seven Kings): Regret cannot trace. Nothing on this frequency corresponds. **ETHER SEARCHER 2**: (1) Zurich; (2) Manchester. **ELSE** (S.W. 9): No, not Seville, and we cannot trace. **WEST VIEW** (York): Details too vague. Perhaps you mean Budapest. **BERRY** (Cambridge): If just below Hilversum, then Leningrad. **VICTOR 3** (Southfields): Leipzig. **RADIOANO THREE**: (1) Budapest; (4) Posen;

(5) 7 kw.; (6) Toulouse on new wavelength 602 kh.; (7) Oslo. Coupons should not be more than one month old. **INTERESTED** (Yorks.): Probably Dublin. **WINCHMORE**; (1) Barcelona; (2) either Kiel or Hörby. Proprietary names must not be used. **LOB** (Fleet): Toulouse has taken up a frequency of 602 kh. **McSIGGAR** (N.B.): Kiel or Cassel, impossible to say which as you give no programme details. **G. B.** (Manchester): WJZ (Bound Brook). **CHEF** (Reading): Kiel, if you are sure of the wavelength. **M. E. B.** (Edgbaston): Königswusterhausen. **NOT YET FIFTEEN** (Hull): WJZ (Bound Brook) if frequency was near 760 kh. **CHING-FORDIAN** (E. 4): We must have an estimate of wavelength. **INKEY** (Cheltenham): Motala. **WANANO** (Kent): No Spanish station near this frequency. Probably EAJ13 (1,140 kh). **COB** (S.E. 1): How much above 5GB? **PHOBOS** (Kent): Possibly Kaiserslautern. **ALIENS** (Eccles): Turin. **BM/RW 4F**: Königsberg. **SHORT WAVE WALLY** (Ipswich): (1) experimental trans-Atlantic; (2) telephony service between New York and London; (4) W2XAF; (5) either 8XK or 2XE. **ALDERBURY** (Croydon): Kaiserslautern. **ROYAL MAINE** (Gosport): Relay of 5SW by W2XE. **H. B.** (Pitsea): (1) probably Kootwyk; (2) WND is an experimental station at Ocean Township, N.J. (U.S.A.) and works on 10-35 m. **CHAMBER MUSIC** (Birmingham): This was Posen. **PEP III**: (1) and (2) probably Leningrad. **MARLBROOK** (Evesham): Budapest relayed by a Russian station. **C. T. W.** (Cornwall): We doubt whether this station was below Flensburg. **H. B.** (Barrow): WJZ (Bound Brook). **BIG BEN** (Cambs.): Probably Hilversum. **SEARCHER** (Derry): Posen. **J. A. A.** (Lusich): Turin. **INQUISITIVE** (Lichfield): Glasgow. **A. H. B.** (Birmingham): Nürnberg. **GLEN** (Bognor): Relay of Carnival meeting would account for this. **3VHV**: (1) Munich; (2) cannot trace on suggested wavelength; (3) Fredrikstad relaying Oslo; (5) Königsberg; coupons must not be more than one month old (see *World-Radio*, January 18). **EX-CHARGE** (St. Anne): Nürnberg. **GESTRIAN** (Cheshire): Probably Döberitz on 39.6 m. **GEBEL TARIK** (Kent): Radio Toulouse on 602 kh. **PIEBALD** (Westfield): Kootwyk (PCR, 36 m.). **ARTHUR** (Bournemouth): This was Radio Toulouse. 24785 EA: Turin. 4 VALVE (N.B.): WPG (Atlantic City). **SEEKER** (Oldham): Dublin. **MOUNT OTTO** (Sunderland): Toulouse on 602 kh. **FLASH** (Leeds): Katowice. **S. D. I.** (Yorks.): This may have been Barcelona. **ARCHIMEDES TWO** (Herne Hill): Possibly relay of KDKA by WBZ, but cannot confirm. **D. A. L.** (Emlayn): Probably Kharkov. **KINGSTON**: Toulouse testing. **PINK** (Bristol): Details too vague. **TOUT LE MONDE** (York): Fredrikstad relaying Oslo. **SQUIREL** (Essex): 2XAD relaying 5SW. **BM/VRE 6**: Possibly you heard WIOD (Miami Beach). **BM/BSD**: (1) Milan; (2) Huizen. **CANATINK** (Bedford): Yes, Göteborg. **WORNALL** (Tonbridge): Cannot trace these songs. **W. A. L.**: Insufficient details. **WOTAN** (Bognor): Possibly Bilbao, but cannot confirm. **OMIAT** (Sanderstead): You mention no time. Possibly Münster relaying Cologne. **MELFORD** (Surrey): Stettin. **BM/BAFH**: Limoges. **BARROW-IN-FURNESS**: (1) W8XK on 25.3 m.; (2) surely the new Huizen station (10.88 m.). **POMPEY** (S.E. 9): W2XO. **GLAD EYE** (Sheffield): (1) Madrid; (2) Katowice; (3) Dublin. **BONK** (Essex): Eiffel Tower or Warsaw. **OSWALD** (London): Possibly St. Assise, France. **DAB CHICK** (Notts.): Nürnberg. **SHAIBA** (Bristol): This was Cologne's programme; (2) Münster. **SKY SAEI**: WGY. **KNOWLE FIELDS**: Cannot trace such a short wave station. **KISH-WOSKI** (Leicester): Leipzig. **HOAKEY** (Farncombe): Rome or Paris PTT. **FIRST SHOT** (Surrey): Zurich. **R7470**: (1) 2XAD testing with Kootwyk; (2) W8XK. **EBONITE** (Leicester): Stuttgart, probably gramophone records. **CRUSADER** (S.W. 8): Are you sure it was Jan. 26, not 27? **QUE ES ESTE** (Belfast): Kiel relaying Hamburg. **CANTAB**: Probably Bordeaux Lafayette. **FATTY** (Rhyly): Bordeaux Lafayette. **LOUGHORIAN**: Do you mean 250 or 350 metres? London and Cardiff are not near either. **J. E. H.** (Keighley): Kharkov. **DANDROCK** (Wallasey): Königsberg. **LOWER 6** (Bridlington): Riga. **REFLEX** (Croydon): Nürnberg. **GROSVENOR** (North Shields): Seville. **3BN** (Bexhill): Possibly San Sebastian. **SCREENED FOUR** (W. 2): Perhaps Koscice, but your estimate of wavelength is vague. **PHANTOM** (Manchester): Limoges. **NAMYRERE** (N. 1): Turin. **THREE VALVE** (Caterham): Madrid. **FAMILY FOUR** (Tyldesley): Wavelength too vague. **ENOS** (Radstock): Are you sure it was not Frankfurt? **TIGGUA-COBAUC** (Cardiff): We do not recognise the call sign. **AULD REEKIE** (Edinburgh): Katowice. **TYNESIDER** (Northumberland): We must have an estimate of wavelength or position of station as at least six stations had orchestral concerts at that time. **SANDY COVE** (Kingstown): Hilversum. **H. F.** (Northwood): Oslo relay of foreign stations. **TONSIL** (Birmingham): Madrid relay of opera from Barcelona. **PONT** (Edenbridge): Lightship. **E. V. B.** (Portsmouth): Probably Mont de Marsan on 1,300 kh. **CRYSTAL DETECTOR** (Catford): (1) harmonic television transmission; (2) Kootwyk; (3) Nauen. All this with a crystal set? **MARVELOUS TWO** (Bradford): WJZ (Bound Brook). **DUCHESS** (I.O.W.): Toulouse. **LIVERPOOL**: Yes, WJZ. **DUMYAT** (Essex): Cannot trace in programmes. **3 VALVER** (Cambridge): (1) Bordeaux Lafayette; (2) Lyons. **BM/HNTC**: Toulouse on 602 kh. **W.P. 7** (Walton): Madrid (EAJ7). **WELLCRAM** (Reocar): WJZ (Bound Brook). **L. A. J. B.** (Herts): (1) WJZ (Bound Brook); (2) WGY (Schenectady); (3) Lahti; (4) no record of this (apparently an amateur). **TYRO** (Barnsley): Yes, WGY direct. **HF42**: (1) possibly W2XAG; (2) W8XK; (3) 2,250 miles; (4) 1,330 miles. Coupons over one month old are not valid. **VULCAN ROYAL** (Binley): (1) possibly Stuttgart relaying 6 days' cycle race; (2) WJZ (Bound Brook). **LABEX** (Redditch): (1) Posen; (2) was not this also Posen? **MACKBR** (Sussex): Turin. **ROSSLYN** (Oxon): Probably Lille. **YELTAR** (Northampton): (1) Radio Paris, if estimate of frequency is correct; (2) Lyons. Relay of a Pasdeloupe concert. **AMATEUR** (Grimsby): Stuttgart relaying 6 days' Cycle Race. **UNITED** (Sheffield): (1) Stuttgart; (2) WPF. **GRID BIAS** (Notts): (1) Madrid; (2) Norddeich, weather and shipping news on 183 kh. **ZÉRO** (Uffculme): Brussels. **BLACKDYKE FOUR** (Brandon): Seville. **CANARY** (Birkenhead): WGY. **LINNET** (Birkenhead): Königsberg. **AUBURN** (Newcastle): WPG. **SHOE SNOB** (Wills): WJZ (Bound Brook). **MIDLAND** (Brid): WGY. **BUY BRITISH** (Birmingham): Königsberg. **MARVELOUS TWO** (Bradford): Probably Stuttgart. **DET 2LF** (Gillingham): Huizen. **PYM**: (1) WJZ; (2) San Sebastian. **SAX THREE** (Blackpool): (1) yes, WGY direct; (2) WJZ. **OPTIMIST** (S.W. 10): Leningrad. **ROZZER** (W. 5): Possibly WABC (New York). **SEARCHER** (Worksop): Oslo. **MARVELOUS TWO** (Bradford): **CARP**: Toulouse. **AWK** (Torquay): (1) probably a relay of 6XX by Warsaw; (2) Toulouse is now on 602 kh. **GRUSHER** (Gillingham): Tou-

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8. Name and address.
9. Nom de plume. (Proprietary names must not be used.)

(Continued on page 249.)

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| 5. Lustreless Hair | 11. Fading Hair |
| 6. Hair Losing Colour | 12. Grey Hair |

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"I have received great results from your first month's treatment. The bald patches are covered with new hair which is quite long. The rest of my hair is in fine condition, as you will note on the photograph I am sending you, as I think you would like to see the results of your work."
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"My hair has wonderfully improved during this first month's treatment. Falling out has ceased. It has more life in it, much softer and not as dry and brittle, and is getting full of lustre. Many of my friends have told me recently how well my hair is beginning to look."
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"I am much obliged to you for the treatment. It is really successful; I have grown hair on the bald parts. It is no use making a long eulogy of your capabilities, but all I need say, in short, is your treatment is a miracle, and hope it will now come to the knowledge of humanity at large."—Mr. C. A. B.



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"My hair is getting much stronger and the dandruff has completely gone. The bald places are now covered all over with new hair, which seems to strengthen every day, and I am very pleased with the results of the treatment."
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"Am pleased to say my hair has wonderfully improved in every way. After trying many so-called remedies yours is the only one that has brought any success. I only wish I had known of your treatment before."
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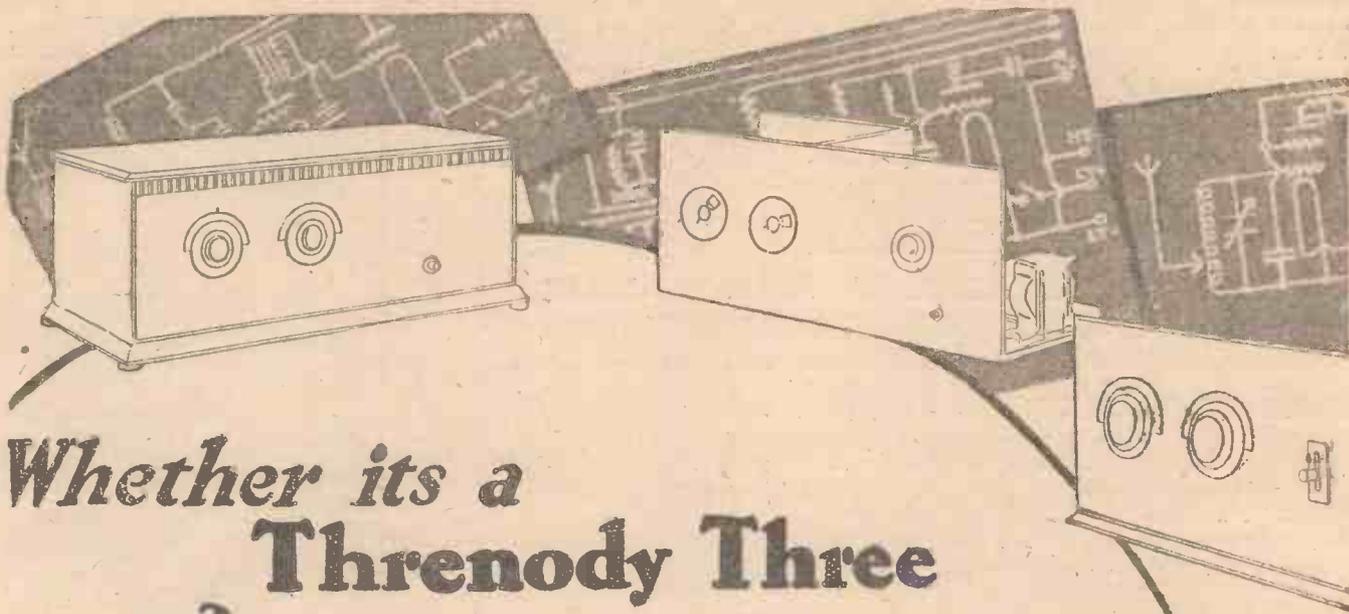
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DAVENTRY PROGRAMME

(Feb. 17—Feb. 23) (25 kw.)

SUNDAY (17)

- 10.30 a.m.—Time Signal (Greenwich). Weather Forecast.
3.30 p.m.—A Concert by Kate Winter (Soprano), Sinclair Logan (Baritone) and The Olof Sextet.
5.0 p.m.—Children's Service. From St. John's, Westminster. Conducted by the Rev. Canon C. S. Woodward.
5.30 p.m.—Scenes from Old Testament History. Sennacherib threatens Hezekiah.
5.45—6.15 p.m. (approx.)—Church Cantata (No. 65) Bach: "Sie werden aus Saba Alle kommen" ("The Sages of Saba") Relayed from the Guildhall School of Music.
6.30 p.m.—Service in Welsh, relayed from Capel Gomer Welsh Baptist Church.
8.0 p.m.—A Religious Service, from All Hallows Church, Lombard Street. Address: The Rev. Canon Tislington Tatlow, D.D., Gen. Secretary Students' Christian Movement.
8.45 p.m.—The Week's Good Cause: Appeal on behalf of the Wallingford Farm Training College of the National Union for Christian Social Service by Sir John Martin Harvey.
8.50 p.m.—Weather Forecast, General News Bulletin. Local Announcements. Shipping Forecast.
9.5 p.m.—A Military Band Concert: Olive Kavann (Contralto), Jeanne Chevreau (Harp). The Wireless Military Band. Conducted by B. Walton O'Donnell. Overture, "Poet and Peasant" (Suppe).
9.18 p.m.—Olive Kavann: I know a lovely garden (Guy d'Hardelot), Lullaby (Cyril Scott), Fairy Pipers (Brewer).
9.25 p.m.—Band: Selection, "Faust" (Gounod).
9.45 p.m.—Jeanne Chevreau: Fileuse (Spinning Woman) (A. Hasselmann), Bourree (H. Torgerson).
9.55 p.m.—Band: Réverie, "The Voice of the Bells" (Luigini), Serenata (Moszkowski), Minuet, "My Lady Lavender" (Leo Peter).
10.12 p.m.—Olive Kavann: Mifanwy (Dorothy Forster), Away on the Hill (Landon Ronald).
10.20 p.m.—Band: Intermezzo, "Loiu du Bal" (Far from the Ball) (Gillet), Graceful Dance ("Henry VIII.") (Sullivan), The Flight of the Bumble Bee (Rimsky-Korsakov).
10.30 p.m.—Epilogue: God is Love.

MONDAY (18)

- 10.15 a.m.—The Daily Service.
10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
10.55 a.m.—Mrs. M. I. Crofts, LL.B.: "The Law and the Home—VII, The Law and Parents—II."
11.0 a.m.—Gramophone Records.
12.0 noon.—A Ballad Concert: Gladys Lack (Mezzo-Soprano), Wilfred Howe-Nurse (Light Baritone).
12.30 p.m.—Jack Payne and The B.B.C. Dance Orchestra.
1.0 p.m.—The Piccadilly Hotel Orchestra, directed by Leonardo Kemp.
2.0 p.m.—Reading in German, by Otto Siepmann.
2.20 p.m.—Musical Interlude.
2.30 p.m.—Miss Rhoda Power: "What the Onlooker Saw (Course II)—Tudor and Stuart Times—VI, The Discovery of the Bermudas."
2.55 p.m.—Musical Interlude.
3.5 p.m.—Miss Rhoda Power: "Stories from Mythology and Folk-lore: The Story of the First Hyacinth."
3.20 p.m.—Musical Interlude.
3.30 p.m.—A Ballad Concert: Minna Woodhead (Soprano), Robert Beresford (Baritone), George Ackroyd (Flute).
4.15 p.m.—Alphonse du Clos and his Orchestra.
5.15 p.m.—The Children's Hour.
6.0 p.m.—"My Day's Work—VII, A Country Doctor's Dispenser."
6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
6.30 p.m.—Girl Guide Talk.
6.45 p.m.—The Foundations of Music: Handel's Violin Sonatas. Played by Eda Kersey. Sonata in C minor.
7.0 p.m.—Mr. James Agate: Dramatic Criticism.

- 7.15 p.m.—Musical Interlude.
7.25 p.m.—Monsieur E. M. Stéphan: French Talk—III, A Practical Demonstration with an English Student.
7.45 p.m.—Vaudeville: Dorothy McBlain (The Girl who Whistles in her Throat), Jack Morrison (Impersonations), Rudy Starita (Saxophone Solos), Gwen Lewis (Entertainer at the Piano), Albert Whelan (The Australian Entertainer), Jack Payne and the B.B.C. Orchestra.
8.40 p.m.—H.R.H. The Prince of Wales, speaking at the British Industries Fair Banquet. Relayed from the Mansion House.
9.0 p.m.—Weather Forecast, Second General News Bulletin; Local Announcements; Shipping Forecast.
9.20 p.m.—Dorothy Ward and Shaun Glenville (At Home and Abroad-casting).
9.35 p.m.—Chamber Music: The Poltronieri String Quartet: Alberto Poltronieri (Violin), Guido Ferrari (Violin), Fiorenzo Mora (Violin), Antonio Valisi (Violoncello). The International String Quartet: André Mangeot (Violin), Boris Pecker (Violin), Frank Howard (Viola), Herbert Withers (Violoncello), Ethel Bartlett and Rae Robertson (Duets on Two Pianofortes). Poltronieri and International Quartets: Octet in E flat, Op. 20 (Mendelssohn).
10.5 p.m.—Ethel Bartlett and Rae Robertson: Concerto Pathétique (Liszt).
10.20 p.m.—Poltronieri and International Quartets: Octet in One Movement. (Eugene Goossens).
10.40 p.m.—Ethel Bartlett and Rae Robertson: Carnival (Lyal Barbour), Lonely Sailing Ship (from Suite, "St. Tropez") (Hugo Anson), Hardanger (Arnold Bax).
10.50 p.m.—Poltronieri and International Quartets: Scherzo from Octet in A (Svendsen).
11.0 p.m.—A Hand at Auction Bridge, played by Major H. S. Browning, Mr. A. E. Manning Foster, Mrs. Stafford Northcote, and Mr. Jack Dalton.
11.15 p.m.—12.0 midnight.—Dance Music.

TUESDAY (19)

- 10.15 a.m.—The Daily Service.
10.30 a.m.—Time Signal (Greenwich). Weather Forecast.
10.45 a.m.—"Menus and Recipes—Veal and Fish."
11.0 a.m.—Gramophone Records.
12.0 noon.—A Concert: Charles I. Record (Baritone). The Celtic Harp Trio.
1.0 p.m.—2.0 p.m.—Alphonse du Clos and his Orchestra: from the Hotel Cecil.
2.0 p.m.—2.25 p.m.—Experimental transmission of still pictures by the Fultograph Process (and at this same hour on the remaining days of the week).
2.30 p.m.—Sir Walford Davies: (a) A Beginner's Course, (b) An Intermediate Course with a Short Concert, (c) A Short Advanced Course.
3.30 p.m.—Musical Interlude.
3.35 p.m.—Monsieur E. M. Stéphan: Elementary French.
4.0 p.m.—Louis Levy's Orchestra, conducted by Arnold Eagle.
4.15 p.m.—The Rev. J. A. Nairn, D.Litt.: "The Classics in Translation—III, The Translators of the Augustan Age."
4.30 p.m.—Orchestra (Continued).
5.15 p.m.—The Children's Hour.
6.0 p.m.—A Reading from the Poems of John Drinkwater.
6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
6.30 p.m.—Musical Interlude.
6.45 p.m.—The Foundations of Music.
7.0 p.m.—Questions for Women Voters—IX, "Should Wages be Supplemented by Family Allowances?" A Discussion between Miss Eleanor Rathbone and Professor D. M. MacGregor.
7.15 p.m.—Musical Interlude.
7.25 p.m.—Professor W. E. S. Turner: "Glass in Modern Civilization—V, Breakable and Unbreakable Glass."
7.45 p.m.—A Military Band Concert: Francis Russell (Tenor), Louis Pecsikai (Violin). The Wireless Military Band, conducted by B. Walton O'Donnell.

- 8.0 p.m.—Professor Leonard Russell: "The Modern Outlook" How it Arose—V, The Reasons of the Heart."
8.30 p.m.—Concert (cont.).
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Sir Walford Davies: "Music and the Ordinary Listener."
9.35 p.m.—Local Announcements. Shipping Forecast.
9.40 p.m.—Two Plays: X-O. A Night of the Trojan War. A Poetic Play by John Drinkwater. The Characters: Pronax, Salvius, (Greeks); Ilius, Capys, (Trojans); A Greek Sentinel, A Greek Servant. "Incorrigible" A One-Act Play by A. J. Talbot. The Characters: Edward Pilkins, an author who has yet to arrive, Aubrey Smythe (present day), Oliver Smith (1675), Frobisher Smith (1587), Literary and dramatic critics. "Tut-Tut-Smith, Lord High Critic at Pharaoh's Court shortly after the Exodus. John Bunyan. William Shakespeare, Moses (The well-known authors), Turnkey, Hebrew Servant.
10.40 p.m.—12 midnight.—Dance Music.

WEDNESDAY (20)

- 10.15 a.m.—The Daily Service.
10.30 a.m.—Time Signal (Greenwich). Weather Forecast.
10.45 a.m.—A Woman's Commentary by Mrs. Oliver Strachey.
11.0 a.m.—Gramophone Records.
12 noon.—Gramophone Records.
12.30 p.m.—A Ballad Concert. Molly Everington (Soprano), Reginald Olley (Baritone).
1.0—2.0 p.m.—Gramophone Records.
2.30 p.m.—Miss C. Von Wyss: "Nature Study for Town and Country Schools—VI. Awakening of Frogs and Toads."
2.55 p.m.—Musical Interlude.
3.0 p.m.—Mr. J. C. Stobart and Miss Mary Somerville: "Foundations of Poetry—(Course II.), English Poetry from Milton to Wordsworth—Blake."
3.30 p.m.—Mrs. M. M. Priestley: "Reading for Busy Women—V. Detective Stories."
3.45 p.m.—Light Classical Music. Theresa Gordon (Mezzo-Soprano), Evelyn Ruegg (Violin), Milly Stanfield (Violoncello), Bertha Hagart (Pianoforte).
4.45 p.m.—Organ Recital by Edward O'Henry.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Wireless Organisations Bulletin.
6.5 p.m.—Gramophone Records.
6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
6.30 p.m.—The Week's Work in the Garden.
6.40 p.m.—Musical Interlude.
6.45 p.m.—The Foundations of Music.
7.0 p.m.—Sir Woodman Burbridge: "The British Industries Fair." (Under the auspices of the Department of Overseas Trade.)
7.15 p.m.—Musical Interlude.
7.25 p.m.—Professor V. H. Mottram: "Diet: Its Principles and Practice—V. The Fuel Foods (for Body Warming)."
7.45 p.m.—A Recital by Olive Groves (Soprano), Katherine Goodson (Pianoforte).
8.30 p.m.—Yugoslavia. A National Programme.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mr. George W. Pearson: "The Future of the Cinema"—IV.
9.30 p.m.—Local Announcements. Shipping Forecast.
9.35 p.m.—"The Emerald Isle," or The Caves of Carrig-Cleena. A Comic Opera in Two Acts, written and told by Basil Hood. Composed by Arthur Sullivan and Edward German. The Earl of Newtown, K.P. (Lord-Lieutenant of Ireland), Dr. Fiddle, D.D. (his Private Chaplain), Terence O'Brian (a Young Rebel), Professor Bunn (Shakespearean Reciter, Character Impersonator, etc.), Pat Murphy (a Fiddler), Black Dan, Mickie O'Hara (Irish Peasants), Sergeant Pincher, Private Perry (H.M. 11th Regiment of Foot), The Countess of Newtown, Lady Rosie Pippin (her daughter), Molly O'Grady (a Peasant Girl), Susan (Lady Rosie's Maid), Nora, Kathleen (Peasant Girls). The Wireless Chorus (Chorus Master, Stanford Robin-

- son), the Wireless Orchestra conducted by John Ansell!
11.0 p.m.—12 midnight.—Dance Music.

THURSDAY (21)

- 10.15 a.m.—The Daily Service.
10.30 a.m.—Time Signal (Greenwich). Weather Forecast.
10.45 a.m.—"Our Boys and Girls" Mr. F. M. Earle, "Choosing the Best Work for your Boys"—I.
11.0 a.m.—Gramophone Records.
12.0 noon.—A Concert. Nellie Palliser (Mezzo-Soprano), John Dunn (Violin), Enid Wykes (Pianoforte).
1.15—2.0 p.m.—A Mid-day Concert. The City of Birmingham Orchestra, conducted by Adrian Boult. Relayed from the Town Hall, Birmingham.
2.30 p.m.—Mr. A. Lloyd James: "Speech and Language."
2.50 p.m.—Musical Interlude.
3.0 p.m.—Evensong, from Westminster Abbey.
3.45 p.m.—Letters from Overseas.
4.0 p.m.—A Concert in the Studio. Joseph Green (Tenor), Margaret Holloway's Ladies' Orchestra.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Lenten Address. The Rev. Eric Southam, M.A., "Teach us to Pray—II, When ye pray say, "Hallowed be Thy Name."
6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
6.30 p.m.—Market Prices for Farmers.
6.35 p.m.—Musical Interlude.
6.45 p.m.—The Foundations of Music.
7.0 p.m.—Mrs. M. A. Hamilton, "New Novels."
7.15 p.m.—Musical Interlude.
7.20 p.m.—Mr. H. G. Dalway Turnbull, "India—V, The Life of the People."
7.40 p.m.—A Pianoforte Recital by Berkeley Mason: Intermezzo, Op. 116, No. 2; Capriccio, Op. 116, No. 3 (Brahms), Humoresque (Balfour Gardiner).
7.50 p.m.—Hallé Concert, from the Free Trade Hall, Manchester. The Hallé Orchestra, conducted by Sir Hamilton Harty. William Murdoch (Pianoforte). Concerto in F for Pianoforte and Orchestra (Haydn), The Fountains of Rome (Respighi).
8.33 p.m. (approx.)—Poems read by Miss Lilian Harrison.
8.43 p.m. (approx.)—Hallé Concert (continued) Suite, "The Love of Three Oranges" (Prokofieff) (First time in Manchester), Pianoforte Solo, "Carnaval" (Schumann), Francesca da Rimini (Tchaikovsky).
9.40 p.m.—Weather Forecast, Second General News Bulletin, Local Announcements, Shipping Forecast.
10.0 p.m.—Mr. Vernon Bartlett, "The Way of the World."
10.15 pm.—Surprise Item.
10.30 p.m.—12.0 midnight.—Dance Music.

FRIDAY (22)

- 10.15 a.m.—The Daily Service.
10.30 a.m.—Time Signal (Greenwich). Weather Forecast.
10.45 a.m.—"Menus and Recipes."
11.0 a.m.—Gramophone Records.
12.0 noon.—Miscellaneous: A Sonata Recital, Helen Luard (Violoncello), Maude Dixon (Pianoforte), Sonata in F (Brahms).
12.30 p.m.—Organ Recital, by Leonard H. Warner (from St. Botolph's, Bishopsgate). First Sonata (Borowski), Two Choral Preludes (Parry), Scherzo (Harvey Grace).
1.0—2.0 p.m.—Lunch Time Music, Moschetto and his Orchestra.
2.30 p.m.—Dr. B. A. Keen, "The Why and Wherefore of Farming—(Course II), Agriculture in the British Isles: VI, The Broad Divisions (Continued)."
2.55 p.m.—Musical Interlude.
3.0 p.m.—Mr. J. Granville Squiers: "Round the World—The Pampas and the Gauchos."
3.20 p.m.—Musical Interlude.
3.25 p.m.—Mrs. Amabel Williams-Elis: "Great Discoverers—VI, Pasteur."
3.40 p.m.—Musical Interlude.
3.45 p.m.—Concert to Schools, under the direction of Sir Walford Davies. The Sybil Eaton String Quartet. Sybil Eaton (First Violin), Pierre Tas (Second Violin), Raymond Jeremy (Viola), Allen Ford (Violoncello), Christine McClure (Mezzo-Soprano).

- 4.30 p.m.—Frank Westfield's Orchestra.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Mr. W. Powell-Owen, "The Small Poultry Keeper—III, Poultry Keeping as a National (and non-Nuisance) Asset."
6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
6.30 p.m.—Ministry of Agriculture Fortnightly Bulletin.
6.45 p.m.—The Foundations of Music.
7.0 p.m.—Mr. G. A. Atkinson, "Seen on the Screen."
7.15 p.m.—Musical Interlude.
7.25 p.m.—Professor H. Munro Fox: "Mind in Animals—V, The Modern View of Instinct."
7.45 p.m.—A Light Orchestral Concert Alice Moxon (Soprano), The Wireless Orchestra, conducted by John Ansell.
9.0 p.m.—Weather Forecast, Second General News Bulletin, Local Announcements, Shipping Forecast.
9.20 p.m.—"Scottish Nationalism"—a Discussion between Mr. Compton Mackenzie and Mr. Robert Boothby, M.P.
10.20 p.m.—"Airy Nothings" (Second Edition). 2LO—calised by Gordon McConnell, with the assistance of Anona Winn, Horace Percival, Piers Osborne, John Derwent. Pianos: Patricia Rossborough and Doris Arnold.
11.0 p.m.—12.0 midnight.—Dance Music.

SATURDAY (23)

- 10.15 a.m.—The Daily Service.
10.30 a.m.—Time Signal (Greenwich). Weather Forecast.
10.45—11.0 a.m.—Miss Ann Kindersley, "Handicraft in Colours."
1.0—2.0 p.m.—The Carlton Hotel (Octet, directed by René T'Apponnier.
3.30 p.m.—Instrumental Solos. Pierre Fol (Violin), Jessie Cornack (Pianoforte).
4.0 p.m.—Dance Music. Alfredo and his Band.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Musical Interlude.
6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin, Announcements and Sports Bulletin.
6.40 p.m.—Musical Interlude.
6.45 p.m.—The Foundations of Music.
7.0 p.m.—Mr. Harvey Grace, "Next Week's Broadcast Music."
7.15 p.m.—An Eye-Witness Account by Mr. L. J. Corbett of the Wakes v. France Rugby International.
7.30 p.m.—A Popular Symphony Concert. Antonio Brosa (Violin), The Wireless Symphony Orchestra, Leader, S. Kneale Kelley, conducted by Stanford Robinson.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mr. C. R. Ashbee, "The Ugliness Exhibition—Can we save the Countryside?"
9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—Vaudeville, Clapham and Dwyer (in another Spot of Bother), Hereward Drysdale (Whistling Solos), Mammie Souther (The Queen of Comedy), Tommy Handley (Comedian), A Variety Item from The London Palladium. Jack Payne and the B.B.C. Dance Orchestra.
10.35 p.m.—12.0 midnight.—Dance Music.

Continued from p. 257.

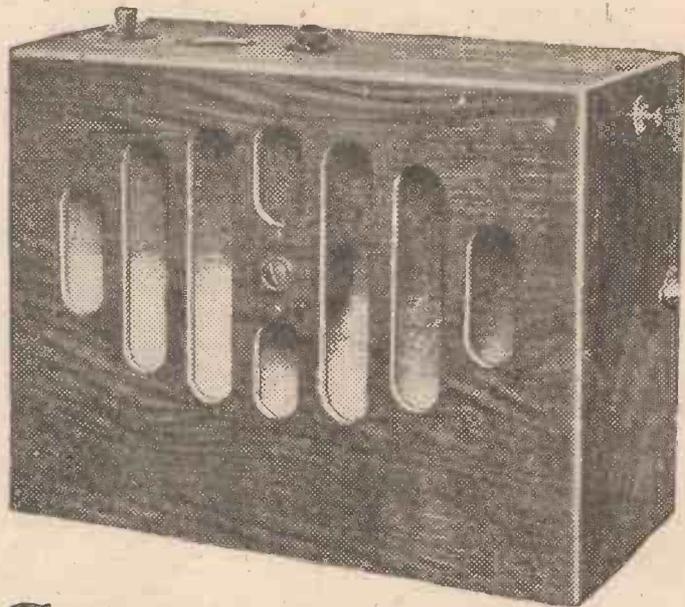
- 9.0 p.m.—Three Studies in Terror: "In a Gondola" by Robert Branning. Presented by Ida Gilbert and Gabriel Toyne. "Danger," By Richard Hughes. Jack (Stuart Vinden), Mary (Vera Ashe), Mr. Byd (George Worrall). The scene is a gallery in a Welsh coal mine. "The Man with a Flower in His Mouth," by Luigi Pirandello. The Man with a Flower in his Mouth (Gabriel Toyne); A Belated Traveller (Howell Davies). The scene is the pavement outside a cafe shortly after midnight. Incidental Music by The Midland Pianoforte Sextet, Winifred Cockerill (Harp), St. Martin's Male Voice Quartet.
10.0 p.m.—Weather Forecast, Second General News Bulletin.
10.15 p.m.—Sports Bulletin.
10.20 p.m.—11.15 p.m.—Another Sing-Song. The Birmingham Studio Chorus and Orchestra (Conducted by Joseph Lewis), Dale Smith (Baritone).

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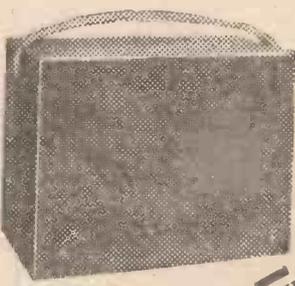


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DAVENTRY (EXPERIMENTAL) PROGRAMME

(5 GB) (482.3 metres: 622 kh) (24 kw.) (Feb. 17—Feb. 23)

SUNDAY (17)

- 3.30 p.m.—A Band Concert. Hardy Williamson (Tenor); David Wise (Violin); Callender's Band, conducted by Tom Morgan.
- 7.55 p.m.—A Religious Service. From the Cathedral, Birmingham. Conducted by the Very Rev. F. B. McNutt (Provost and Archdeacon of Leicester).
- 8.45 p.m.—The Week's Good Cause. Appeal on behalf of the Walsall General Hospital, by Mr. Walter Francombe (Secretary).
- 8.50 p.m.—Weather Forecast, General News Bulletin.
- 9.0 p.m.—A String Orchestral Concert. The Birmingham String Orchestra, conducted by Joseph Lewis. Variations on Barbara Allen (Adam Carse). George Baker (Baritone) and Orchestra: Aria, "Revenge! Timotheus cries!" ("Alexander's Feast") (Handel).
- 9.20 p.m.—Sheridan Russell (Violoncello) and Orchestra: Sonate en Concert (Vivaldi, arr. D'Indy).
- 9.35 p.m.—Orchestra: Suite, "Cakes and Ale" (Felix White). George Baker: Ethiopia saluting the Colours (Charles Wood), Britanny (Ernest Farra), The Holy Child (Easthope Martin).
- 9.50 p.m.—Orchestra: Two Melodies, Op. 53 (Grieg). Sheridan Russell and Orchestra: Adagio (Tartini), Gavotte and Menuet (Veracini), Menuet (Valensin).
- 10.10 p.m.—Orchestra: Serenade in E (Dvorak).
- 10.30 p.m.—Epilogue.

MONDAY (18)

- 3.0 p.m.—Lozells Picture House Orchestra, conducted by E.A. Parsons. Leonard Gordon (Baritone).
- 4.0 p.m.—Jack Payne and the B.B.C. Dance Orchestra. Cecil Harrington and John Oliver (in Syncopation and Harmony).
- 5.0 p.m.—A Ballad Concert: Helen Ogilvie (Soprano), Frank Poulton (Baritone).
- 5.30 p.m.—The Children's Hour.

- 6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.30 p.m.—Light Music: Pattison's Salon Orchestra, directed by Norris Stanley; Denham Charles (Bass); Charles Badham (Pianoforte); Norris Stanley (Violin).
- 8.0 p.m.—A Ballad Concert: Herbert Thorpe (Tenor), Elsie Griffin (Soprano), Edward J. Robinson (Violoncello), Harry Brindle (Bass).
- 9.0 p.m.—"From the Operas". The Birmingham Studio Chorus and Augmented Orchestra (Leader, Frank Cantell), conducted by Joseph Lewis; Trefor Jones (Tenor); Howard Fry (Baritone). "Carmen" (Bizet): Prelude; Flower Song, "See here thy floweret"; Toreador's Song, "Sirs, your Toast."
- 9.12 p.m.—"The Magic Flute" (Mozart): Overture; Oh, loveliness beyond compare; O Isis and Osiris; Yet once again we come to greet thee.
- 9.27 p.m.—"I Pagliacci" (Leoncavallo): Prologue, On with the Motley.
- 9.40 p.m.—"Idomeneo" (Mozart): Sweet peace descending; To thee, mighty Neptune.
- 9.50 p.m.—"The Lily of Killarney" (Benedict): The Moon hath raised. "Cavalleria Rusticana" (Mascagni): Intermezzo.
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15-11.15 p.m.—Dance Music.

TUESDAY (19)

- 3.0 p.m.—Paul Moulder's Rivoli Theatre Orchestra.
- 4.0 p.m.—An Orchestral Programme: The Birmingham Studio Orchestra, conducted by Frank Cantell; Heddie Nash (Tenor); Kathleen Cooper (Pianoforte).
- 5.30 p.m.—The Children's Hour.
- 6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.

- 6.30 p.m.—Jack Payne and The B.B.C. Dance Orchestra: Tarrant Bailey, Junr. (Banjo Solos).
- 8.0 p.m.—A Recital: John Thorne (Baritone), James Ching (Pianoforte).
- 8.35 p.m.—"The Emerald Isle" (see 5XX, Wednesday, 9.35 p.m.).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15 p.m.—11.15 p.m.—April Pen-darvis (Contralto). The Parkington Saxophone Orchestra.

WEDNESDAY (20)

- 3.0 p.m.—The City of Birmingham Police Band, conducted by Richard Wassell. Joyce Wright (Violin). Helena Millais (The Actress-Entertainer).
- 4.30 p.m.—Jack Payne and The B.B.C. Dance Orchestra: Cecil Harrington and John Oliver (in Syncopation and Harmony).
- 5.30 p.m.—The Children's Hour.
- 6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.30 p.m.—Light Music: The Zigeuner (Gipsy) Ensemble, directed by Alfred Bondt. Nino Maudini (Tenor), Rita Colere (Soprano).
- 8.0 p.m.—A Light Orchestral Programme. The Birmingham Studio Augmented Orchestra (Leader, Frank Cantell); conducted by Joseph Lewis. Kate Winter (Soprano). Edna Willoughby (Pianoforte).
- 9.30 p.m.—A Short Story Reading.
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15-11.15 p.m.—Dance Music.

THURSDAY (21)

- 1.10-1.50 p.m.—Lunch-Hour Service. Relay from St. Martin's Parish Church, Speaker, The Rev. Charles Matthews (of St. Peter-in-Thane, Kent).

- 3.0 p.m.—A Symphony Concert, by the Folkestone Municipal Orchestra relayed from the Leas Cliff Hall, Folkestone. (Conducted by Eldridge Newman.) Tina Bonifacio (Harp).
- 4.30 p.m.—Lozell's Picture House Organ. Frank Newman (Organ), Grace Field (Soprano).
- 5.30 p.m.—The Children's Hour.
- 6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.30 p.m.—Jack Payne and The B.B.C. Dance Orchestra. Tarrant Bailey (Junr.) (In Banjo Solos).
- 8.0 p.m.—Music by John Ansell. The Birmingham Studio Augmented Orchestra (Leader, Frank Cantell) (Conducted by John Ansell). Overture to "An Irish Comedy"; Pastoral Suite; Suite of Three Irish Pictures; Military Overture, "Private Ortheris"; A Children's Suite; Ballet Suite, "The Shoe."
- 9.0 p.m.—"Fadedville". Wallace Cunningham presents a Ventriloquist Sketch, May Jones in Mimicry, Ben Lawes (Entertainer), Patricia Rossborough (Syncopated Pianisms), Masoa and Armas (Entertainers with a Piano), Paul Raffman and his Band.
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15 p.m.—A Light Symphony Concert: Beethoven—Early Works. William Primrose (Violin). The Wireless Symphony Orchestra (Leader, S. Knéale Kelley). (Conducted by Herbert Menzies). Orchestra: Overture, "Coriolanus" (1807).
- 10.25 p.m.—William Primrose and Orchestra: Romance, in G (1803).
- 10.35 p.m.—Orchestra: Symphony No. 1, in C (1800).
- 11.0 p.m.—11.15 p.m.—Orchestra: Ballet Music, "The Men of Prometheus" (1801).

FRIDAY (22)

- 3.0 p.m.—Organ Recital, by Leonard H. Warner. From St. Botolph's, Bishopsgate. Sophie Wyss.

- 4.0 p.m.—Jack Payne and The B.B.C. Dance Orchestra. Grace Ivell and Vivien Worth (Songs and Duets at the Piano).
- 5.0 p.m.—"How It Strikes Me," by Miss Sybil Thorndike.
- 5.45 p.m.—The Children's Hour.
- 6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.30 p.m.—Light Music. The Birmingham Studio Orchestra (Conducted by Joseph Lewis). Daisy Neal (Contralto). Harold Mills (Violin).
- 8.0 p.m.—Chamber Music. The Hungarian String Quartet: Emerich Waldbauer (Violin); Tivadar Orezagh (Violin); Jean de Temesvary (Viola); Eugene de Kerpely (Violoncello).
- 9.0 p.m.—A Military Band Concert. The Wireless Military Band (Conducted by B. Walton O'Donnell). Sydney Northcote (Tenor).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15 p.m.—11.15 p.m.—Dance Music.

SATURDAY (23)

- 3.30 p.m.—A Band Programme. The Metropolitan Works Band (Conducted by George Wilson) Watcya Watcyns (Baritone).
- 5.0 p.m.—A Pianoforte Recital, by Gordon Bryan.
- 5.30 p.m.—The Children's Hour.
- 6.15 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin, Announcements and Sports Bulletin.
- 6.40 p.m.—Sports Bulletin.
- 6.45 p.m.—Light Music. The Birmingham Studio Orchestra (Conducted by Frank Cantell). Margaret Collier (Soprano), Edith Penville (Flute).
- 8.0 p.m.—Jack Payne and The B.B.C. Dance Orchestra. Tarrant Bailey, Junior (Banjo Solos).

Continued on p. 255.

PROGRAMMES FOR SUNDAY (February 17)

BARCELONA (Spain)

- Radio Barcelona (EAJI). 857.4 kh (347.6 m.); 2 kw.
- 13.0 a.m.—Chimes and Weather.
- 1.30 p.m.—Concert of Trio Music and Gramophone Records.
- 6.0 p.m.—Weekly Agricultural Talk and Market Quotations.
- 6.10 p.m.—Dance Music Programme.
- 6.30 p.m.—Tenor Song Recital: Arias from 1. "Il Trovatore" and 2. "Aida" (Verdi). 3. "I Pagliacci" (Leoncavallo). 4. "La Tosca" (Puccini).
- 7.0 p.m.—Agricultural Talk.
- 7.20 p.m.—Orchestral Selections. 1. Selection from "The Crown Diamonds" (Moreno). 2. Invocation tartare (Forte). 3. Gavota clásica (Solér). 4. Pavane de Louis XV (Tavan).
- 7.50 p.m.—Song Recital. 1. Selection from "The Marriage of Figaro" (Mozart). 2. Clair de Lune (Fauré). 3. La Morisca (Pahissa). 4. Tarongers (Buxo).
- 8.20 p.m.—Orchestral Selection: Agnes, dame galante—Suite (Février-Mouton).
- 8.40 p.m.—Sports Notes.
- 9.0 p.m. (approx.).—Close Down.

BERGEN (Norway)

- Kringkastingselskap. 819.6 kh (366.6 m.); 1 kw.
- 9.30 a.m.—Divine Service from the Korskurch.
- 11.30 a.m.—Weather and News.
- 4.0 p.m.—Evening Service from the Korskurch.
- 7.0 p.m.—Orchestral Concert.
- 7.50 p.m.—Topical Talk.
- 8.0 p.m.—Programme of Duets.
- 8.30 p.m.—Talk (to be announced).
- 9.0 p.m.—Weather, News, and Time.
- 9.15 p.m.—Dance Music Programme.
- 11.0 p.m. (approx.).—Close Down.

BERLIN (Germany)

- Königsruherhaus. 181.7 kh (1,651 m.); 20 kw.
- 7.55 a.m.—12.45 p.m.—Programme from Voxhaus.
- 12.45-1.15 p.m.—Phototelegraphy Transmission.
- 1.30-3.0 p.m.—See Voxhaus.
- 3.0 p.m.—Talk on National Anthems.
- 3.30-5.0 p.m.—See Voxhaus.

- 5.0 p.m.—Three Talks on Economics.
- 6.30 p.m.—Talk on "Trustee Education."
- 7.0 p.m.—Programme from Voxhaus.
- BERLIN (Germany)**
Voxhaus. 630.7 kh (475.6 m.); 4 kw.
- 7.55 a.m.—Chimes and Recital of Sacred Music, followed by Berlin Cathedral Chimes.
- 10.30 a.m.—Orchestral Concert from the Grosse Schauspielhaus.
- 12.15 p.m.—Talk on Chess.
- 1.30 p.m.—Agricultural Programme.
- 2.30 p.m.—Reading of Fairy Tales.
- 3.0 p.m.—Advertising Talk.
- 3.30 p.m.—Concert of Light Music.
- 5.30 p.m.—See Königsruherhaus.
- 6.30 p.m.—Talk, "Do not take Life too Seriously—an important Chapter of Hygiene."
- 7.0 p.m.—Orchestral Concert. 1. "Rienzi"—Overture, and 2. Entry of the Guests, from "Tannhäuser" (Wagner). 3. Tarantella from "Venezia e Napoli" (Liszt). 4. (a) Minuet of the Eighteenth Century (Martini), (b) Lisette-Bergerette of the Eighteenth Century. 5. "Russlan and Ludmilla"—Overture (Glinka). 6. Spanish Folk Songs: (a) El gaucha (Bolles), (b) No, No, quiero casarme. 7. Caucasian Suite (Ippolitoff-Ivanoff). 8. (a) Romance (Petterson-Berger), (b) Lolita (Buzzi-Peccia). 9. Chorus from "Don Pasquale" (Donizetti).
- 8.30 p.m.—"The Journalist Speaks," followed by Weather, News, Time, Sports Notes and Light Music from the Hotel Adlon.
- 11.30 p.m. (approx.).—Close Down.

BERNE (Switzerland)

- Radio Berne. 738.3 kh (406.3 m.); 1.3 kw.
- 9.30 a.m.—Protestant Address.
- 12.0 (noon).—Time and Weather.
- 12.3 p.m.—Concert of Trio Music.
- 2.30 p.m.—The Kursaal Orchestra.
- 6.29 p.m.—Time, Weather, and Announcement of Football Results.
- 6.30 p.m.—An Hour in Old Berne. Talks and Musical Interludes from Works of the 18th and 19th Centuries.
- 8.30 p.m.—Baritone and Orchestral Recital. Programme from the

- Works of Mascagni, Bizet, Verdi, etc.
- 8.45 p.m.—Sports Notes, News, and Weather Report.
- 9.0 p.m.—The Kursaal Orchestra.
- 9.35 p.m. (approx.).—Close Down.
- BRESLAU (Germany)**
Schlesische Funkstunde. 937.3 kh (320.7 m.); 4 kw. Relayd by Gleiwitz, 918.5 kh (326.5 m.).
- 8.15 a.m.—Relay of Chimes from the Christuskirche.
- 10.0 a.m.—Catholic Service.
- 11.0 a.m.—Relay of Choral Concert from Gleiwitz.
- 1.0 p.m.—Talk on Gardening.
- 1.10 p.m.—Nature Talk.
- 1.30 p.m.—Talk on Chess.
- 1.55 p.m.—Fairy Tales for Children.
- 2.20 p.m.—Agricultural Talk.
- 2.40 p.m.—Choral Recital and Recitations relayed from Gleiwitz.
- 3.15 p.m.—Talk on Bookbinding.
- 3.45 p.m.—Pianoforte Recital.
- 5.0 p.m.—See Königsruherhaus.
- 6.30 p.m.—Readings from the Works of Hermann Stehr.
- 7.0 p.m.—"Die Fledermaus"—Opera in Three Acts (Joh. Strauss).
- 9.0 p.m.—News and Announcements.
- 9.30 p.m.—Dance Music Programme.
- 11.0 p.m. (approx.).—Close Down.

BRÜNN (Czechoslovakia)

- Komarov. 693.9 kh (432.3 m.); 2.4 kw.
- 8.0 a.m.—Sacred Recital.
- 9.0 a.m.—Agricultural Talk.
- 9.30 a.m.—See Prague Programme.
- 10.0 a.m.—Concert from the Works of Petrzek.
- 11.0 a.m.—Orchestral Concert.
- 3.30 p.m.—See Prague Programme.
- 5.0 p.m.—German Transmission.
- 6.0 p.m.—See Prague Programme.
- 6.5 p.m.—Orchestral Concert.
- 7.0 p.m.—Literary and Musical Programme.
- 8.0 p.m.—Dance Music by Classical Composers.
- 9.0 p.m.—See Prague Programme.

BRUSSELS (Belgium)

- Radio-Belgique. 585.9 kh (512 m.); 10 kw. After 7.30 p.m. Experimental Transmission on a High Power.
- 5.0 p.m.—Concert from the Armentonville Tea-Rooms.

- 6.0 p.m.—Programme for Children.
- 6.30 p.m.—Concert by Station Trio: 1. Selection from "Mireille" (Gounod). 2. Fantasia for Piano (Mendelssohn). 3. Selection from "Les mousquetaires au couvent" (Varney). 4. Selection from "The Dollar Princess" (Fall). 5. Réverie for Violin (Vieuxtemps). 6. Garden of Love (Wood). 7. Selection from "La mascotte" (Audran). 8. Le cygne (Saint-Saëns). 9. Idylle passionnelle (Razigade). 10. Loin du bal (Gillet). 11. Si vous l'aviez compris (Denza). 12. Selection from "Manon" (Massenet).
- 7.30 p.m.—"Radio-Chronique."
- 8.15 p.m.—Concert by the Station Orchestra: 1. Carnaval romain—Overture (Berlioz). 2. Liebestraum (Liszt). 3. Song: Torna a Soriente (Curtis). 4. Fourteenth Rhapsody (Liszt). 5. Duet from "Hamlet" (Thomas). 6. Spanish Dance (de Falla). 7. Juegos (Turina). 8. Baritone Solo: Les deux Grenadiers (Wagner). 9. Andante for Cello and Orchestra. 10. Selections from "Thais" (Massenet). 11. Selections from "Scheherazade" (Rimzky-Korsakoff).
- 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)

- Magyar Telephon Hirmondo es Radio R.T. 540.8 kh (554.6 m.); 20 kw.
- 8.0 a.m.—News and Beauty Hints.
- 9.0 a.m.—Divine Service from the Church in the Kalvinplatz.
- 10.0 p.m.—Unitarian Service.
- 11.10 p.m.—Time and Weather, followed by Symphony Concert: 1. "Oberon"—Overture (Weber). 2. Symphonic Variations (Franck). 3. (a) Aria from "Orpheus and Eurydice" (Gluck), (b) Schmerzen and (c) Traume (Wagner). 4. Hungarian Rondo (Haydn). 5. Hungarians Symphonie (Beethoven).
- 2.30 p.m.—Agricultural Talk.
- 3.0 p.m.—Educational Programme.
- 4.20 p.m.—Gramophone Selections.
- 5.0 p.m.—Dramatic Programme.
- 6.50 p.m.—Concert by a Tzigane Orchestra.

- 7.50 p.m.—Concert—Violin and Vocal Selections.
- 8.50 p.m.—Time and Sports News.
- 9.0 p.m.—Experimental Relay to Zagreb—Military Music.
- 10.15 p.m.—Relay from Zagreb, 973 kh, (08.3 m), Croatian Folk-songs.
- COLOGNE (Germany)**
Westdeutscher Rundfunk. 1,139.5 kh (263.1 m.); 4 kw.
See Langenberg Programme.

COPENHAGEN (Denmark)

- Copenhagen Radio. 883.8 kh (339.4 m.); 1 kw. Relayd by Kalundborg, 259.7 kh (1,155.2 m.).
- 9.0 a.m.—Divine Service from the Garrison Church.
- 1.45 p.m.—Carillon Recital from Frelsers Kirke.
- 2.0 p.m.—Orchestral Concert.
- 4.0 p.m.—Divine Service from the Elias Kirke.
- 5.20 p.m.—Programme for Children.
- 6.0 p.m.—News and Time.
- 6.30 p.m.—Talk, "Classical Dance Music—Johann Strauss and Lumbye."
- 7.0 p.m.—Town Hall Chimes.
- 7.2 p.m.—Orchestral Concert. (a) Persian March, (b) Tales from the Vienna Woods—Waltz, (c) Sängerstimmen—French Polka, (d) Frühlingsstimmen—Vocal Waltz, (e) Tik-Tak—Gallop (Joh. Strauss), (f) Selection from "Drömmehilledet," (g) Helga-Mazurka, (h) Pepita—Polka, (i) Amelia—Waltz, (j) Champagne Gallop (Lumbye).
- 8.15 p.m.—"Mazurka"—Comedy in One Act (Steenbuch). News.
- 9.0 p.m.—Concert. 1. Overture, Aria, and Selection from "Les Dragons de Villars" (Maillart). 2. (a) Selection and Aria from "Les Cloches de Corneville" (b) Selection from "Nell Gwynn," (c) Le Régiment de Sambre-et-Meuse—March (Planquette).
- 10.0 p.m.—Dance Music Programme from the Palace Hotel.
- 11.0 p.m.—Town Hall Chimes.
- 11.30 p.m. (approx.).—Close Down.
- CORK (Ireland)**
Cork Broadcasting Station (6CK), 1,350 kh (222 m.); 1 kw.

Programmes for Sunday.—(Cont.)

8.30 p.m.—Organ Recital.
9.0 p.m.—Concert. 1. A Young (Baritone). 2. Seamus O'Mahony (Violin). 3. Pianoforte Solos. 4. Station Septet. 5. Mrs. A. Young (Mezzo-Soprano). 6. Seamus O'Mahony. 7. Mr. and Mrs. A. Young (Duets). 8. Station Septet.
11.0 p.m.—National Anthem, Weather Forecast and Close Down.

CRACOW (Poland)
Polskie Radio. 955 kh (314 m.); 1 kw.
9.15 a.m.—Divine Service from Wilno Cathedral.
10.56 p.m.—Relay of Chimes from the Church of Notre Dame, Time Signal, and Weather Report.
11.10 a.m.—Programme from Warsaw.
1.0 p.m.—Agricultural Talk.
2.0 p.m.—Weather Report.
2.15 p.m.—Programme from Warsaw.
4.10 p.m.—Talk, "The Wonder and Beauty of Snow."
4.55 p.m.—Talk, "Paris and its Polish Souvenirs."
5.20 p.m.—Programme from Warsaw.
6.0 p.m.—Miscellaneous Items.
6.20 p.m.—Talk on "How to Prevent the Importation of Fresh-water Fish."
6.56 p.m.—Time Signal from the Astronomical Observatory.
7.0 p.m.—Relay of Chimes from the Church of Notre Dame, Sports Notes.
7.30 p.m.—Programme from Warsaw.
7.45 p.m.—Concert of Chamber Music and Songs.
9.0 p.m.—Programme from Warsaw.
9.30 p.m.—Concert from the "Pavilion" Restaurant.
10.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)
Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw.
8.30—11.0 p.m.—Programme relayed from Cork.
11.0 p.m.—National Anthem, Weather Forecast, and Close Down.

FRANKFURT-am-MAIN (Germany)
Südwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relay by Cassel, 1,200 kh (250 m.).
7.30 a.m.—Sacred Recital.
10.30 a.m.—Talk for Parents, "The Lazy Child."
11.0 a.m.—Zither Recital.
12.0 noon.—Talks arranged by the Wiesbaden Board of Agriculture.
12.15 p.m. (from Cassel).—A Walk through the National Picture Gallery at Cassel. Dialogue: "Rembrandt before the Microphone."
1.30 p.m.—Talk on Wireless Journalism, "Journalistic Tasks and Aims: The Wireless Critic."
2.0 p.m.—Programme for Children.
3.0 p.m.—Orchestral Concert of Modern Operetta Music.
4.0 p.m.—Two Agricultural Talks.
5.0 p.m.—See Königsrueterhausen.
6.30 p.m.—Talk on Modern Dwellings.
7.0 p.m.—Sports Notes.
7.15 p.m.—Variety Programme. In the Interval: "Chattering in the Summer Resort"—Wireless Play (Lengbach-Obermeyer). Followed by Dance Music from the Künstlerklausen, Gross-Frankfurt.
11.30 p.m. (approx.)—Close Down.

HAMBURG (Germany)
NORAG (ha, in Morse). 765.5 kh (390.6 m.); 4 kw. Relay by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); Kiel, 1,200.4 kh (249.9 m.).
Transmits at intervals from 7.20 a.m. 8.15 a.m. (from Bremen)—Morning Recital.
10.0 a.m.—"Samson"—A Mining Disaster in the Harz Mountains in the Year 1700—Wireless Play in four parts (Dr. Funk).
10.40 a.m.—Concert from the Ostermann Restaurant.
11.30 a.m.—Dialogue on Economics.
11.55 a.m.—Namen Time Signal.
12.5 p.m.—Orchestral Concert.
1.0 p.m.—Fairy Tales for Children.
2.0 p.m. (from Kiel)—Cello and Piano Recital: Sonatas by Scandinavian Composers: 1. Sonata, Op. 58 (Sjögren). 2. Sonata, Op. 27 (Asterberg).
2.45 p.m.—Talk on Oehlenschläger, a Poet who wrote in Two Languages.
3.30 p.m. (from Bremen)—Orchestral Concert: 1. "Die Geschöpfe des Prometheus"—Overture (Beethoven). 2. Träume (Wagner). 3. Selection from "The Gipsy Baron" (J. Strauss). 4. Selection from "La Tosca" (Puccini). 5. Gondellied (Schwarzenka). 6.

Madrigal (Schmalstich). 7. Ballet égyptien (Luigini).
4.30 p.m.—Talk: "German Castles as Landmarks of Germany History."
5.0 p.m.—Orchestral Concert.
6.0 p.m.—Experiences and Reminiscences of an International Correspondent. "The Inheritance of Millions."
6.30 p.m.—Talk on Rowing.
6.40 p.m.—Sports Notes and Weather.
7.0 p.m.—"Wildfeuer"—Lyrical Opera in Three Acts (Bortz) adapted from the Dramatic Poem by Halm.
9.30 p.m.—Weather and News.
9.45 p.m.—Dance Music Programme.
10.50 p.m.—North Sea and Baltic Weather Report and Close Down.

HILVERSUM (Holland)
Algemeene Vereeniging Radio Omroep. 279.6 kh (1,072.8 m.); 5 kw.
11.40 a.m.—Talk on Chess.
12.10 p.m.—Concert of Trio Music.
1.40 p.m.—Dramatic Criticism.
2.10 p.m.—Concert relayed from the Amsterdam Concert Hall. 1. Suite in B minor (Bach). 2. Till Eulenspiegel's Merry Pranks—Symphonic Poem (R. Strauss). Gramophone Records in the Interval.
3.40 p.m.—Thé Dansant. Sports Notes in the Interval.
7.25 p.m.—Gramophone Records.
7.40 p.m.—Time and News.
7.55 p.m.—Concert by the Augmented Station Orchestra and Di Moorlag (Soprano). 1. "Coriolan"—Overture (Beethoven). 2. Eine Kleine Nachtmusik (Mozart). 3. Aria from "The Flying Dutchman" (Wagner). 4. Les Préludes (Liszt). 5. Songs: (a) Absence (Berlioz), (b) Invitation au voyage and (c) Chanson triste (Duparc). 6. España—Spanish Rhapsody (Chabrier).
9.25 p.m.—Musical Anecdotes.
9.40 p.m.—Popular Programme. 1. "The Gipsy Baron"—Overture (J. Strauss). 2. Waltz from "Zigeunerprimas" (Kálmán). 3. Fantasia on the Works of Offenbach (Conradi). 4. Florentine March (Fucik), followed by Gramophone Records of Dance Music.
11.10 p.m. (approx.)—Close Down.

HUIZEN (Holland)
889.8 kh (337 m.); 6.5 kw (until 5.40 p.m.). From 5.40 p.m. 162.5 kh (1,846.1 m.).
8.5 a.m.—Sacred Recital.
9.10 a.m.—Short Mass Relay.
9.20 a.m.—Talk by M. Gorter.
9.40 a.m.—Concert. 1. Quintet for Pianoforte, Oboe, Clarinet, Bassoon and Horn, and 2. Sonata for Flute and Pianoforte (Beethoven). 3. Talk. 4. (a) Recitative and Aria from "Céphale et Proxus" (Grétry), (b) Four Songs. 5. Rustic Song Suite (Röntgen). 6. Four Songs with Flute and Pianoforte Accompaniment.
12.10 p.m.—Concert of Trio Music.
1.10 p.m.—Religious Address.
1.40 p.m.—Talk by M. Koldeway.
2.10 p.m.—Concert from Nymegen.
4.10 p.m.—Programme for Hospitals.
4.40 p.m.—Programme for Children.
5.25 p.m.—Service from Delft.
7.10 p.m.—Talk and Sports News.
7.45 p.m.—Concert. 1. Fingal's Cave Overture (Mendelssohn). 2. Dream Pictures (Lumbye). 3. Suite from "La Princesse au Sabbat" (Ganne). 4. Songs: (a) The Toreador's Song from "Carmen" (Bizet), (b) Wiegenlied (Strauss), (c) Der Freund (Wolf). 5. Tales from the Vienna Woods (Strauss). 6. Selection from "The Magic Flute" (Mozart). 7. Songs: (a) Der Sieger (Kaun), (b) Aria from "Zaza" (Leoncavallo). 8. "Le Secret de Maître Cirille"—Overture (Parés). 9. The Second Armenian Rhapsody (Snoëk). 10. Songs: (a) Love's Rhapsody (d'Hardelot), (b) The Star (Rogers), (c) Our Little Home (Eric Coates). 11. Tousjours ou jamais—Waltz Suite (Waldteufel). 12. Selection from "Lohengrin" (Wagner). 13. Germanenblut—March (Blankenburg).
9.10 p.m.—News and Epilogue.

KALUNDBORG (Denmark)
Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw.
See Copenhagen Programme.

KATOWICE (Poland)
Polskie Radio. 721.7 kh (413.3 m.); 10 kw.
9.15 a.m.—Divine Service Relay.
10.56 a.m.—Time and Weather.
11.15 a.m.—Popular Concert.

1.0 p.m.—Talks on Gardening and Agriculture.
2.0 p.m.—Weather Report.
2.15 p.m.—6.0 p.m.—See Warsaw.
6.0 p.m.—Various Announcements.
6.20 p.m.—Popular Concert.
6.56 p.m.—Time Signal.
7.0 p.m.—Variety Programme.
7.30 p.m.—Programme from Warsaw.
9.0 p.m.—Weather, News, Sports Notes, and Dance Music.

KÖNIGSBERG (Germany)
Ostmarken Rundfunk. 1,070 kh (280 m.); 4 kw. Relay by Danzig, 657.4 kh (457.3 m.).
8.0 a.m.—Sacred Recital.
9.56 a.m.—Weather Report (Danzig only).
10.0 a.m.—Weather Report (Königsberg only).
10.0 a.m. (Danzig only)—Recital of Songs.
10.10 a.m.—Talk with Illustrations on Schubert and the German Song—"Beethoven and Schubert."
10.40 a.m.—Chamber Music.
11.55 a.m.—Time and Weather.
12 noon.—Light Concert from the Central Hotel.
1.0 p.m.—Talk on Chess.
2.0 p.m.—Elementary Spanish Lesson.
2.45 p.m.—Talk for Young People: "The Submarine and the German U-Boat in the Great War."
3.15 p.m.—Variety Concert.
5.0 p.m.—See Königsrueterhausen.
6.30 p.m.—Talk on Criminal Statistics.
7.5 p.m.—"The Barber of Baghdad"—Comic Opera in Two Acts (Cornelius).
9.10 p.m.—News and Sports Notes.
9.30 p.m. (approx.)—Programme from Voxhaus.
11.30 p.m. (approx.)—Close Down.

LAHTI (Finland)
199.45 kh (1,504 m.); 20 kw. Programme also for Helsinki, 800.5 kh (374 m.); 0.8 kw. Transmits at intervals from 10.0 a.m.
4.35 p.m.—Violin Recital.
5.10 p.m.—Evening Service from St. John's Church.
6.30 p.m.—Talk on History.
7.0 p.m.—Vocal Recital.
7.20 p.m.—Orchestral Concert.
7.45 p.m.—News in Finnish and Swedish, and Close Down.

LANGENBERG (Germany)
Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relay by Aix-la-Chapelle, 651.7 kh (456.4 m.); Cologne, 1,139.5 kh (263.1 m.); Münster, 1,129.1 kh (265.6 m.).
6.45 a.m.—Lesson in Self-Defence.
7.5 a.m.—Lesson in Shorthand.
7.55 a.m.—Lesson and Programme. Extracts in Esperanto.
8.0 a.m.—Chimes from the Church of St. Gereon, Cologne.
8.5 a.m.—Catholic Morning Recital.
9.15 a.m.—Programme for Hospitals.
10.0 a.m.—Talk: "The German Language."
10.35 a.m.—Agricultural Talk.
11.0 a.m.—Organ Recital. Relayed from the Grosse Messehalle.
12 noon.—Orchestral and Instrumental Concert: 1. Marche militaire (Schubert). 2. Waltz (Carena). 3. (a) Albumblatt and (b) Mailed (Micheli). 5. Two Selections for Harp and Piano. 6. L'Arlesienne—Suite (Bizet). 7. Walter's Prize Song from "The Mastersingers" (Wagner). 8. Selections from "Faust" (Gounod).
1.30 p.m.—Talk on Chess.
1.55 p.m.—Literary Programme.
2.15 p.m.—Talk on Literature for Women.
2.40 p.m.—Talk, "Wireless and the Press."
3.0 p.m.—Talk on Oriental Capitals: "Cairo."
3.30 p.m.—Military Band Concert.
5.0 p.m.—Literary Readings.
5.25 p.m.—Talk, "How Animals find their Way: Can they hear?"
5.50 p.m.—Readings from the Novel "Third Class Passengers" (Klaeber).
6.15 p.m.—Talk for Workers, "The Significance of the Reparations Problem to the German People."
6.40 p.m.—Talk, "Contemporary Criticisms."
7.0 p.m.—Sports Notes.
7.10 p.m.—"Gasparone"—Operetta in Three Acts (Millocker), followed by News, Sports Notes, Orchestral Concert and Dance Music.
11.0 p.m. (approx.)—Close Down.

LEIPZIG (Germany)
Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relay by Dresden, 775 kh (387 m.).
7.30 a.m.—Organ Recital.
8.0 a.m.—Morning Service.
10.0 a.m.—Talk on High Frequency.

10.30 a.m.—Talk, "The Role of Puritanism in the English Personal Ideal."
11.0 a.m.—Concert of Songs with String Quartet.
12.0 noon.—Agricultural Talks, followed by Time Signal.
1.0 p.m.—Foreign Press News.
1.30 p.m.—Humorous Selections.
2.30 p.m.—Gramophone Records. News.
3.30 p.m.—Choral Concert.
4.30 p.m.—Popular Orchestral Concert.
5.30 p.m.—Talk on the High School and Educational Methods in England.
6.0 p.m.—Talk by O. Schreier.
7.30 p.m.—Concert of Light English and American Music.
8.0 p.m.—"Die Überlagerungsehe"—Play (F. Mendelssohn). During the Performance, Dance Music and Cabaret Entertainment.
9.0 p.m.—Press News and Sports Notes.
9.30 p.m. (approx.)—Programme relayed from Voxhaus.
11.30 p.m. (approx.)—Close Down.

LJUBLJANA (Yugoslavia)
Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw.
8.30 a.m.—Concert of Sacred Music.
9.30 a.m.—Talk on Agriculture.
10.0 a.m.—Quartet Concert.
11.0 a.m.—Time Signal.
2.0 p.m.—Talk, "The Character of the Slovenes of Carinthia, their Customs and Habits."
2.30 p.m.—Gramophone Records.
3.0 p.m.—Talk, "Memories of the Alps."
3.30 p.m.—Concert of Light Music.
7.0 p.m.—Concert by the Balalaika Orchestra, the Station Orchestra, and the "Kremelj" Choir.
9.0 p.m.—Tides Report, Time, News and Close Down.

MADRID (Spain)
Union Radio (EAJ7). 708.3 kh (423 m.); 1 kw.
2.0 p.m.—Chimes and Orchestral Concert. 1. El niño de Jerez—Pascalle (Zabala). 2. How could I know—Waltz (Campbell). 3. Dizzy Fingers—Fox-trot (Confrey). 4. Selection from "Juegos malabares" (Vives). 5. Andante from the Fifth Symphony (Beethoven). 6. Selection from "Lohengrin" (Wagner). 7. Spanish Serenade (Albéniz). 8. March from "Aida" (Verdi). Literary Interlude between Items 4 and 5.
7.0 p.m.—Chimes and Dance Music.
8.0 p.m.—Talk, "Famous Travels."
10.0 p.m.—Chimes and Orchestral Selections.
10.30 p.m.—Band Music relayed from the Hotel Nacional.
12.0 midnight.—Chimes and Dance Music from the Alkazar.
12.30 a.m. (approx.)—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. 595.3 kh (503.9 m.); 7 kw.
9.0 a.m.—English Language Lesson.
9.30 a.m.—Concert of Sacred Music.
11.30 a.m.—Time Signal, followed by Quartet Selections.
3.0 p.m.—Relay of a Comedy from the Arcimboldi Theatre.
3.45 p.m.—Variety Concert. 1. Quintet Selections: (a) "Stradella"—Overture (Flotow), (b) Ballet Suite (Siede). 2. Contralto Solos from (a) "Mignon" (Thomasi), (b) "La Gioconda" (Ponchielli). 3. Selection from "Pique Dame" (Tchaikovsky). 4. Contralto Solo: Notte (Respighi). 5. Quintet Selections: (a) Canto marinaro (Albergoni), (b) Rusticiana (Curtopassi).
7.30 p.m.—Time and News.
7.40 p.m.—Talk on History, followed by News.
8.0 p.m.—Relay of an Opera from the Scala Theatre. In the First Interval, Talk, "Town and Country"; In the Second, Sports Notes and News.
10.30 p.m. (approx.)—Close Down.

MOTALA (Sweden)
218.9 kh (1,370 m.); 20-kw. See Stockholm Programme.

MUNICH (Germany)
Deutsche Stunde in Bayern. 558.4 kh (537.2 m.); 4 kw. Relay by Augsburg, 529.75 kh (566.3 m.); Kaiserslautern, 1,102.5 kh (272.1 m.); Nürnberg, 1,250 kh (240 m.).
6.0 a.m.—Catholic Recital.
10.0 a.m.—Chimes and Weather.
10.15 a.m.—Talk on the following Transmission.
10.20 a.m.—Recital from the Works of Janacek.
11.45 a.m.—Time, Weather and Programme Announcements.
2.0 p.m.—Recital of Folk Songs.

2.45 p.m.—Review of Books.
3.0 p.m.—Pianoforte Recital.
3.45 p.m.—Reading (Hans Frank).
4.15 p.m.—Talk on Helen Keller.
4.45 p.m.—Concert of Trio Music.
5.15 p.m.—Talk: "Viennese Humour."
7.0 p.m.—Orchestral Concert: Vocalist: Heinrich Knotte (Tenor). 1. "Maritana"—Overture (Wallace). 2. Selection from "Tiefland" (d'Albert). 3. Tenor Solos: (a) Aria from "Alessandro Stradella" (Flotow); (b) Aria from "Il Trovatore"; (Verdi). 4. Preludes to the First, Third and Fourth Acts of "Carmen" and 5. The Flower Song from "Carmen" (Bizet). 6. Concerto for Violin and Orchestra in One Movement (Swert). 7. Cavatina from "Faust" (Gounod). 8. "The Force of Destiny"—Overture (Verdi). 9. Arioso from "L'Africaine" (Meyerbeer). 10. Italian Caprice (Tchaikovsky). 11. Serenade in D minor with "Cello obbligato (Volkmann); 12. Slavonic Dances (Dvorak).
9.5 p.m.—"The Wireless Mirror" followed by News.
9.45 p.m.—Concert from the Hotel Reichsadler, Munich.
11.0 p.m. (approx.)—Close Down.

OSLO (Norway)
Kringkastingselskapet. 604.7 kh (496.1 m.); 1 kw. Relay by Forstrund, 658 kh (456 m.); Fredriksstad, 781 kh (384.1 m.); Rjukan, 1,237.5 kh (242.4 m.); Hamar, 530 kh (566 m.); and Notodden, 1,070 kh (297 m.).
9.20 a.m.—Chimes.
9.30 a.m.—Divine Service from the Church of St. Saviour.
4.50 p.m.—Chimes.
5.0 p.m.—Divine Service from the Church of St. Saviour.
6.15 p.m.—Weather and News.
6.30 p.m.—Recitations from the Works of Olaf Benneche.
7.0 p.m.—Time, followed by Orchestral Concert.
8.30 p.m.—Weather and News.
8.45 p.m.—Topical Talk.
9.0 p.m.—Accordion Recital.
9.30 p.m.—Gramophone Dance Music.
10.30 p.m. (approx.)—Close Down.

PARIS (France)
Eiffel Tower (FL). 201.5 kh (1,488 m.); 12 kw.
7.56 a.m.—Time Signal on 9,231 kh (32.5 m.).
5.0 p.m.—"Pasdeloup" Concert.
7.10 p.m.—Weather Forecast.
7.20 p.m.—"Le Journal Parlé."
7.56 p.m.—Time Signal on 9,231 kh (32.5 m.).
8.0 p.m.—Concert. 1. Masques et Bergamasques (Fauré). 2. Violin Solos, (a) Romance in B flat, (b) Chant hindou (Rimsky-Korsakoff-Kreisler). 3. Songs. 4. Harmonie du soir (Lazari). 5. Scherzando from the Spanish Symphony (Lalo). 6. Songs. 7. Danses persanes (Guiraud).
8.50 p.m.—Silent Night.

PARIS (France)
Petit Parisien. 899.6 kh (333.4 m.); 0.5 kw.
8.45 p.m.—Gramophone Selections, followed by Talk and News.
9.0 p.m.—Concert. 1. "Tannhäuser"—Overture (Wagner). 2. Selection from "The Barber of Seville" (Rossini). 3. Selection from "Amour et Psyché" (Georges Schumann). 4. Second Piedmontese Dance (Sinigaglia). 5. Ballet Music from "Parysatis" (Saint-Saëns). 6. Selection from "Les Préludes" (Debussy). 7. Ronde française (Boëllmann). News in the Intervals at 9.25 and 10.0 p.m.

PARIS (France)
Radio-Paris (CFR). 171.75 kh (1,740.7 m.); 12 kw.
8.0 a.m.—News and Press Review.
8.30 a.m.—Physical Culture Lesson.
12 noon.—Religious Address, Sacred Music and News.
12.45 p.m.—Orchestral Concert: 1. Festag (Schumann). 2. Joyeux Arlequin (Rabey). 3. Pensée d'automne (Massenet). 4. Selection from "Rip-Rip" (Planquette). 5. Gretna Green (Guiraud). 6. Jeux d'enfants (Bizet). 7. Marche héroïque (Saint-Saëns). Interlude: Bilboquet at the Mill.
4.30 p.m.—Gramophone Concert, News in the interval.
6.30 p.m.—Agricultural Report.
6.45 p.m.—Gramophone Concert: 1. Selection from "Poet and Peasant" (Suppé). 2. Selection from "Rose Marie" (Friml). 3. Aria from "Werther" (Massenet). 4. "Halle-lujah"—Fox-trot (Youmans). 5. Recitation: La laitère et le pot au lait (La Fontaine). 6. Selections by the Balalaika Orchestra. 7. Ah, Ah.

Programmes for Sunday.—(Cont.)

Official March of the Nice Carnival (Tarrelli).
7.30 p.m.—News and Announcements.
7.45 p.m.—Radio-Paris Guignol.
8.30 p.m.—Radio-Paris Café Concert and Music-Hall. News during the intervals.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). 980 kh (306 m.); 25 kw. Relayed at intervals on 4,800 kh (62.5 m.). Transmits at intervals from 3.45 p.m. 11.30 p.m.—Variety Programme of Music, Talks, Concerts, Time, and Weather Reports, etc.
4.15 a.m. Mon. (approx.).—Close Down.

POSEN (Poland)

Polskie Radio. 892.9 kh (336 m.); 1.5 kw.
9.15 a.m.—Divine Service from the Cathedral.
11.10 a.m.—Time Signal.
11.15 a.m.—Agricultural Talks.
2.0 p.m.—Divine Service from the Cathedral.
3.0 p.m.—Programme from Warsaw.
4.30 p.m.—Miscellaneous Items.
4.50 p.m.—Programme for Children.
5.20 p.m.—Vocal Recital.
5.40 p.m.—Gramophone Selections.
6.0 p.m.—Report of the Catholic Association of Polish Youth.
6.20 p.m.—Programme from Warsaw.
6.45 p.m.—"Silva rerum."
7.5 p.m.—Miscellaneous Items.
7.30 p.m.—Concert. During the Intervals, Literary Programme, Theatre and Cinema Notes, News.
9.0 p.m.—Time and Sports Notes.
9.20 p.m.—Dancing Lesson.
9.40 p.m.—Dance Music from the Carlton Restaurant.
11.0 p.m. (approx.).—Close Down.

PRAGUE (Czechoslovakia)

Strasnice. 873.4 kh (341.9 m.); 5 kw.
8.0 a.m.—Programme from Brünn.
9.0 a.m.—Agricultural Talks.
10.0 a.m.—Programme from Brünn.
12.0 noon.—Industrial Review.
12.15 p.m.—Talk on the Red Cross.
3.30 p.m.—Orchestral Concert.
4.30 p.m.—Talk for Workers: "Mme Bakunin, the Grandmother of the Russian Revolution."

5.0 p.m.—German Transmission.
6.0 p.m.—Sports Notes.
6.30 p.m.—"Les cloches de Corneville"—Comic Opera in Three Acts (Planquette) from the Municipal Theatre at Pilsen.
9.0 p.m.—Time, News and Sports Notes.
9.15 p.m.—Theatre Review.
9.20 p.m.—Dance Music and Sports Notes relayed from Smokovec.

ROME (Italy)

Unione Radiofonica Italiana (IRO). 676.25 kh (443.6 m.); 3 kw.
8.30 a.m.—German Language Lesson.
9.0 a.m.—Concert of Sacred Music.
10.0 a.m.—Relay from the "Casa di Dante," Canto XV of the Purgatorio, followed by Talk.
12.0 noon.—Concert of Trio Music.
4.0 p.m.—Variety Concert.
6.50 p.m.—News and Sports Notes.
7.29 p.m.—Time and Topical Talk.
7.45 p.m.—Symphony Concert. 1. Sant'Elena al Calvario—Symphony (Leo). 2. Laura soave—Ballet (Carosio, 1531). 3. Bergamasca (Gianocelli, 1650). 4. Talk, Leningrad, a Dead City. 5. Concerto in A minor, Op. 16 for Pianoforte with Orchestral accompaniment (Grieg). 6. Fashion Talk. 7. Nostalgia (Dumas). 8. Piccola serenata (Rossini). 9. Second Gavotte (Popper). 10. The Emigrant's Song from the Sicilian Suite (Marianuzzi). 11. Selection from "The Twilight of the Gods" (Wagner). 12. Tarantella (Martucci).
9.50 p.m.—News and Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kh (380 m.); 50 kw. Relayed by 2XAD on 15,337 kh (19.56 m.) from 8.30 p.m.
Transmits at intervals from 3.30 p.m. 11.0 p.m.—"Stetson Parade," American Legion Band, relayed from Boston, Mass.
11.30 p.m.—Acousticon Programme, relayed from New York.
12.0 midnight.—Old Company's Programme, Sigmund Spaeth and the International Singers, from New York.

12.30 a.m. (Monday) — Capitol Theatre Programme.
2.0 a.m.—Talk, "Our Government," by David Lawrence, Washington, D.C.
2.15 a.m.—Atwater Kent Hour, relayed from New York.
3.15 a.m.—Studebaker Programme, relayed from New York.
3.45 a.m.—Musical Programme.
4.15 a.m.—Television Transmission (W2 XAD only).

STOCKHOLM (Sweden)

Radiotjänst (SASA). 685 by (438 m.); 1.5 kw. Relayed kh Eskilstuna, 1,208 kh (248 m.); Gävle, 1,470 kh (204 m.); Göteborg, 864.9 kh (344.3 m.); Kalmar, 1,184.5 kh (253 m.); Karlstad, 1,361 kh (220 m.); Motala, 218.9 kh (1,370 m.); Saffle, 1,190.35 kh (252 m.); Sundsvall, 550.9 kh (500 m.).
10.0 a.m.—Divine Service.
11.45 a.m.—Weather and Time.
2.30 p.m. (from Uppsala).—Military Concert: 1. Military March (Ekström). 2. Suite from the Ballet égyptien (Luigini). 3. Waltz (Svendsen). 4. Entry March of the Boyards (Halvorsen). 5. Five Songs (Lindblad). 6. "The Force of Destiny"—Overture (Verdi). 7. Military March (Herrman).
3.30 p.m.—Reading.
4.0 p.m.—Programme for Children.
4.55 p.m.—Town Hall Chimes.
5.0 p.m.—Divine Service Relay.
6.30 p.m.—Cabaret Programme.
7.15 p.m. (from Göteborg).—Concert by a String Orchestra: Sonata for Violin, Viola and Strings (Leclair). 2. Larghetto for Viola and Strings (Handel). 3. Serenade No. 3 in D minor for Strings and Cello (Volkmann). 4. Serenade for Strings, Op. 6 (Suk).
8.15 p.m.—News and Weather.
8.40 p.m.—"Napoleon"—Play by Students of Uppsala.
10.0 p.m. (approx.).—Close Down.

STUTTGART (Germany)

Süddeutscher Rundfunk. 800.9 kh (374.6 m.); 4 kw. Relayed by Freiburg, 520 kh (576.9 m.).
10.15 a.m.—Protestant Recital.
11.0 a.m.—"Brother Death"—Musical Sketch Schieber and Ruck).
12.0 noon.—Gramophone Concert,

1.0 p.m.—Fairy Tale with Musical Setting.
2.0 p.m.—Psychological Talk.
2.30 p.m.—Orchestral and Vocal Concert.
5.0 p.m.—Reading of Legends, Old and New.
6.0 p.m.—Sacred Song Recital.
7.0 p.m.—Concert: 1. Concerto for Organ in G minor (Handel). 2. Concerto for Violin in A minor (Vivaldi). 3. Chaconne in G minor (Vivaldi). 4. Symphony in D minor (Bach).
8.15 p.m.—"Gauvain"—Mystery Play (Stucken), followed by News.

TOULOUSE (France)

Radiophonie du Midi. 602.75 kh (495.9 m.); 8 kw.
12.30 p.m.—Weather Report.
12.45 p.m.—Concert. 1. Five Spanish Songs. 2. Opera Selections: (a) Chorus and Triumphal March from "Aida" (Verdi), (b) Chorus from "Carmen" (Bizet), (c) Selection from "Cavalleria Rusticana" (Mascagni). 3. Six Tangos.
8.0 p.m.—News and Announcements.
8.30 p.m.—Concert. 1. Military Music. 2. Songs (Leoncavallo, de Falla, Debussy). 3. Selections from "The Barber of Seville" (Rossini). 4. Dance Music.
10.15 p.m.—North African News.
10.30 p.m. (approx.).—Close Down.

VIENNA (Austria)

Radio-Wien. 576.9 kh (528.7 m.); 20 kw. Relayed by Graz, 847.75 kh (353.9 m.); Innsbruck, 1059.2 kh (281.1 m.); Klagenfurt, 658 kh (456 m.); and Linz, 1,209.4 kh (243 m.).
9.20 a.m.—Choral Concert.
10.0 a.m.—Orchestral Concert. 1. Symphony No. 2 (Beethoven). 2. Andantino with Variations (Mozart). 3. Three Selections from "A Midsummer Night's Dream" (Mendelssohn). 4. Lullaby—Symphonic Prelude (Rinaldini). 5. Songs (Mahler). 6. "William Tell"—Overture (Rossini).
2.15 p.m.—Phototelegraphy Transmission.
2.40 p.m.—Orchestral Concert.
4.30 p.m.—Travel Talk, "Native Life in Hawaii."
5.15 p.m.—Pianoforte and Vocal Recital.

6.15 p.m.—Readings from the Works of Gabriel Reuter on the occasion of his 70th Birthday.
7.0 p.m.—Time and Weather.
7.5 p.m.—"Ballad of the Town"—Comedy (Csokor), followed by Orchestral Concert. Phototelegraphy Transmission after the Programme.

WARSAW (Poland)

Polskie Radio. 215.2 kh (1,393.6 m.); 8 kw.
9.15 a.m.—Divine Service from Wilno Cathedral.
10.56 a.m.—Time, Chimes from Cracow.
11.10 a.m.—Symphony Concert from the Philharmonic.
1.0 p.m.—Agricultural Talks.
2.0 p.m.—Weather Report.
2.15 p.m.—Symphony Concert.
4.15 p.m.—Relay of the Ceremony at the Town in honour of the 50th Sacerdotal Anniversary of Pope Pius IX.
5.35 p.m.—Talk on Wireless Technique.
6.0 p.m.—Miscellaneous Items.
6.20 p.m.—Talk: "Cairo—the European and the Arab Elements."
6.45 p.m.—News and Time.
7.0 p.m.—"Intellectual Amusements."
7.30 p.m.—Concert. Theatre News during the Intervals.
8.0 p.m.—Short Story Reading.
8.15 p.m.—Concert (contd.).
9.0 p.m.—Aviation and Weather Reports, News and Sports Notes.
9.30 p.m.—Dance Music from the Oaza Restaurant.
10.30 p.m. (approx.).—Close Down.

WILNO (Poland)

Polskie Radio. 955 kh (314 m.); 0.6 kw.
9.15 a.m.—Divine Service from the Cathedral.
10.56 a.m.—4.15 p.m.—See Warsaw.
4.15 p.m.—Programme for Children.
4.40 p.m.—Talk on Ski-ing in the neighbourhood of Wilno.
5.5 p.m.—Gramophone Selections.
5.35 p.m.—Programme from Warsaw.
6.0 m.—Gramophone Selections.
6.20 p.m.—Programme from Warsaw.
6.45 p.m.—Time and News.
7.0 p.m.—Relay of Foreign Stations.
9.0 p.m.—Programme from Warsaw.
10.20 p.m. (approx.).—Close Down.



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PROGRAMMES FOR MONDAY

(February 18)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio Barcelona (EAJ). 857.4 kh (347.6 m.); 2 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—Exchange Quotations.
6.10 p.m.—Sextet Selections.
8.30 p.m.—Talk in Esperanto.
9.0 p.m.—Chimes and Weather.
9.5 p.m.—Exchange and News.
9.10 p.m.—Humorous Review of the Week's Events in Verse.
9.20 p.m.—Selections of Sardanas by the Cobia Barcelona.
10.0 p.m.—Vocal Quartets.
10.30 p.m.—Guitar Selections.
10.55 p.m.—Orchestral Selection: "Le Déluge"—Prelude (Saint-Saëns).
11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)

Kringkastingskap. 819.6 kh (366.6 m.); 1 kw.
Transmits at intervals from 11.0 a.m.
6.30 p.m.—Orchestral Selections.
6.50 p.m.—Talk for Housewives.
7.20 p.m.—Orchestral Selections.
7.50 p.m.—Topical Talk.
8.0 p.m.—Songs from Modern Operettas.
8.30 p.m.—Engineering Talk.
9.0 p.m.—Weather, News and Time.
9.15 p.m.—Dance Music Programme.
10.30 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. 181.7 kh (1,651 m.); 20 kw.
Transmits at intervals from 9.15 a.m.
3.30 p.m.—Programme from Voxhaus.
4.30 p.m.—Philological Talk.
5.0 p.m.—Talk: "Humour in Song—The Art of Song from Telemann to the Present Day."
5.30 p.m.—Elementary English Lesson.
5.55 p.m.—Talk: "The Relation between the Prices of Meat and Cattle Fodder."
6.20 p.m.—Talk for Mechanics.
7.0 p.m.—Programme from Voxhaus.

BERLIN (Germany)

Voxhaus. 630.7 kh (475.6 m.); 4 kw.
Transmits at intervals from 9.10 a.m.
3.30 p.m.—Concert. 1. Symphonic Piece for Cello and Pianoforte (Backes). 2. Baritone Solos: (a) Vereinsamt, (b) Venedig, (c) Maienwind, (d) Garten, (e) Selige Grösse, (f) Glück, (g) Nacht (Koller-Hopp). 3. Pianoforte Solos (Heynssens) by the Composer: (a) Maschinelle Rhythmen, (b) Ruhig fließend, (c) Humoresque. 4. Baritone Solos: (a) Verbunden, (b) Erfüllung, (c) Lenznacht, (d) Der Thiezer (Pfund), followed by Orchestral Music from the Hotel Bristol.
4.30 p.m.—Reading, followed by Advertising Notes.
5.10 p.m.—Talk on Philology.
5.30 p.m.—See Königswusterhausen.
6.0 p.m.—Talk, "Friendship as Destiny—Marx and Engels."
6.30 p.m.—Talk, "Contemporary Youth—The Younger Generation among the People."
7.0 p.m.—Readings from "Peregrins Heimkehr" and Unpublished Poems (Paul Zech).
7.30 p.m.—International Programme. (See Vienna). Followed by Weather, News, Time, Sports Notes and Dance Music Programmes.
11.30 p.m. (approx.)—Close Down.

BERNE (Switzerland)

Radio Berne. 738.3 kh (406.3 m.); 1.3 kw.
Transmits at intervals from 11.43 a.m.
6.0 p.m.—Esperanto Language Lesson.
6.20 p.m.—Time and Weather.
6.30 p.m.—Talk on the Roman Excavations on the Enge-Halbinsel, near Berne.
7.0 p.m.—Topical Talk.
7.15 p.m.—"Die Weiss von Liebe und Tod"—Melodrama (Rilke). Music by von Paszyhory.
7.50 p.m.—Organ Recital from the Works of Franck, Vierné and Dupré.
8.45 p.m.—News, Weather Report and Close Down.

BRESLAU (Germany)

Schlesische Funkstunde. 937.3 kh (320.7 m.); 4 kw. Relayed by Gleiwitz, 918.5 kh (326.5 m.).
Transmits at intervals from 10.15 a.m.
6.25 p.m.—Philosophical Talk, "The Three Stages of Work."

6.50 p.m.—Review of Art and Literature.
7.15 p.m.—Baritone Recital of Ballads by Robert Schumann.
8.15 p.m.—Concert of Request Items by the Station Quartet, relayed from Gleiwitz.
9.0 p.m.—News, Answers to Correspondents, and Report of the German Board of Agriculture.

BRÜNN (Czechoslovakia)

Komarov. 693.9 kh (423.3 m.); 2.4 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—Programme from Prague.
6.5 p.m.—Programme of Dialogues.
7.0 p.m.—See Prague Programme.
7.15 p.m.—Talk, "House Planning."
7.30 p.m.—See Prague Programme.

BRUSSELS (Belgium)

Radio-Belgique. 585.9 kh (512 m.); 10 kw.
5.0 p.m.—Dance Music from the St. Sauveur Palais de Danse.
6.0 p.m.—Selected Readings.
6.15 p.m.—Talk on Belgian Folklore.
6.30 p.m.—Concert by Station Trio: 1. Here and there (Chapelle). 2. En sourdine (Tellam). 3. Tonnes et gobelots (Chillemont). 4. Selection from "Les saltimbanques" (Ganne).
7.0 p.m.—Gramophone Selections.
7.30 p.m.—"Radio-Chronique."
8.15 p.m.—Gramophone Selections.
8.25 p.m.—Topical Talk.
8.30 p.m.—Concert: 1. "Idomeneo"—Overture (Mozart). 2. The Birds (Respighi). 3. Concerto in A minor (Schumann). 4. Symphony in D minor (Franck). After the Concert, News and Close Down.

BUDAPEST (Hungary)

Magyar Telephone Hirmondo es Radio R.T. 540.8 kh (554.6 m.); 20 kw.
Transmits at intervals from 8.15 a.m.
6.30 p.m.—Concert by the Philharmonic Society: 1. Wunderlicher Mandarin—Suite (Bartok). 2. Concerto for Piano in D minor (Rachmaninoff). 3. Symphony (Haydn).
8.35 p.m.—Time and News.
9.0 p.m.—Talk on Foreign Politics.
9.30 p.m.—Weather Report, followed by Dance Music from the Grand Hotel Ritz.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,139.5 kh (263.1 m.); 4 kw.
See Langenberg Programme.

COPENHAGEN (Denmark)

Copenhagen Radio. 883.8 kh (339.4 m.); 1 kw. Relayed by Kalundborg, 259.7 kh (1,155.2 m.).
Transmits at intervals from 6.30 a.m.
6.0 p.m.—News, Exchange and Time.
6.20 p.m.—Introductory Talk on the following Transmission.
6.30 p.m.—"Tannhäuser"—Opera in Three Acts (Wagner), relayed from the Royal Theatre. News.
10.0 p.m. (approx.)—Close Down.

CORK (Ireland)

Cork Broadcasting Station (6CK). 1,350 kh (222 m.); 1 kw.
1.30 p.m.—Weather Forecast and Gramophone Record Music.
6.0 p.m.—Exchange Quotations, News and Gramophone Selections.
6.15 p.m.—Programme from Dublin.

CRACOW (Poland)

Polskie Radio. 955 kh (314 m.); 1 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—French Language Lesson.
6.56 p.m.—Time Signal from the Astronomical Observatory.
7.0 p.m.—Relay of Chimes from the Church of Notre Dame, Sports Notes.
7.30 p.m.—International Concert, See Vienna.
9.0 p.m.—Programme from Warsaw.
9.30 p.m.—Concert from the Carlton Restaurant.
10.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw.
Transmits at intervals from 1.30 p.m.
6.0 p.m.—Gramophone Selections:
6.15 p.m.—Programme for Children.
7.0 p.m.—Italian Language Lesson.
7.15 p.m.—Gramophone Selections.
7.20 p.m.—News and Irish Lesson.
7.45 p.m.—Talk on Fishing.
8.0 p.m.—Concert. 1. Station Orchestra: Spanish Dances (Moskovsky). 2. A. J. O'Farrell (Baritone). 3. Signor Grossi and Dina Copeman

(Violin and Piano). 4. Margaret Dempsey (Soprano). 5. Station Orchestra: Venetian Scenes (Casanova). 6. Mary O'Hea and Company: Sketch; "The House Agent." 7. Adolphe Borschke (Piano). 8. The Traditional Trio.
10.30 p.m.—News, Weather Report and Close Down.

FRANKFURT-am-MAIN (Germany)

Südwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relayed by Cassel, 1,200 kh (250 m.).
Transmits at intervals from 5.30 a.m.
3.35 p.m.—Orchestral Concert of Opera Music.
5.10 p.m.—Reading from "Die Flucht ohne Ende" (J. Roth).
5.30 p.m.—Talk: "How Post Office Customers can assist the Postal Authorities in the Expedition of their Work."
5.45 p.m.—Selections from English Literature.
6.0 p.m.—English Language Lesson.
6.30 p.m.—Gramophone Concert.
7.15 p.m.—(from Cassel).—Sacred Music from the 16th to the 18th Century.
8.15 p.m.—Concert from the Works of Verdi: 1. "The Force of Destiny"—Overture. 2. (a) Ballad from "Rigoletto," (b) Recitative and Aria from "La Traviata." 3. Selection from "Aida." 4. (a) Richard's Song from "A Masked Ball," (b) Selection from "Othello." 5. Two Orchestral Selections from "Sicilian Vespers": (a) Barcarolle, (b) Tarantella.

HAMBURG (Germany)

Norag (ha, in Morse). 765.5 kh (390.6 m.); 4 kw. Relayed by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); Kiel, 1,200.4 kh (249.9 m.).
Transmits at intervals from 5.50 a.m.
4.0 p.m.—Talk on Emil Rathenau and the German Electrical Industry.
4.30 p.m.—Legal Talk.
5.0 p.m.—Variety Programme.
5.30 p.m.—See Königswusterhausen.
6.0 p.m.—Orchestral Concert.
6.25 p.m.—(from Hanover).—Talk for Workers, "The Various Grades of Employees in the New State."
6.50 p.m.—Frankfurt Exchange and Hamburg Agricultural Prices.
6.55 p.m.—Weather Report.
7.0 p.m.—"Youth on the German Frontiers"—Programme of Talks, Choral and Orchestral Selections and Community Recitation.
8.15 p.m.—Carl Günther Song Recital.
9.15 p.m.—Weather, News, Sports Notes, North Sea and Baltic Weather, Snow and Ice Report and Silent Night.

HILVERSUM (Holland)

Algemeene Vereeniging Radio Omroep. 276.6 kh (1,072.8 m.); 5 kw.
9.40 a.m.—Time. Daily Service.
11.45 a.m.—Police Announcements.
11.50 a.m.—Concert of Trio Music.
1.40 p.m.—Talk (to be announced).
2.10 p.m.—Musical Programme from the Rembrandt Theatre, Amsterdam.
4.40 p.m.—Programme for Children.
5.40 p.m.—Time, and Orchestral Concert. 1. "La Dame blanche"—Overture (Boieldieu). 2. Von Felsen und Tal—Suite (Frederiksen). 3. Loin du bal (Gillet). 4. Selection from "I Pagliacci" (Leoncavallo). 5. Italian Serenade (Schebek). 6. Hallo, Hallo! Hier Wien! (Moréna). 7. Primavera—Serenade (Grit). 8. Marche grecque (Ganne).
6.55 p.m.—English Language Lesson.
7.25 p.m.—Police Announcements.
7.40 p.m.—Time and Talk.
8.10 p.m.—Jewish Programme by Miss Rahel Ermolnikoff (Vocalist) Sam Swoap (Violinist), the Choir conducted by Mr. S. H. Englander. Speeches by Mr. B. J. Kan, Secretary for Home Affairs, and Dr. I. H. J. Vos, Member of the Second Chamber. Weather and News in the Interval, 9.40—9.50 p.m.
10.40 p.m.—Gramophone Concert.
11.10 p.m. (approx.)—Close Down.

HUIZEN (Holland)

889.8 kh (337 m.); 6.5 kw (until 5.40 p.m.). From 5.40 p.m. 162.5 kh (1,840.1 m.).
10.40 a.m.—Programme for Hospitals.
12.10 p.m.—Organ Recital.
1.40 p.m.—Programme for Schools.
3.40 p.m.—Programme for Hospitals.
6.10 p.m.—Literary Talk.
6.40 p.m.—Shorthand Lesson.

7.10 p.m.—Talk, by Dr. van Nes Czn.
7.40 p.m.—Concert from Groningen. Talk by Prof. Veldhuizen. Choral, Violin and Tenor Solos and Recitations. News after the Concert.

KALUNDBORG (Denmark)

Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw.
See Copenhagen Programme.

KATOWICE (Poland)

Polskie Radio. 721.7 kh (414.3 m.); 10 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—Polish Language Lesson.
6.45 p.m.—News and Time.
7.0 p.m.—Talk by Dr. Gronovsky.
7.30 p.m.—International Concert. See Vienna.
9.0 p.m.—Weather and News.
9.30 p.m.—Dance Music Programme.

KÖNIGSBERG (Germany)

Ostmarken Rundfunk. 1,070 kh (280 m.); 4 kw. Relayed by Danzig, 657.4 kh (457.3 m.).
Transmits at intervals from 8.0 a.m.
3.30 p.m.—Orchestral Concert.
5.10 p.m.—Ice Report.
5.20 p.m.—"Women as Political Economists and Lawyers."
5.50 p.m.—Talk, "Martin Luther, the Reformer."
6.25 p.m.—English Reading from the Works of Galsworthy.
7.0 p.m.—Reading.
7.30 p.m.—Recital of Popular Melodies, followed by Orchestral Concert of Light Music.
9.20 p.m.—Weather, News and Sports Notes.
9.30 p.m.—Concert of Orchestral Music and Dance Music Programme.
11.0 p.m. (approx.)—Close Down.

KOVNO (Lithuania)

Radio Kaunas. 150 kh (2,000 m.); 7 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—"The Beating Heart," Drama (Gunold), followed by Orchestral Concert.

LAHTI (Finland)

199.45 kh (1,504 m.); 20 kw. Programme also for Helsingfors, 800.5 kh (374 m.); 0.8 kw.
Transmits at intervals from 10.0 a.m.
6.20 p.m.—Concert. 1. Vocal Selections. 2. Selections for Accordion. 3. Humoresques. 4. Selections for Accordion.
7.45 p.m.—News in Finnish and Swedish and Close Down.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relayed by Aix-la-Chapelle, 657.1 kh (456.4 m.); Cologne, 1,139.5 kh (263.1 m.); Münster, 1,129.1 kh (265.6 m.).
Transmits at intervals from 9.15 a.m.
12.5 p.m.—Orchestral Concert.
1.30 p.m.—Hints for the Housewife.
2.0 p.m.—Programme for Children.
2.30 p.m.—Economic Report.
3.5 p.m.—Talk for Women, "Ricarda Huch and her Work."
3.30 p.m.—Talk, "The Enchantment of Distance."
4.0 p.m.—Tales from Dr. Dolittle's Circus.
4.20 p.m.—Raffia Work for Little Children.
4.45 p.m.—Recital of Songs to the Lute and Cello Solos. In the Interval, at 5.15 p.m.: Programme Announcements.
5.30 p.m.—Talk, "Recreation for German Youth."
5.50 p.m.—Economic Report, Weather Forecast and Sports Notes.
6.15 p.m.—Spanish Conversation.
6.35 p.m.—Talk for Parents.
7.0 p.m.—Orchestral Selections: 1. "Oberon"—Overture (Weber). 2. Waltz from "Der Rosenkavalier" (Strauss). 3. Selection from "Pique Dame" (Tchaikovsky). 4. Serenade (Tarenghi). 5. First Little Suite (Michele). 6. Hungarian Dances (Brahms).
8.0 p.m.—Cembalo Recital: 1. Trio in C minor for Flute, Violin and Cembalo (Handel). 2. Two Selections for Soprano Solo and Cembalo. 3. Franzosische Suite in E major for Cembalo Solo (Bach). 4. Sonata in G major for Cembalo and Violin (Haydn). 5. Sonata-tempo di ballo, for Cembalo Solo (Scarlatti). 6. Five Songs for Soprano and Cembalo. After the Concert, News: Sports Notes,

Business Announcements and Concert from the Hotel zur Post Elberfeld.
11.0 p.m. (approx.)—Close Down.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relayed by Dresden, 775 kh (387 m.).
Transmits at intervals from 9.5 a.m.
3.30 p.m.—Orchestral Concert.
4.45 p.m.—Advertising Notes.
5.20 p.m.—Weather Forecast and Time.
5.30 p.m.—See Königswusterhausen.
6.0 p.m.—Talk, "Theories of Life."
6.30 p.m.—Talk, "Lessing and Music."
7.0 p.m.—Concert of Selections from the Works of Hans Pfitzner, conducted by the Composer. 1. Three Preludes to "The Feast of Solihou" (Ibsen). 2. Lethe for Choir and Orchestra. 3. Selection from "Die Rose von Liebesgarten." 4. Heinzelmännchen for Choir and Orchestra.
8.15 p.m.—Readings from "Oliver Twist" (Dickens), with Introductory Talk.
9.0 p.m.—Labour Market Report, Weather, News and Sports Notes.
9.20 p.m.—Light and Dance Music.

LJUBLJANA (Yugoslavia.)

Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw.
Transmits at intervals from 11.30 a.m.
4.0 p.m.—Orchestral Concert.
5.30 p.m.—Czech Language Lesson.
6.0 p.m.—French Language Lesson.
6.30 p.m.—Medical Talk.
7.0 p.m.—Sonata Recital.
9.0 p.m.—Tides Report, Time, News and Close Down.

MADRID (Spain)

Union Radio (EAJ). 708.3 kh (423 m.); 1 kw.
Transmits at intervals from 11.45 a.m.
7.0 p.m.—Chimes, Exchange Quotations, and Orchestral Concert. 1. "Genoveva"—Overture (Schumann). 2. Mezzo-Soprano Solos: (a) Gebet (Bach), (b) Im Walde (Mozart), (c) Pour toi seul (Chopin). 3. Selection from "L'apprenti sorcier" (Dukas). 4. Mezzo-Soprano Solos: (a) Liebeslied (Liszt), (b) Selection (Jensen). (c) I hide my love (R. Strauss). 5. Persian Dances from Khovantchina (Moussorgsky).
8.0 p.m.—Lesson in Spanish-American History.
8.25 p.m.—News and Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. 595.3 kh (503.9 m.); 7 kw.
Transmits at intervals from 10.15 a.m.
7.15 p.m.—Talk on Sardinia, followed by News.
7.30 p.m.—Time Signal, followed by News and Relay of an Operetta. After the First Act, Talk, "The Vicissitudes of a Great Inventor—Meucci and the Invention of the Telephone."
9.55 p.m.—News and Economic Notes.
10.0 p.m.—Dance Music Programme from the Fiaschetta Toscana.
10.30 p.m. (approx.)—Close Down.

MOTALA (Sweden)

218.9 kh (1,370 m.); 20 kw.
See Stockholm Programme.

MUNICH (Germany)

Deutsche Stunde in Bayern. 558.4 kh (537.2 m.); 4 kw. Relayed by Augsburg, 529.75 kh (566.3 m.); Kaiserslautern, 1,025.5 kh (272.1 m.); Nürnberg, 1,250 kh (240 m.).
Transmits at intervals from 5.45 a.m.
6.0 p.m.—(From Nürnberg) Esperanto Language Lesson.
6.30 p.m.—Talk on the following Transmission.
6.35 p.m.—Symphony Concert from the "Tonhalle," Munich. 1. Waldmusik, for Orchestra (Graener). 2. Concerto for Pianoforte and Orchestra in D minor, Op. 15 (Brahms). 3. Ballet Suite (Reger).
8.20 p.m.—Talk, "Style in Music."
9.20 p.m.—News and Chess Talk.

OSLO (Norway)

Kringkastingskapet. 604.7 kh (496.1 m.); 1 kw. Relayed by Porsgrund, 658 kh (456 m.); Frederikstad, 781 kh (384.1 m.); Rjukan, 1,237.5 kh (242.4 m.); Hamar, 530 kh (566 m.); and Notodden, 1,010 kh (297 m.).
Transmits at intervals from 10.0 a.m.
5.0 p.m.—Chamber Music Programme.

Programmes for Monday.—(Cont.)

6.0 p.m.—Shorthand Dictation.
6.15 p.m.—Weather and News.
6.30 p.m.—Elementary German Lesson.
7.0 p.m.—Time and Review of Foreign Affairs.
7.30 p.m.—Selections for Piano and Cornet. 1. Aus Holbergs Zelt—Suite (Grieg). 2. (a) Liebestraum, and (b) Polonaise in E major (Liszt). 3. Two Movements from Concerto for Cornet (Mozart).
8.15 p.m.—Gramophone Records: Enrico Caruso.
8.30 p.m.—Weather and News.
8.45 p.m.—Topical Talk.
9.0 p.m.—Recitations.
9.30 p.m. (approx.)—Close Down.

PARIS (France)

Eiffel Tower (FL). 201.5 kh (1,488 m.); 12 kw.
7.56 a.m.—Time-Signal on 9,231 kh (32.5 m.).
5.45 p.m.—"Le Journal Parlé."
7.10 p.m.—Weather Forecast.
7.30 p.m.—Concert. 1. Selection from "Pepita Jimenez" (Albéniz). 2. Songs: (a) Air from "The Creation" (Haydn), (b) Agatha's Aria from "Der Freischütz" (Weber). 3. Selection from "Pepita Jimenez" (Albéniz). 4. Poems: (a) Un principe agricole (Bataillat), (b) Notre Jeunesse (Zama-cois). 5. Interlude from "Pepita Jimenez" (Albéniz). 6. Violin Solos: (a) Les moments intimes (Petrzelka), (b) Berceuse (Ondricek). 7. España (Albéniz). 8. Songs: (a) Aria from "Lakmé" (Delibes), (b) Aria from "Esclamonde" (Massenet). 8. Three Pieces from "España" (Albéniz). 9. Poems: (a) Les Séparés (Valmore), (b) Le nom (Schumann). 10. Romance (Smetana). 11. Violin Solos: (a) Poème (Fibich), (b) Selection from "The Bartered Bride" (Smetana). 12. Polonaise (Schubert-Levadé). At 7.56 p.m.—Time Signal on 9,231 kh (32.5 m.).
8.50 p.m.—Silent Night.

PARIS (France)

Radio-Paris (CFR). 171.75 kh (1,740.7 m.); 12 kw.
Transmits at intervals from 6.45 a.m. 12.30 p.m.—Concert. 1. Bouton d'Or

(Pierre). 2. Ronde des Lutins (Razigade). 3. Song (Friml). 4. La Navarraise (Massenet). 5. Réverie du Soir (Saint-Saëns). 6. Humorous Dance (Zoubaloff). 7. Nocturne (Février). 8. Selection from "The Merry Widow" (Lehár). Exchange and News in the Interval.
2.0 p.m.—Market Prices.
3.30 p.m.—Exchange Quotations.
3.45 p.m.—Symphony, Song and Dance Music.
4.45 p.m.—Exchange and News.
6.30 p.m.—Exchange and Agricultural Bulletin.
6.45 p.m.—Gramophone Concert.
7.30 p.m.—Book-keeping Lesson.
7.45 p.m.—Market Prices and News.
8.0 p.m.—Horticultural Talk, followed by Exchange Quotations.
8.15 p.m.—Concert. "Le Mariage Forcé" (Molière). Songs and Chamber Music. During the Intervals: News and Announcements.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). 980 kh (306 m.); 25 kw. Relayed at intervals on 4,800 kh (62.5 m.).
Transmits at intervals from 2.45 p.m. 11.30 p.m.—Variety Programme of Music, Talks, Concerts, Time and Weather Reports, etc.
4.15 a.m. Tues. (approx.)—Close Down.

POSEN (Poland)

Polskie Radio. 892.9 kh (336 m.); 1.5 kw.
Transmits at intervals from 12.0 noon. 6.15 p.m.—"Silva rerum."
6.40 p.m.—Talk on Wireless Technique.
7.0 p.m.—Miscellaneous Items.
7.30 p.m.—International Concert. See Vienna. During the intervals, Theatre and Cinema Notes, News.
9.0 p.m.—Time and News.
9.15 p.m. (approx.)—Close Down.

PRAGUE (Czechoslovakia)

Strasnice. 873.4 kh (341.9 m.); 5 kw.
Transmits at intervals from 10.15 a.m. 6.0 p.m.—Time and News.
6.5 p.m.—Programme from Brünn.
7.0 p.m.—Talk on Dr. Alois Rasin.

7.30 p.m.—International Concert. See Vienna.
9.0 p.m.—Time and News.
9.15 p.m.—Theatre Notes.
9.20 p.m.—Gramophone Music.

ROME (Italy)

Unione Radiofonica Italiana (iRO). 676.25 kh (443.6 m.); 3 kw.
Transmits at intervals from 12.0 noon. 7.29 p.m.—Time Signal, followed by "Giornale parlato" and Press Review.
7.45 p.m.—Concert of Light Music. 1. Orchestral Selections: (a) Alalà—March (Amadei), (b) In the Garden of Love—Suite (Kettelbey). 2. Soprano Solos: (a) Ramona (Rully), (b) Lolota (Peccia). 3. Tenor Solos: (a) Il canto dei fiumi and (b) Questa è la Spagna (Tagliaferri). 4. "Lumie di Sicilia"—Comedy in One Act (Pirandello). 5. Dance Music Selections, followed by Vocal Solos and Orchestral Suite.
9.50 p.m.—"Giornale parlato," and News.
10.0 p.m. (approx.)—Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kh (380 m.); 50 kw. Relayed by 2XAD on 15,337 kh (19.56 m.); and 2XAF on 9,529 kh (31.48 m.); from 11.0 p.m.
Transmits at intervals from 11.45 a.m. 11.0 p.m.—Stock Reports, Produce Market Report, Farm Forum and News Items.
11.29 p.m.—Weather Forecast.
11.30 p.m.—Telechron Time, followed by Dinner Music from the Hotel Van Curler.
12.30 a.m. Tues.—Madrigal mixed Quartet.
1.0 a.m.—"Voice of Firestone," relayed from New York.
1.30 a.m.—A. & P. Gypsies, relayed from New York.
2.30 a.m.—"General Motors Family Party," relayed from New York.
3.30 a.m.—Great Northern Programme, relayed from New York.
4.0 a.m. (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 685 kh (438 m.); 1.5 kw. Relayed by Eskilstuna, 1,208 kh (248 m.); Gävle, 1,470 kh (204 m.); Göteborg, 864.9 kh (344.3 m.); Kalmar, 1,184.5 kh (253 m.); Karlstad,

1,361 kh (220 m.); Mölndal, 218.9 kh (1,370 m.); Sjöffe, 1,190.35 kh (252.9 m.); Sundsvall, 550.9 kh (544.5 m.); and Uppsala, 600 kh (500 m.).
Transmits at intervals from 11.30 a.m. 6.15 p.m.—English Language Lesson.
6.45 p.m.—Talk on New Legislation by Carl Kuylenstierna.
7.15 p.m.—Concert of Swedish Music. 1. "Estrella de Soria"—Overture (Berwald). 2. Concerto No. 3 in C minor for Violin and Orchestra (Aulin). 3. Swedish Rhapsody (Bratt). 4. March from "The Wedding at Ulfasa" (Södermann).
8.15 p.m.—News and Weather.
8.40 p.m. (approx.)—Close Down.

STUTT GART (Germany)

Sddeutscher Rundfunk. 800.9 kh (374.6 m.); 4 kw. Relayed by Freiburg, 520 kh (576.9 m.).
Transmits at intervals from 9.30 a.m. 5.0 p.m.—Time, Weather and Agricultural Labour Report.
5.15 p.m.—Talk on Madagascar.
5.45 p.m.—Wireless Talk.
6.15 p.m.—Talk on Economics.
6.45 p.m.—Time and Weather.
7.0 p.m.—Swabian Programme of Orchestral Selections and Musical Sketch.
7.15 p.m. (from Freiburg).—"Dreiy Freijer"—One-Act Farce (Greber), followed by Concert of Light Music. 1. Romance (Tchaikovsky). 2. In a Chinese Temple Garden (Kettelbey). 3. Im Rosengarten (Schmid). 4. La Cinquantaine (Marie). 5. Three Selections from the Indian Suite (Lülling). 6. Bummel—Intermezzo (Häuser).
8.15 p.m.—See Frankfurt.

TOULOUSE (France)

Radiophonie du Midi. 602.75 kh (495.9 m.); 8 kw.
Transmits at intervals from 12.30 p.m. 8.0 p.m.—Exchange and News.
8.30 p.m.—Concert. 1. Nocturnes: (a) Sirènes, (b) Nuages, (c) Fêtes (Debussy). 2. Aria from "Samson and Delilah" (Saint-Saëns). 3. Aria from "Faust" (Gounod). 4. Two Songs from "Sigurd" (Reyer). 5. Aria from "The Huguenots" (Meyerbeer). 6. Sonata in B flat minor (Chopin). 7. Dance Music.
10.15 p.m.—North African News.
10.30 p.m. (approx.)—Close Down.

VIENNA (Austria)

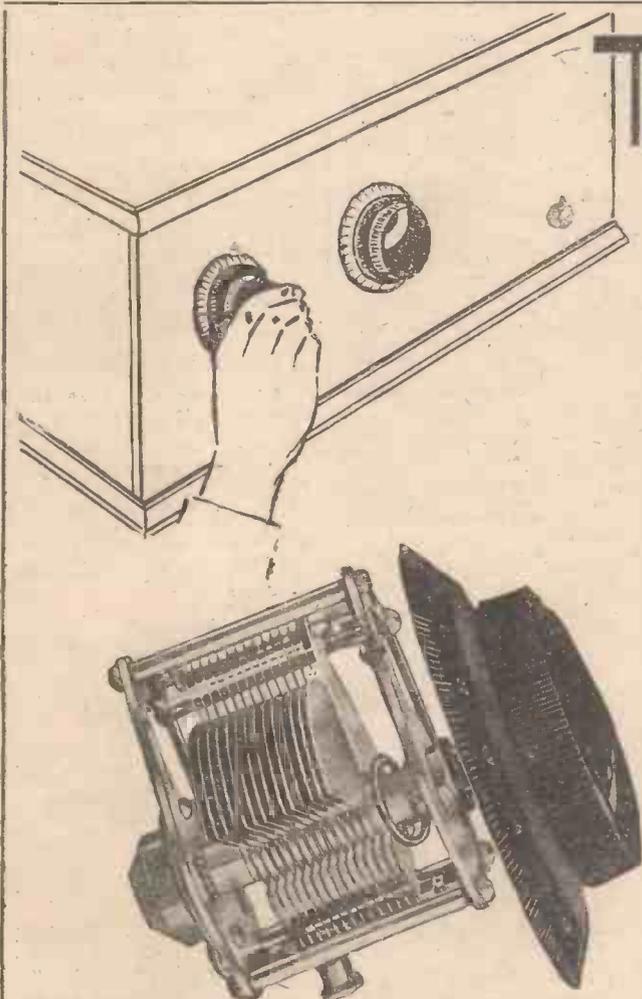
Radio-Wien. 576.9 kh (528.7 m.); 20 kw. Relayed by Graz, 847.75 kh (353.9 m.); Klagenfurt, 658 kh (456 m.); Innsbruck, 1,759.2 kh (282.1 m.); and Linz, 1,209.4 kh (243 m.).
Transmits at intervals from 10.0 a.m. 6.20 p.m.—Theatre Review.
6.55 p.m.—Time and Weather.
7.0 p.m.—Recital of Songs. 1. Bilder aus dem Osten (Wachsmann). 2. (a) Ravenna, (b) The Fiddler (Maux). 3. (a) Es ist ein Sonntag heute, (b) Winterfrühling (Brauneis). 4. (a) Romance, (b) Hinauf (Kienzl).
7.30 p.m.—International Concert of Polish Music. 1. Pianoforte Quartet in D minor, Op. 8 (Noskovsky). 2. Songs by Noskovsky, Nievjadomsky, Szopsky, and Szymanovsky. 3. Pianoforte Solos: (a) Sarabande and Legend (Paderewsky), (b) Polish Dance (Rozycky), (c) Étude in B flat minor (Szymanovsky), (d) Improprtu and Caprice (Zarembsky). (4) Violin Solos: (a) Nocturne in F sharp minor (Rozycky), (b) Romance (Szymanovsky), (c) Mazurka (Zarzycky), followed by Concert of Light Music. Phototelegraphy Transmission after the Programme.

WARSAW (Poland)

Polskie Radio. 215.2 kh (1,393.6 m.); 8 kw.
Transmits at intervals from 10.56 a.m. 6.10 p.m.—French Literature Lesson.
6.35 p.m.—News and Time.
7.0 p.m.—Talk on Economics.
7.30 p.m.—International Concert. See Vienna.
9.0 p.m.—Aviation and Weather Reports, News, and Sports Notes.
9.30 p.m.—Dance Music from the Hotel Bristol.
10.30 p.m. (approx.)—Close Down.

WILNO (Poland)

Polskie Radio. 955 kh (314 m.); 0.6 kw.
Transmits at intervals from 10.50 a.m. 6.5 p.m.—Gramophone Selections.
6.20 p.m.—"They've missed"—Comedy (Zalesky).
6.45 p.m.—Time and News.
7.0 p.m.—Programme from Warsaw.
7.30 p.m.—International Concert. See Vienna.
9.0 p.m.—Programme from Warsaw.
10.0 p.m. (approx.)—Close Down.



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PROGRAMMES FOR TUESDAY (February 19)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio Barcelona (EAJ), 857.4 kh (347.6 m.); 2 kw.
 Transmits at intervals from 11.0 a.m.
 6.0 p.m.—Exchange Quotations.
 6.10 p.m.—Fashion Talk for Women.
 6.30 p.m.—Sextet Selections.
 9.0 p.m.—Elementary English Lesson.
 9.0 p.m.—Chimes and Weather.
 9.5 p.m.—Exchange and News.
 9.10 p.m.—Orchestral Selections.
 Es war ein Knabe gezogen—March (Zimmer). 2. Apasinat—Waltz (Casademont).
 9.20 p.m.—Tenor Song Recital. 1. La Dogaresa—Barcarolle (Millán). 2. La Alegria del Batallon (Chucca). 3. Marina (Arrasca). 4. La leyenda del beso (Soutullo and Vert).
 9.55 p.m.—Orchestral Selection from "L'Ancre" (Saint-Saens).
 10.0 p.m.—Choral Concert. 1. Els tres tambors (Vilarca). 2. Jovenirola (Miller). 3. Humoresque (Grieg). 4. Song of the Volga Boatmen. 5. To the Rhine (Mendelssohn). 6. Selection (Zöllner). 7. Selections for Choir and Orchestra: (a) La Font del Roure (Clavé), (b) Pilgrims' Chorus from "Tannhäuser" (Wagner).
 11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)

Kringkastingselskap. 819.6 kh (366.6 m.); 1 kw.
 Transmits at intervals from 11.0 a.m.
 6.30 p.m.—Orchestral Concert.
 6.50 p.m.—Talk in English.
 7.20 p.m.—Orchestral Selections.
 7.50 p.m.—Topical Talk.
 8.0 p.m.—Pianoforte Recital.
 8.30 p.m.—Talk on Walt Whitman.
 9.0 p.m.—Weather, News and Time.
 9.15 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. 181.7 kh (1,651 m.); 20 kw.
 Transmits at intervals from 9.15 a.m.
 1.30 p.m.—Programme from Leipzig.
 4.30 p.m.—Talk: "The New Turkey."
 5.0 p.m.—Talk: "New Chamber Music for the Pianoforte."
 5.30 p.m.—Elementary French Lesson.
 5.55 p.m.—Talk: "South Germany—Franconia and Swabia."
 7.0 p.m.—Concert of Wind Instrument Music: 1. Rhine Carnival March. 2. Gaudeamus igitur—Overture (Schneider). 3. Akademischer Hymnus (Flemming). 4. Two Madrigals of the Seventeenth Century: (a) Lieblich hat sich gesellet mein Herz in kurzer Frist zu einer, die mir gefällt, (b) Mehr Lust und Freud' die Lieb' hat gar als Gut und Geld (Hasler). 5. Ständchen (Mangwein). 6. Selection from "The Betrothal by Lamplight" (Offenbach). 7. Two Wedding Marches: (a) Swedish Wedding March (Södermann), (b) German Wedding March (Mendelssohn). 8. Minuet from the Berlin Carnival (1792) (Janitsch). 9. Old Brandenburg Dances—Suite (Pless). 10. Drinking Polonaise from Crossen.
 8.0 p.m.—"Frauenlieb und Leben," Op. 42 (Schumann).
 8.30 p.m.—Old and New Dances, followed by News.
 9.45-10.15 p.m.—Phototelegraphic Transmission.

BERLIN (Germany)

Voxhaus. 630.7 kh (475.6 m.); 4 kw.
 Transmits at intervals from 9.10 a.m.
 3.30 p.m.—Concert, followed by Advertising Notes.
 5.0 p.m.—Talk on Insurance.
 6.0 p.m.—Talk on the Press.
 6.30 p.m.—Talk: "German Musical Culture—Chamber Music."
 7.0 p.m.—"Professor Bernhardt"—Comedy in Five Acts (Schnitzler), preceded by Short Introductory Talk. Followed by Weather, News, Time and Sports Notes.

BERNE (Switzerland)

Radio Berne. 728.3 kh (406.3 m.); 1.3 kw.
 Transmits at intervals from 11.43 a.m.
 6.29 p.m.—Time and Weather.
 6.30 p.m.—Agricultural Talk.
 7.0 p.m.—Popular Berne Programme: Selections by Orchestra, Edelweiss Yodelling Club and Alpine Folk.
 7.45 p.m.—Dance and Operetta Music by the Kursaal Orchestra. From Basle, 290.1 kh (1,034 m.): Songs to the Piano and Lute.
 8.45 p.m.—News and Weather.
 9.0 p.m.—The Kursaal Orchestra.
 9.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)

Schlesische Funkstunde. 937.3 kh (320.7 m.); 4 kw. Relayed by Gleiwitz, 918.5 kh (326.5 m.).
 Transmits at intervals from 10.15 a.m.
 6.25 p.m.—Talk, "The Development of Silesian Literature."
 6.50 p.m.—Talk on the Problem of Ensuring Peace in the Future.
 7.15 p.m.—Violin Recital by Florizel von Reuter. 1. (a) Variations on the Theme "The Harmonious Blacksmith" (Handel-Reuter), (b) Four Characteristic Dances from "The Nutcracker Suite" (Tchaikovsky). 2. Scherzo in E minor for Piano (Brahms). 3. National Dances: (a) Mazurka (Wieniawsky), (b) Hungarian Dance (Brahms-Joachim), (c) Rumanian Dance (F. v. Reuter), (d) Spanish Dance (Sarasate), (e) Variations on the G String, and (f) La Campanella (Paganini).
 8.30 p.m.—Relay of Foreign Stations.
 9.0 p.m.—Programme from Voxhaus, followed by News and Report of the Silesian Wireless Society.

BRÜNN (Czechoslovakia)

Komarov. 693.9 kh (423.3 m.); 2.4 kw.
 Transmits at intervals from 11.0 a.m.
 6.0 p.m.—See Prague Programme.
 6.5 p.m.—"The Rascal"—Comedy (Skruzny).
 6.30 p.m.—Song Recital from the Works of Dvorak and Smetana.
 6.45 p.m.—Talk, "The Origin of the League of Nations."
 7.0 p.m.—Concert of Chamber Music. 1. Trio in B major (Beethoven). 2. The Clock (Löwe). 3. Song (Schubert). 4. Trio for Piano (Weber). 5. and 6. Songs by Franz and Wolf.
 8.0 p.m.—Orchestral Concert. 1. Selection from "Eugen Onegin" (Tchaikovsky). 2. Waltz (Komzak). 3. Selection from "The Bartered Bride" (Smetana). 4. Anderson (Nedbal). 5. Selection from "The Little Dutch Girl" (Kálmán).
 9.0 p.m.—See Prague Programme.

BRUSSELS (Belgium)

Radio-Belgique. 585.9 kh (512 m.); 10 kw.
 5.0 p.m.—Concert from the Armenonville Tea-rooms.
 6.0 p.m.—French Language Lesson.
 6.30 p.m.—Concert of Chamber Music by the Station Trio.
 7.30 p.m.—"Radio-Chronique."
 8.10 p.m.—Concert by the Station Orchestra. 1. "The Daughter of the Regiment"—Overture (Donizetti). 2. Algerian Nights (Grieg).
 8.30 p.m.—Popular Science Talk, "If Gravity did not Exist."
 8.40 p.m.—Accordion Recital by Joseph Clermans of Gilly, aged 10. 1. Czardas (Monti). 2. La merle blanc (Damare). 3. Selection from "Si j'étais roi" (Adam). 4. Violette—Waltz.
 9.0 p.m.—Topical Talk.
 9.5 p.m.—Concert. 1. "Orpheus and Eurydice"—Overture (Glück). 2. La nuit, for Voices and Flute (Saint-Saens). 3. Moorish Song (Turino). 4. (a) La splendeur du vide (Saint-Saens), (b) Pas de serments (Huberti). 5. Complaint (Liadoff). 6. Selection from "Sadko" (Rimsky-Korsakoff). 7. Bacchanal (Glazounoff).
 10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)

Magyar Telephon Hirmondok es Radio RT. 540.8 kh (554.6 m.); 20 kw.
 Transmits at intervals from 8.15 a.m.
 5.30 p.m.—"The Valkyrie"—Opera (Wagner), from the Opera House.
 9.35 p.m.—Time, News, and Weather, followed by Concert by the Tzigane Orchestra from the Grand Hotel Britannia.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,139.5 kh (263.1 m.); 4 kw.
 See Langenberg Programme.

COPENHAGEN (Denmark)

Copenhagen Radio. 883.8 kh (339.6 m.); 1 kw. Relayed by København, 259.7 kh (1,155.2 m.).
 Transmits at intervals from 9.30 a.m.
 6.0 p.m.—News, Exchange and Time.
 6.30 p.m.—Talk on "Tivvilde."
 7.0 p.m.—Town Hall Chimes.
 7.2 p.m.—"Fra Tivvilde Egen"—Historical Play (Nygaard)—Music by Andersen.
 7.30 p.m.—Danish Duet Recital.
 7.45 p.m.—Yugoslavian Programme: 1. Talk: "Yugoslavian Folk Music." 2. Fantasia on Yugoslavian

Folk Melodies. 3. Serbian Folk Songs.

8.45 p.m. (approx.)—News.
 9.0 p.m.—Recital from the Works of Schumann: 1. Introduction. 2. From the Song Cycle "Frauenliebe und Leben." 2. Quartet for Pianoforte in E flat major, Op. 47.
 10.0 p.m. (approx.)—Close Down.

CORK (Ireland)

Cork Broadcasting Station (6CK). 1,350 kh (222 m.); 1 kw.
 1.30 p.m.—Weather Forecast and Gramophone Record Music.
 6.0 p.m.—Exchange Quotations, News and Gramophone Selections.
 6.15 p.m.—Programme from Dublin.

CRACOW (Poland)

Polskie Radio. 955 kh (314 m.); 1 kw.
 Transmits at intervals from 10.56 a.m.
 6.10 p.m.—News and Announcements.
 6.50 p.m.—Relay of an Opera.
 7.0 p.m.—Programme from Warszawa.
 9.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw.
 Transmits at intervals from 1.30 p.m.
 6.0 p.m.—Gramophone Records.
 6.15 p.m.—Programme for Children.
 7.0 p.m.—Gramophone Records.
 7.20 p.m.—News and Announcements.
 7.30 p.m.—"Leighacht Ghaedhilige."
 7.45 p.m.—Spanish Language Lesson.
 8.0 p.m.—Concert: 1. Station-Orchestra: (a) Irish Airs (Larchet), (b) Irish Suite (McDonnell). 2. May Mortell: Amhrain Ghaedhilige. 3. Station Orchestra: Request Music. 4. H. R. White: Musical Talk. 5. P. J. Duffy (Baritone). 6. Adolphe Borsche (Piano). 7. Seamus MacCall and Eily M. O'Gaghan: "South America in Song and Story." 8. Station Orchestra: Gems from South America.
 10.30 p.m. (approx.)—Close Down.

FRANKFURT-am-MAIN (Germany)

Südwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relayed by Cassel, 1,200 kh (250 m.).
 Transmits at intervals from 5.30 a.m.
 3.35 p.m.—Programme from Stuttgart.
 5.30 p.m. (from Cassel)—Talk: "Mother and Child."
 5.45 p.m. (from Cassel)—Recital of Fables and Songs by Lessing.
 6.15 p.m.—Talk: "Vitamins."
 6.45 p.m.—Bert Brecht in Readings from his own Works.
 7.15 p.m.—Concert of Military Music.
 8.30 p.m.—"Oedipus" (Sophocles, arr. Heinz Lippmann).

HAMBURG (Germany)

Norag (ha, in Morse). 765.5 kh (390.6 m.); 4 kw. Relayed by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); Kiel, 1,200.4 kh (249.9 m.).
 Transmits at intervals from 5.50 a.m.
 4.0 p.m.—Talk, "Democracy and Economics."
 4.25 p.m.—Talk on Careers.
 4.50 p.m. (from Kiel)—Talk for Women, "The Exchange of Experiences between Town and Country Housewives."
 5.15 p.m.—Programme to be announced.
 6.0 p.m.—Agricultural Talk, "German Forests."
 6.25 p.m.—Talk on World Economics.
 6.50 p.m.—Frankfurt Exchange and Weather Report.
 7.0 p.m.—"Nigger Heaven"—(Goldschmidt). Variety Programme based on the Coloured Quarter of New York.
 8.30 p.m.—Talk, "The Panama Canal."
 9.30 p.m.—Weather, News, Sports Notes.
 9.45 p.m.—Concert from the Ostermann Restaurant.
 10.50 p.m.—North Sea and Baltic Weather Report and Close Down.

HILVERSUM (Holland)

Algemeene Vereniging Radio Omroep. 279.6 kh (1,072.8 m.); 5 kw.
 9.40 a.m.—Trio. Daily Service.
 10.10 a.m.—Gramophone Records.
 10.25 a.m.—Trio Concert.
 11.25 a.m.—Gramophone Records.
 11.40 a.m.—Police Announcements.
 11.55 a.m.—Midday Concert.
 1.40 p.m.—Talk (to be announced).
 2.40 p.m.—Talk on Fashions.
 3.40 p.m.—Concert by Microphone Debutants.
 5.10 p.m.—Gramophone Records.
 5.40 p.m.—Time and Trio Concert.
 6.55 p.m.—English Language Lesson.
 7.25 p.m.—Police Notes and Time.

7.41 p.m.—Weekly Talk on Books.

8.10 p.m.—Orchestral Concert: 1. "Fra Diavolo"—Overture (Auber). 2. Casanova—Suite (Becca). 3. Humorous Variations on "Was Kommt dort von der Höh'?" (Suppé). 4. Dance of the Dervishes (Bendix).
 8.40 p.m.—Recital for Two Pianos: 1. Spanish Dance (Granados). 2. Tango. 3. Can't help loving that man. 4. Blackbottom. 5. Hungarian Dance (Brahms).
 9.10 p.m.—Orchestral Concert: Gold and Silver—Waltz. 2. Selection from "The Count of Luxemburg." 3. (a) Gern' hab' ich die Frau'n geküsst; (b) Wir gehen ins Theater, from "Paganini." 4. Fürstentind—Waltz and 5. Weiber Marsch (Lehár).
 9.55 p.m.—Weather and News.
 10.10 p.m.—Dance Music Programme.
 11.10 p.m. (approx.)—Close Down.

HUIZEN (Holland)

889.3 kh (327 m.); 6.5 kw. (until 5.40 p.m.). From 5.40 p.m. 162.5 kh (1,846.1 m.).
 12.10 p.m.—Concert of Trio Music.
 5.10 p.m.—Gramophone Records.
 6.10 p.m.—German Language Lesson.
 6.40 p.m.—Elementary Latin Lesson.
 7.15 p.m.—Advanced Latin Lesson.
 7.40 p.m.—Sacred Music Recital.
 9.10 p.m.—"Pilate"—Tragedy in Four Acts (Frencken). News.

KALUNDBORG (Denmark)

Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw.
 See Copenhagen Programme.

KATOWICE (Poland)

Polskie Radio. 721.7 kh (414.3 m.); 10 kw.
 Transmits at intervals from 10.56 a.m.
 6.20 p.m.—"Tannhäuser"—Opera (Wagner), relayed from the Polish Theatre, Katowice.
 9.30 p.m.—Weather, News, Close Down.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relayed by Aix-la-Chapelle, 657.1 kh (456.4 m.); Cologne, 1,139.5 kh (263.1 m.); Münster, 1,129.1 kh (265.0 m.).
 Transmits at intervals from 9.15 a.m.
 12.5 p.m.—Orchestral Concert.
 1.30 p.m.—Hints for the Housewife.
 2.0 p.m.—Programme for Children.
 2.30 p.m.—Economic Report.
 2.40 p.m.—"Kasperl bei den Leinwäuschern" or "The Artesian Well"—Children's Play (Pocci).
 3.15 p.m.—Readings from his own Works by Robert Michel.
 3.35 p.m.—Talk: "The Psychology of Wit."
 4.0 p.m.—Educational Talk: "The Co-relation of Natural Science with other Subjects."
 4.45 p.m.—Orchestral Concert. In an interval, at 5.15 p.m.: Programme Announcements.
 5.30 p.m.—Readings from "Die Leute von Seldwyla" (Keller).
 5.50 p.m.—Economic Report, Weather Report and Sports Notes.
 6.15 p.m.—French Conversation.
 6.40 p.m.—Discussion on Humanity.
 7.0 p.m.—"Hahn in Ruh"—Programme of Recitations, Baritone Solos, and Instrumental Quartets, followed by News, Sports Notes, Business Announcements and Silent Night.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relayed by Dresden, 775 kh (387 m.).
 Transmits at intervals from 9.5 a.m.
 3.30 p.m.—Concert of Rocco Music: 1. Symphony in B major (J. C. Bach). 2. Songs: (a) Das Ständchen, and (b) Schäferlied (Haydn); (c) Der Phoenix (P. E. Bach). 3. Ballet Music: "Les petits riens," and 4. Three Songs (Mozart). 5. Overture in D major (Bocherini). 6. Songs: (a) Frühlingsliebe (Schulz); (b) Die rechte Stimmung (Telemann); (c) Das Lösegeld (Reichardt). 7. First Movement from the Military Symphony in G major, No. 100 (Haydn).
 4.45 p.m.—Weather Forecast, Time and Advertising Notes.
 5.5 p.m.—Talk for Women.
 5.30 p.m.—See Königswusterhausen.
 6.0 p.m.—Talk: "The Lawyer and Property."
 6.30 p.m.—Talk on Direct Colour Photography.
 7.6 p.m.—Humorous Selections for Wind Instruments.

8.0 p.m.—Talk on Heinrich Mann and Jakob Wassermann.

9.0 p.m.—Labour Market Report, Weather News and Sports Notes, followed by Dancing Lesson and Dance Music.

LJUBLJANA (Yugoslavia)

Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw.
 Transmits at intervals from 11.30 a.m.
 4.0 p.m.—Orchestral Concert.
 5.30 p.m.—Recitations of Slovene Lyrics.
 6.0 p.m.—German Language Lesson.
 6.30 p.m.—Talk: "Chemistry in Everyday Life."
 7.0 p.m.—Drama, followed by Orchestral Concert.
 9.0 p.m.—Tide Report, Time, News and Close Down.

MADRID (Spain)

Union Radio (EAJ7). 768.3 kh (423 m.); 1 kw.
 Transmits at intervals from 11.45 a.m.
 7.0 p.m.—Chimes, Exchange Quotations and Programme for Children.
 8.0 p.m.—Talk, "Alpine Sports for Health and Hygiene."
 8.25 p.m.—News and Announcements.
 10.0 p.m.—Chimes, Exchange Quotations and Selections from "I Pagliacci"—Opera (Leoncavallo).
 12.0 midnight.—Chimes, News and Dance Music from the Alkazar.
 12.30 a.m. (approx.)—Wed.—Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. 593.3 kh (503.9 m.); 7 kw.
 Transmits at intervals from 10.15 a.m.
 7.15 p.m.—News and Announcements.
 7.30 p.m.—Time and News, followed by Variety Concert. Part One: Seventh Concert of Old Italian Music. Part Two: 1. Pianoforte Solos: (a) Prelude in G Major, and (b) Polichinelle (Rachmaninoff). (c) Marche militaire (Schubert). 2. Orchestral Selections: (a) "La Vestale"—Overture (Spontini), (b) Two Brazilian Dances (Missonne), (c) Invitation to the Waltz (Weber). Between Parts One and Two, at 9.0 p.m. (approx.): Talk, "North and South."
 9.55 p.m.—News and Economic Notes.
 10.9 p.m.—Dance Music Programme from the Fiaschetta Toscana.
 10.30 p.m. (approx.)—Close Down.

MOTALA (Sweden)

218.9 kh (1,370 m.); 20 kw.
 See Stockholm Programme.

MUNICH (Germany)

Deutsche Stunde in Bayern. 538.4 kh (537.2 m.); 4 kw. Relayed by Augsburg, 529.75 kh (566.3 m.); Kaiserslautern, 1,102.5 kh (272.1 m.); Nürnberg, 1,250 kh (240 m.).
 Transmits at intervals from 5.45 a.m.
 6.0 p.m.—Talk: "The Origin of the Great Powers."
 6.35 p.m.—Talk: "European Art in the Nineteenth Century—Cézanne and van Gogh."
 7.5 p.m.—Concert from the Works of Kálmán: 1. Potpourri, Songs and Luetz fro "The Duchess of Chicago." 2. Selections from "The Circus Princess." 3. Jouppla Marsch. 4. Waltz from "La Bayadère." 5. Selections from "Zigeunerprimas." 6. Selection from "The Little Dutch Girl."
 3.30 p.m.—Hans Reimann Programme.
 9.20 p.m.—News and Announcements.

OSLO (Norway)

Kringkastingselskapet. 604.7 kh (496.1 m.); 1 kw. Relayed by Porsgrund, 638 kh (456 m.); Frederikstad, 781 kh (384.1 m.); Rjukan, 1,237.5 kh (242.4 m.); Hamar, 530 kh (566 m.); and Notodden, 1,010 kh (297 m.).
 Transmits at intervals from 10.0 a.m.
 5.35 p.m.—Programme for Housewives: Lesson in Sewing.
 6.15 p.m.—Weather and News.
 6.30 p.m.—Elementary English Lesson.
 7.0 p.m.—Time, followed by Agricultural Talk, "Fruit Culture."
 7.30 p.m.—Orchestral Concert. 1. "Orpheus in the Underworld"—Overture (Offenbach). 2. A Night in St. Petersburg (Helmund). 3. Mattinata (Leoncavallo). 4. Selection from "Les Millions d'Arlequin" (Drigo). 5. Marquissette (Lindsay-Theimer). 6. Berceuse (Per Winge). 7. Valse infidèle (Mackeben). 8. Fantasia on Themes from Glinka (Urbach).

Programmes for Tuesday.—(Cont.)

8.30 p.m.—Weather and News.
8.45 p.m.—Typical Talk.
9.0 p.m.—Relay of Foreign Stations.
10.30 p.m. (approx.)—Close Down.

PARIS (France)

Eiffel Tower (FL). 201.5 kh (1,488 m.); 12 kw.
7.56 a.m.—Time Signal on 9,231 kh (32.5 m.).
8.45 p.m.—"Le Journal Parlé."
7.10 p.m.—Weather Forecast.
7.20 p.m.—Concert of Orchestral and Vocal Music. At 7.56 p.m.: Time Signal on 9,231 kh (32.5 m.).
8.50 p.m.—Silent Night.

PARIS (France)

Petit Parisien. 899.6 kh (333.4 m.); 0.5 kw.
8.45 p.m.—Gramophone Selections, followed by Talk and News.
9.0 p.m.—Concert: 1. Minbaghad-dasch, and 2. Popular Jewish Lullaby (Engel). 3. Eli, Eli (Schallit). 4. "Harald"—Overture (Leroux). 5. Selection from "Les noces de Jeannette" (Massé). 6. Hebrew Music. 7. Hebrew Rhapsody (Zolotareff). 8. First Spanish Rhythms (Laparra). 9. Aubade (Lacombe). 10. Danse bressane, from "La Chanson de Paris" (Casedes). News in the Intervals at 9.25 and 10.0 p.m.

PARIS (France)

Radio-Paris (CFR). 171.75 kh (1,740.7 m.); 12 kw.
Transmits at intervals from 6.45 a.m.
12.30 p.m.—Orchestral Concert: 1. "Les Troyens"—Prelude, and 2. Selection from "The Damnation of Faust" (Berlioz). 3. Devant la mer. 4. Danse mauresque, and 5. Danse kabyle (Bernard). 6. Cuadros (Laparra). 7. Mélodie étrange, and 8. Printemps (Carcel). 9. Six Short Pieces (Guignard). 10. Minnetonka (Lieurance). 11. The Bell Boy (Clarke). Exchange and News during the Interval.
2.0 p.m.—Market Prices.
3.30 p.m.—Exchange Quotations.
3.45 p.m.—Concert: 1. First Arabesque (Debussy). 2. Cello Solos: (a) Forlane (Mouret-Dandelot), (b) Abendlied (Schumann), (c) Minuet (Mozart). 3. Gothic Minuet (Boellmann). 4. Piano Solo: La Maison dans les Dunes (Dupont). 5.

Minuet (Barlow). Sonata for Violin (Vienné). 7. Suite brève (Busser).

4.45 p.m.—Exchange and News.
6.30 p.m.—Exchange Quotations and Agricultural Report.
6.45 p.m.—Gramophone Concert.
7.30 p.m.—Elementary English Lesson, followed by Market Prices and News.
8.0 p.m.—Talk on Aristotle, followed by Exchange Quotations.
8.30 p.m.—"La Traviata"—Opera (Verdi). News during the Intervals.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). 980 kh (306 m.); 25 kw.
Relayed at intervals on 4,800 kh (62.5 m.).
Transmits at intervals from 2.45 p.m.
11.30 p.m.—Variety Programme of Music, Talks, Concerts, Time and Weather Reports, etc.
4.15 a.m. (approx.) (Wed.)—Close Down.

POSEN (Poland)

Polskie Radio. 892.9 kh (336 m.); 1.5 kw.
Transmits at intervals from 12.0 noon.
6.20 p.m.—Programme from Katowice. During the Intervals: Theatre and Cinema Notes, News.
9.30 p.m.—Time and News.
9.45 p.m.—Dance Music relayed from the Esplanade Café.
11.0 p.m. (approx.)—Close Down.

PRAGUE (Czechoslovakia)

Strasnice. 873.4 kh (341.9 m.); 5 kw.
Transmits at intervals from 10.15 a.m.
6.0 p.m.—Time and News.
6.5 p.m.—Dance Music Programme.
6.45 p.m.—Talk, "Reminiscences of Stage Life."
7.0 p.m.—Popular Programme.
8.0 p.m.—Programme of Popular Music. 1. "Operetta No. 66"—Overture (Offenbach). 2. Rural Serenade (Kubin). 3. Theatre Ball (Weis).
8.40 p.m.—Pianoforte Recital. Sonata in E flat major (Beethoven).
9.0 p.m.—Time, News and Sports Notes.
9.15 p.m.—Theatre Notes.
9.20 p.m.—Dance Music Programme.
10.0 p.m.—Time Signal.

ROME (Italy)

Unione Radiofonica Italiana (IRO). 676.25 kh (443.6 m.); 3 kw.
Transmits at intervals from 12.0 noon
6.50 p.m.—"Giornale parlato," Sports Notes, News, Exchange and Weather.
7.29 p.m.—Time, "Giornale parlato" and Press Review.
7.45 p.m.—"The Pearl-Fishers"—Opera in Three Acts (Bizet). In the First Interval, Recitations. In the Second, "Giornale parlato" and Scientific and General Review.
9.50 p.m.—"Giornale parlato" and News.
10.0 p.m. (approx.)—Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kh (380 m.); 50 kw. Relayed by 2 XAF on 9,529 kh (31.48 m.); from 11.0 p.m.
Transmits at intervals from 11.45 a.m.
11.0 p.m.—Stock Reports, Produce Market Report, Farm Forum and News Items.
11.29 p.m.—Weather Forecast.
11.30 p.m.—Telechron Time, followed by Dinner Music from the Hotel Ten Eyck, Albany, N.Y.
12.0 midnight.—Voters' Service, relayed from New York.
12.30 a.m.—Wednesday.—Soconyland Sketch, relayed from New York.
1.0 a.m.—Studio Orchestra.
1.30 a.m.—Prophylactic Programme, relayed from New York.
2.0 a.m.—Eveready Hour, relayed from New York.
3.0 a.m.—Clickquot Club Eskimos, relayed from New York.
3.30 a.m.—Studio Orchestra.
4.0 a.m.—Radio Keith Orpheum Hour relayed from New York.
5.0 a.m.—Television Transmission (W2XAF only).
5.30 a.m. (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiorättstjänst (SASA). 685 kh (438 m.); 1.5 kw. Relayed by Eskilstuna, 1,208 kh (248 m.); Gävle, 1,470 kh (204 m.); Göteborg, 864.9 kh (344.3 m.); Kalmar, 1,184.5 kh (253 m.); Karlstad, 1,361 kh (220 m.); Motala, 218.9 kh (1,370 m.); Saffle, 1,190.35 kh (252 m.); Sundsvall, 550.9 kh (544.5 m.); and Uppsala, 600 kh (500 m.).
Transmits at intervals from 11.0 a.m.

6.15 p.m.—Talk: "Famous Religious Personalities—Grundtvig."
6.45 p.m.—Concert by the Svea Life Guard Band: 1. "Le Roi l'a dit"—Overture (Delibes). 2. Wine, Women and Song—Waltz (Strauss). 3. Selection from "The Circus Princess" (Kalman). 4. Poem (Fibich). 5. Piedmontese Dance (Sinigaglia). 6. Selection from "La Bohème" (Puccini). 7. Ricordo—March (Menente).
7.45 p.m.—Talk: "Resemblances between the Swedish and Danish Languages."
8.15 p.m.—News and Weather.
8.40 p.m.—Literary Criticism.
9.10 p.m.—Programme of Old Dance Music from Göteborg.
10.0 p.m.—Dance Music Programme from "The Sphinx."
11.0 p.m. (approx.)—Close Down.

STUTTGART (Germany)

Süddeutscher Rundfunk. 800.9 kh (374.6 m.); 4 kw. Relayed by Freiburg, 520 kh (576.9 m.).
Transmits at intervals from 9.30 a.m.
3.15 p.m.—Programme of Ballet Music and Dance Melodies.
5.0 p.m.—Time, Weather and Agricultural News.
5.15 p.m.—Talk, "Is the Earth the only Inhabited Globe?"
5.45 p.m.—Talk on Wireless Technique.
6.15 p.m.—Talk, "Women of the Baltic."
6.45 p.m.—Orchestral Concert. 1. Bülow Marsch (Blon). 2. Serenade (Weyler). 3. Lieb Väterchen (Klose). 4. Wedding Procession in Lilliput (Translateur).
7.15 p.m.—Concert of Military Music, from the Works of Moltke, Ludwig, Scherzer, Meyerbeer, Meissner.
8.30 p.m.—"Chamber Music"—Comedy in Three Acts (Ilgenstein), followed by News.

TOULOUSE (France)

Radiophonie du Midi. 602.75 kh (495.9 m.); 8 kw.
Transmits at intervals from 12.30 p.m.
8.0 p.m.—Exchange and News.
8.30 p.m.—Concert: 1. Waltzes. 2. Aria from "The Barber of Seville" (Rossini). 3. Aria from "I Pagliacci" (Leoncavallo). 4. Aria from "Manon Lescaut" (Auber). 5. "The Drum-major's Daughter"—Overture (Offenbach). 6. Prélude à l'après-midi d'un faune (Debussy).

7. Danse macabre (Saint-Saëns). 8. Polonaise (Chopin). 9. Marche arabe (Ganne). 10. Piano Solos: (a) Adagio (Beethoven), (b) Minute (Paderewsky). 11. Serenade for Violin (Drdla). 12. Dance Music.
10.15 p.m.—North African News.
10.30 p.m. (approx.)—Close Down.

VIENNA (Austria)

Radio-Wien, 576.9 kh (528.7 m.); 20 kw. Relayed by Graz, 847.75 kh (353.9 m.); Klagenfurt, 658 kh (456 m.); Innsbruck, 1059.2 kh (281.1 m.); and Linz, 1,209.4 kh (243 m.).
Transmits at intervals from 10.0 a.m.
6.0 p.m.—Advanced French Lesson.
6.35 p.m.—Elementary English Lesson.
7.0 p.m.—Time and Weather.
7.5 p.m.—Recital of Songs from the Works of Blümel.
7.40 p.m.—Orchestral Concert. 1. Moorish March from "Bohémien" (Moszkovsky). 2. "Si j'étais Roi"—Overture (Adam). 3. Waltz from "The Gipsy Baron" (Joh. Strauss). 4. Violin Fantasia—in Mendelssohn's Rose Garden. 5. Prélude and Serenade from the Ballet "Der Schneckemann" (Korngold). 6. Moment musical (Schubert). 7. (a) Indian Dance, (b) The Doll—Polka Humoresque (Wacek). 8. Selection from "Gipsy Love" (Lehár). 9. Sphärenklänge—Waltz (Jos. Strauss). 10. Aus der Zeit der jungen Liebe—Potpourri (Kornzák). 11. Los Banderilleros—March (Volpati). Phototelegraphy Transmission after the Programme.

WARSAW (Poland)

Polskie Radio. 215.2 kh (1,393.6 m.); 8 kw.
Transmits at intervals from 10.56 a.m.
6.20 p.m.—Relay of Opera from Katowice. After the Programme: Aviation and Weather Reports, Police and Sports Notes, News, followed by Mareoni Transmission of Foreign Stations.

WILNO (Poland)

Polskie Radio. 955 kh (314 m.); 0.6 kw.
Transmits at intervals from 10.56 a.m.
6.5 p.m.—Weather Report and Forecast.
6.20 p.m.—Programme from Katowice.
9.0 p.m.—News and Relay of Foreign Stations

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PROGRAMMES FOR WEDNESDAY (February 29)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio Barcelona (EAJ). 857.4 kh (347.6 m.); 2 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—International Market Prices.
6.10 p.m.—Sextet Selections.
8.30 p.m.—Castilian Grammar Lesson.
9.0 p.m.—Chimes and Weather.
9.5 p.m.—Exchange and News.
9.10 p.m.—Orchestral Selections: 1. March (Donnedu-Woodhouse). 2. Plus Ultra (Marrugat).
9.20 p.m.—Song Recital.
9.45 p.m.—Recitations from the Poems of Don Francisco de P. Ureña.
10.0 p.m.—Second Lenten Concert by the Orficio de Sans: 1. Lobt den Herrn—Motet (Bach). 2. Ave Verum—Motet (Saint-Saëns). 3. O sacrum convivium—Motet (Ribe). 4. Resignación—Sacred Song (Millet). 5. Victimæ paschali—Gregorian Chant. 6. O bone Jesu—Motet, and 7. Velum templi (Palastrina).
11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)

Kringkastingselskap. 819.6 kh (366.6 m.); 1 kw.
Transmits at intervals from 11.0 a.m.
6.30 p.m.—Evening Service from the Korskchurch.
7.10 p.m.—Talk in French.
7.40 p.m.—Gramophone Records.
7.50 p.m.—Topical Talk.
8.0 p.m.—Talk on Edgar Allan Poe.
8.30 p.m.—Orchestral Concert.
9.0 p.m.—Weather, News and Time.
9.15 p.m.—Dance Music Programme.
10.30 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. 181.7 kh (1,651 m.); 20 kw.
Transmits at intervals from 9.15 a.m.
3.30 p.m.—Programme from Hamburg.
4.30 p.m.—Talk: "The Workers' Interest and the Reparations Payment."
5.0 p.m.—Talk on Karl Schönherr.
5.30 p.m.—Advanced French Lesson.
5.55 p.m.—Talk for Mechanics.
6.20 p.m.—Talk: "Introduction to the Understanding of Music."
7.0 p.m.—East and West Prussian Programme: 1. "The Taming of the Shrew"—Overture (Götz). 2. Talk: "East Prussia, an Isolated Land." 3. Talk: "The Importance of East Prussia to German National Culture." 4. Soprano Solos: (a) Schöne Agnete; (b) Solos (Vollerthun). 5. Selections of East Prussian Poetry: (a) Es ist eine alte Stadt (Balke); (b) Das alte Nest, from "Phantasia" (Holz); (c) Gebet (Jung); (d) Ostpreussen bleibt deutsch (Kudnig); (e) Über die Berge der Ewigkeit (Luschnat); (f) Die Frauen von Nidden (Miegel). 6. East and West Prussian Humour. 7. Masquerade—Choral Selection (Fehr), followed by Orchestral Concert of Light Music.
9.0 p.m. (approx.)—Programme from Voxhaus.

BERLIN (Germany)

Voxhaus. 630.7 kh (475.6 m.); 4 kw.
Transmits at intervals from 9.10 a.m.
3.30 p.m.—"Der Traum, ein Leben"—Dramatic Fairy Tale in Four Acts for Young People (Grillparzer), followed by Advertising Notes.
5.10 p.m.—Talk by Dr. C. Thomaalla.
5.35 p.m.—Talk: "Forerunners of Western Europeanism."
6.0 p.m.—Talk: "Art Connoisseurs and their Collections."
6.30 p.m.—Talk: "The Rationalisation of Industrial Life."
7.0 p.m.—Evening Entertainment.
8.0 p.m.—Concerto for Violin and Orchestra, Op. 35 (Tchaikovsky).
8.30 p.m.—Lecture Recital—"German Musical Culture": 1. Introductory Talk. 2. Piece for Pianoforte Op. 37 (Tieszen). 3. Baritone Solos: (a) Der wunde Ritter (Heine); (b) Aus einer Sturmnacht (Rilke); (c) Aus des Knaben Wunderhorn (Jarnach). Followed by Press Review, Weather, News, Time, Sports Notes and Dance Music Programme.
11.30 p.m. (approx.)—Close Down.

BERNE (Switzerland)

Radio Berne. 738.3 kh (406.3 m.); 1.3 kw.
Transmits at intervals from 11.43 a.m.
6.0 p.m.—Talk, "The Poems and Prose Writings of Authors from Fribourg and the District."
6.29 p.m.—Time and Weather.

6.30 p.m.—Jugoslavian Programme: Talk on the Political Position in Jugoslavia.
7.0 p.m. (from Berne and Lausanne, 441.1 kh (680 m.)) Concert of Jugoslavian Music, Serbian and Slavonic Folk-songs.
7.35 p.m.—Talk on Jugoslavian Literature.
7.50 p.m.—Musical Programme (cont.)
8.10 p.m. (from Lausanne).—Orchestral Concert.
8.45 p.m.—News and Weather.
9.0 p.m.—The Kursaal Orchestra.
9.35 p.m. (approx.)—Close Down.

BRESLAU (Germany)

Schlesische Funkstunde. 937.3 kh (320.7 m.); 4 kw. Relayed by Gleiwitz, 918.5 kh (326.5 m.).
6.25 p.m.—Talk, "Company—Promoting in Commerce and Industry"
6.50 p.m.—Topical Talk.
7.15 p.m.—"Herr Lamberthier" (Satan)—Comedy (Verneuil—arr. Blum).
8.30 p.m.—Programme of Jugoslavian Folk-Songs.
9.0 p.m.—News and Announcements.
9.15 p.m.—Talk, "Legal Protection against Wireless Disturbances."
9.40 p.m. (approx.)—Close Down.

BRÜNN (Czechoslovakia)

Komarov. 693.9 kh (432.3 m.); 2.4 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—See Prague Programme.
6.5 p.m.—Orchestral Concert: 1. Village Musicians (Kozak). 2. Legend (Kostal). 3. Czech Dance (Balling). 4. Serenade (Procházka). 5. From the Old World and the New (Leopold). 6. Monte Carlo Waltz (Nedbal). 7. March (Fucik).
7.0 p.m.—See Prague Programme.
9.15 p.m.—Programme Announcement.

BRUSSELS (Belgium)

Radio-Belgique. 585.9 kh (512 m.); 10 kw.
5.0 p.m.—Concert from the Palace Hotel Tea-rooms.
6.0 p.m.—Talk on Edmond Rostand.
6.15 p.m.—Talk on Modern Poetry.
6.30 p.m.—Concert by Station Trio: 1. Selection from "Carmen" (Bizet). 2. Mazurka for Piano (Chopin). 3. Romance (van Goens). 4. Chez bonne-maman (Antreas). 5. Aubade (Pierne). 6. Waltz from "The Count of Luxemburg" (Lehár). 7. Serenade for Violin (Drdla). 8. Czardas Scene (Lederer). 9. Serenata (Enzolini). 10. Conte d'antan (Fourdrain). 11. Suite orientale (Bonis). 12. Melody for Cello (Strauwen). 13. Tails up (Braham).
7.30 p.m.—Radio-Chronique.
8.15 p.m.—Gramophone Selections.
8.30 p.m.—Concert relayed from Antwerp: 1. Scottish Melodies (Gillon). 2. Concerto for Cello and Orchestra (Lalo). 3. Symphony No. 2 (Tchaikovsky). 4. Sonate ancienne (Locatelli). 5. Dona Diana (Reznicek). After the Concert: News and Close Down.

BUDAPEST (Hungary)

Magyar Telefon Híradó és Radio R.T. 540.8 kh (554.6 m.); 20 kw.
Transmits at intervals from 8.15 a.m.
6.25 p.m.—Italian Language Lesson.
7.0 p.m.—Gramophone Concert.
7.30 p.m.—Jugoslavian Programme relayed from Zagreb (973 kh); 308.3 m.).
9.20 p.m.—Time, Weather and News, followed by Gramophone Concert.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,139.5 kh (263.1 m.); 4 kw.
See Laugenberg Programme.

COPENHAGEN (Denmark)

Copenhagen Radio. 883.8 kh (339.4 m.); 1 kw. Relayed by Kalundborg, 259.7 kh (1,155.2 m.).
Transmits at intervals from 6.30 a.m.
6.0 p.m.—News, Exchange and Time.
6.30 p.m.—Talk, "Women in Public Life."
7.0 p.m.—Town Hall Chimes.
7.2 p.m.—Concert by the Band of the Royal Life Guards: 1. Prins Frederiks March (Schmitt). 2. Pastorale (Gade). 3. Selection from the Ballet "Pontemolle" (Lincke). 4. Rosenborg—March (Hoyer). 5. Fantasia on Danish Military Songs (Nielsen). 6. Serenade from the Music to Drachmann's "Der var engang" (Muller). 7. Introduction to the Ballet "Valdemar" (Frölich). 8. Nordiske Fostbrodre—Gallop (Lumbye). After the Programme, News.

8.15 p.m.—Reading: "Et Skud i Taagen" (Jacobsen).
8.45 p.m.—Band Concert (continued): 1. Victory March (Blankenburg). 2. "Raymond"—Overture (Thomas). 3. Wiener Bonbons—Waltz (Strauss). 4. Selection from "Aida" (Verdi). 5. Polonaise from "Eugen Onegin" (Tchaikovsky). 6. Entrance from "La Colombe" (Gounod). 7. Sweden (Stenhammer). 8. Entry of The Boyards—March (Halvorsen).
9.15 p.m.—Dance Music. Relayed from Nimb's Restaurant.
11.0 p.m.—Town Hall Chimes.
11.30 p.m. (approx.)—Close Down.

CORK (Ireland)

Cork Broadcasting Station (6CK). 1,350 kh (222 m.); 1 kw.
1.30 p.m.—Weather Forecast, and Gramophone Record Music.
6.0 p.m.—Exchange Quotations, News and Gramophone Selections.
6.45 p.m.—Programme from Dublin.

CRACOW (Poland)

Polski Radio. 955 kh (314 m.); 1 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—"The Letter Box."
6.50 p.m.—Time Signal from the Astronomical Observatory.
7.0 p.m.—Agricultural Report.
7.30 p.m.—Programme from Katowice.
8.0 p.m.—Literary Programme.
8.15 p.m.—Programme from Katowice.
9.0 p.m.—Programme from Warsaw.
9.30 p.m.—Concert from Restaurant.
10.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw.
Transmits at intervals from 1.30 p.m.
6.0 p.m.—Gramophone Records.
6.15 p.m.—Programme for Children.
7.0 p.m.—Programme for Women.
7.20 p.m.—News and Irish Lesson.
7.45 p.m.—German Language Lesson.
8.0 p.m.—Concert: 1. No. 1 Army Band. 2. Jean Nolan (Soprano). 3. Adolphe Borsche (Piano). 4. Kathleen Roddy: Amhrán Ghachdhlige. 5. Jack O'Sheehan (Entertainer).
10.30 p.m. (approx.)—Close Down.

FRANKFURT-am-MAIN (Germany)

Sudwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relayed by Cassel, 1,200 kh (250 m.).
Transmits at intervals from 5.30 a.m.
3.45 p.m.—Tales from the Chinese: "The Last Emperor" (Klabund).
4.15 p.m. (from Stuttgart)—Concert.
4.45 p.m.—See Langenberg.
5.30 p.m.—Talk: "The Apprentice and Trade Regulations."
6.0 p.m.—Selections from French Literature.
6.15 p.m.—French Language Lesson.
6.45 p.m.—Nature Science Talk.
7.0 p.m.—"Undine"—Opera in Four Acts (Lortzing), relayed from the National Theatre, Cassel.

HAMBURG (Germany)

Nörög (ha, in Morse). 765.5 kh (392.6 m.); 4 kw. Relayed by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); and Kiel, 1,200.4 kh (249.9 m.).
Transmits at intervals from 5.50 a.m.
3.30 p.m.—Concert from the Works of Edward Moritz. 1. Kammer-symphonie No. 2, Op. 34. 2. Three Songs set to the Words of Tagore, for Baritone, with Orchestral accompaniment, Op. 25. 3. Burlesque for Full Orchestra, Op. 9.
4.30 p.m.—Talk, "The Origin of the Opera."
5.0 p.m.—Orchestral Concert.
5.45 p.m.—Talk on Chess.
6.0 p.m.—Talk, "Church Welfare Work in the Middle Ages."
6.25 p.m.—Talk on Wireless Technique.
6.50 p.m.—Frankfurt Exchange and Hamburg Agricultural Prices.
6.55 p.m.—Weather Report.
7.0 p.m.—Jugoslavian Programme. 1. Introduction (Bieder). 2. Ballet Music from "The Little Porcelain Figure" (Safrensky). 3. Three Vocal Selections from "Japanese Spring"—Song Cycle (Hirschler). 4. Readings. 5. Two Piano Solos (Hirschler). 6. Two Selections from the Ballet "The Little Porcelain Figure" (Safrensky).
8.0 p.m.—Symphony Concert: 1. Symphony No. 2, in D major (Haydn). 2. Piano Solos: (a) Ah! Vous Ferez-maman (Mozart). (b) Nacht in Wien (Schubert-

Liszt). 3. Symphonic Poem (Spenderoff). 4. Concerto for Piano in E flat major (Liszt). 5. Eine Puppenspiel—Ouverture (Gál).
9.20 p.m.—Weather, Sports Notes, News and Snow Report.
9.35 p.m.—Fancy Dress Carnival in the Studio. In an interval, at 10.50 p.m., North Sea and Baltic Weather Report.

HILVERSUM (Holland)

Algemeen Vereeniging Radio-Omroep. 279.6 kh (1,072.8 m.); 5 kw.
9.40 a.m.—Time, Daily Service.
10.10 a.m.—Gramophone Records.
10.25 a.m.—Trio Concert.
11.25 a.m.—Gramophone Records.
11.40 a.m.—Police Announcements.
11.55 a.m.—Lunchtime Concert.
1.40 p.m.—Programme for Children.
2.40 p.m.—Talk, "Make it Yourself!" by Mrs. Schaake-Verkozen.
3.40 p.m.—Talk, "The Art of Ancient Greece."
4.40 p.m.—Gramophone Records.
5.25 p.m.—Agricultural Talk.
5.55 p.m.—Orchestral Concert: 1. Extravaganzen (Morena). 2. Schlager Echo (Lindsay-Theimer). 3. Alt-Heidelberg (May). 4. Foxtrots (Medley von Platen).
6.55 p.m.—Talk to be announced.
7.25 p.m.—Police Notes and Time.
7.41 p.m.—"Cavalleria Rusticana"—Opera (Mascagni), followed by "I Pagliacci"—Opera (Leoncavallo), performed by the Italian Opera Company, from the Carré Theatre, Amsterdam. Weather and News in the interval. Gramophone Dance Music after the programme.
11.10 p.m. (approx.)—Close Down.

HUIZEN (Holland)

889.8 kh (337 m.); 6.5 kw (until 5.40 p.m.). From 5.40 p.m. 162.5 kh (1,846.1 m.).
10.40 a.m.—Programme for Hospitals.
12.10 p.m.—Concert.
4.40 p.m.—Programme for Children.
6.10 p.m.—Elementary-French Lesson.
6.40 p.m.—Lesson in English-Commercial Correspondence.
7.10 p.m.—Talk by M. Risseneuv.
7.40 p.m.—Concert. 1. Talk. 2. (a) Aria from "Clearco in Negroponet" (Gabielli). (b) Arco di Parma del 1688 (Anon.). 2. Aria from "Olympiade" (Pergolesi). 3. Concerto (Haydn). 4. (a) Wiegenlied, (b) Liebe am allen Wegen (Schubert). 5. (a) Widmung, (b) Arlequin (Popper). 6. (a) Heimkehr, (b) Morgen, (c) Ständchen (R. Strauss). 7. Berceuse (Diepenbrock): Followed by News.

KALUNDBORG (Denmark)

Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw.
See Copenhagen Programme.

KATOWICE (Poland)

Polski Radio. 721.7 kh (414.3 m.); 10 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—Talk, "The Silesian House-wife."
6.50 p.m.—Time Signal.
7.0 p.m.—Literary Sketches.
7.30 p.m.—Concert of Chamber Music from the Works of Schumann, followed by Literary Programme.
9.0 p.m.—Weather, Press, and Sports News, and Dance Music.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relayed by Aix-la-Chapelle, 657.1 kh (456.4 m.); Cologne, 1,139.5 kh (263.1 m.); Münster, 1,129.1 kh (265.6 m.).
Transmits at intervals from 9.15 a.m.
12.5 p.m.—Orchestral Concert.
1.30 p.m.—Household Hints.
2.0 p.m.—Programme for Children.
2.30 p.m.—Economics-Report.
2.40 p.m.—Talk for Women.
3.10 p.m.—Review of Books.
3.30 p.m.—Ernst Toller Programme.
4.0 p.m.—Educational Talk.
4.45 p.m.—Jugoslavian Concert: 1. Serbian Folk Songs: 2. Piece for Violin Op. 12 (Vladigeroff). 3. Croatian Folk Songs.
5.30 p.m.—Talk, "The Treatment of Alcoholism."
6.15 p.m.—Talk for Workers: "From a Worker's Biography."
6.40 p.m.—Talk on Economics.
7.15 p.m.—Gramophone Concert of Caruso's Songs from French Opera: 1. "O Paradise" from "L'Africain," and (b) "Fairer than the Lily," from "The Hugenots" (Meyerbeer). 2. "Rachel, quand du Seigneur la grâce tutélaire," from "La Juive" (Halévy). 3. (a) Two Arias from "Manon,"

and (b) "O Lord, O Judge, O Father," from "The Cid" (Massenet). 4. "Vois ma misère" from "Samson and Delilah" (Saint-Saëns). 5. Two Arias from "The Pearl-Fishers" and 6. The Flower Song from "Carmen" (Bizet).
8.0 p.m.—"Poor as a Church-Mouse." Comedy in Three Acts (Fodor), followed by News, Sports and Transport Notes, Concert and Dance Music Programme.
11.0 p.m. (approx.)—Close Down.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relayed by Dresden, 775 kh (387 m.).
Transmits at intervals from 9.5 a.m.
3.30 p.m.—Jugoslavian Programme.
4.45 p.m.—Advertising Notes.
5.5 p.m.—Labour Market Report.
5.20 p.m.—Weather Forecast and Time.
5.30 p.m.—See Königswusterhausen.
5.55 p.m.—Talk for Mechanics.
6.30 p.m.—Talk, "The Art of Speaking."
7.0 p.m.—Popular Orchestral Concert: 1. "La Clochette de l'Ermitte"—Overture (Maillart). 2. Melodies from "La Traviata" (Verdi). 3. Living Marionettes (Leoncavallo). 4. Am Chiemsee (Goeppart). 5. Waltz from "The Countess Maritza" (Kálmán).
8.0 p.m.—Concert of Modern Austrian Chamber Music. 1. Lyrical Suite for String Quartet (Berg). 2. Third String Quartet, Op. 19 (Zemlinsky).
9.0 p.m.—Labour Market Report, Weather, News and Sports Notes.
9.30 p.m.—Concert of Light Music from the Café Corso.
11.0 p.m. (approx.)—Close Down.

LJUBLJANA (Yugoslavia)

Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw.
Transmits at intervals from 11.30 a.m.
4.0 p.m.—Orchestral Concert.
5.30 p.m.—Reading of Fairy Tales.
6.0 p.m.—Serbo-Croatian Language Lesson.
6.30 p.m.—Talk, "Neighbouring Countries."
7.0 p.m.—Relay from the Opera House.
9.0 p.m.—Tides Report, Time, News, and Close Down.

MADRID (Spain)

Union Radio (EAJ7). 708.3 kh (423 m.); 1 kw.
Transmits at intervals from 11.45 a.m.
7.0 p.m.—Chimes, Exchange Quotations and Variety Concert.
8.0 p.m.—Agricultural Talk.
8.25 p.m.—News and Announcements.
10.0 p.m.—Chimes, Exchange Quotations and Orchestral Selections.
11.30 p.m.—Band Music from the Hotel Nacional.
12.0 midnight—Chimes, News and Dance Music from the Alkazar.
12.30 a.m. Thurs. (approx.)—Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. 595.3 kh (503.9 m.); 7 kw.
Transmits at intervals from 10.15 a.m.
7.15 p.m.—Talk: "Italian Folklore."
7.25 p.m.—News and Announcements.
7.30 p.m.—Time and News, followed by Quintet Selections: 1. Danza delle marionette (Cerrri). 2. Serenata (Costa). 3. Principessa bionda (Galaverni). 4. Pifferata (Storti).
8.5 p.m.—Relay of a Comedy from the Arcimboldi Theatre.
8.45 p.m. (approx.)—Quintet Selections: 1. Tutti in maschera—Symphony (Pierotti). 2. Gavotta Roccoco (Ricci). 3. The Stolen Bucket (Burgmein). 4. "Le roi l'a dit"—Overture (Delibes). In an interval at 9.0 p.m. (approx.) Topical Talk.
9.30 p.m.—Dance Music Programme.
9.55 p.m.—News and Economic Notes.
11.0 p.m. (approx.)—Close Down.

MOTALA (Sweden)

218.9 kh (1,370 m.); 20 kw.
See Stockholm Programme.

MUNICH (Germany)

Deutsche Staffeln in Bayern. 558.4 kh (537.2 m.); 4 kw. Relayed by Augsburg, 529.75 kh (566.3 m.); Kaiserslautern, 1,102.5 kh (272.1 m.); Nürnberg, 1,250 kh (240 m.).
Transmits at intervals from 5.45 a.m.
6.0 p.m.—Talk, "A Journey through Austria."
6.30 p.m.—Jugoslavian Concert, Vocal and Instrumental Music.
7.15 p.m.—Variety Programme.

Programmes for Wednesday.—(Cont.)

8.20 p.m.—Reading of Modern Austrian Lyrics.
 8.40 p.m.—Concert from Nürnberg. 1. Pastoral Fantasia for Flute and Pianoforte (Doppler). 2. Soprano Solos (Tchaikovsky). 3. Soprano Solos, (a) Auf der Heide ist ein Platz, (b) Zur Drossle sprach der Fink (D'Albert). 4. (a) Swedish Polka (Andersen), (b) Mazurka (Doppler). 5. Soprano Solos, (a) Du kleines, blitzendes Sternlein (Abt), (b) Heimkehr vom Feste (Blech), (c) The Awakening of Spring (Leoncavallo).
 9.20 p.m.—News, followed by Gramophone Record Concert.

OSLO (Norway)

Kringkastingselskapet. 604.7 kh (496.1 m.); 1 kw. Relayed by Porsgrund, 658 kh (456 m.); Frederikstad, 781 kh (384.1 m.); Rjukan, 1,237.5 kh (242.4 m.); Hamar, 530 kh (566 m.); and Notodden, 1,010 kh (297 m.).
 Transmits at intervals from 10.10 a.m. 6.15 p.m.—Weather and News.
 6.30 p.m.—Esperanto Language Lesson.
 7.0 p.m.—Time and Concert of Orchestral Music.
 8.30 p.m.—Weather and News.
 8.45 p.m.—Topical Talk.
 9.0 p.m.—Gramophone Dance Music.
 9.30 p.m. (approx.)—Close Down.

PARIS (France)

Eiffel Tower (FL). 201.5 kh (1,483 m.); 12 kw.
 7.56 a.m.—Time Signal on 9,231 kh (32.5 m.).
 5.45 p.m.—"Le Journal Parlé."
 7.10 p.m.—Weather Forecast.
 7.20 p.m.—Concert: 1. (a) Danse villageoise, (b) La petite maison blanche (Cools). 2. Songs (Cittanova): (a) Les Chrysanthèmes, (b) L'amour. 3. (a) Menuet guilleret, (b) Marche bohémienne (Filippucci). 4. Cello Solos: (a) Adieu (Beethoven), (b) Tambourin (Somis). 5. (a) Aubade sentimentale, (b) Danse latine (Fourdrain). 6. Programme from the Works of M. de Breteuil, under the direction of the Composer: (a) Theme and Variations, in C minor, for Pianoforte, (b) Song,

Sur la Montagne, (c) Song, Conseil, (d) Music from "Diane au Bois," (e) Les Néréides, (f) Song, Amour est en fuite, (g) Barcarolle for Pianoforte, (h) Song, Quand vous serez bien vieille. 7. (a) Prelude, (b) Réverie mauresque (Nerini). 8. Au pays du souvenir, (b) Défilé nocturne (Cadou). At 7.56 p.m.: Time Signal on 9,231 kh (32.5 m.).
 8.50 p.m.—Silent Night.

PARIS (France)

Radio-Paris (CFR). 171.75 kh (1740.7 m.); 12 kw.
 Transmits at intervals from 6.45 a.m. 12.30 p.m.—Concert. 1. Trio (Mendelssohn). 2. Quintet (Dvorak). Exchange and News in the intervals.
 2.0 p.m.—Market Prices.
 3.30 p.m.—Exchange Quotations.
 3.45 p.m.—Concert. 1. "Die Fledermaus"—Overture (J. Strauss). 2. Violin Solos: (a) Souvenir (Drdla), (b) Tango (Albéniz), (c) Le Rouet (d'Ambrosio). 3. La Boîte à Joux (Debussy). 4. Piano Solos: (a) Deux Danses anciennes (Grécourt), (b) Valse élégante (Staub). 5. Sicilienne (Chausson-Chapelier). 6. Sonata for Cello (Saint-Saëns). 7. Bourrée fantasque (Chabrier).
 4.45 p.m.—Market Prices and News.
 6.45 p.m.—Gramophone Concert.
 7.30 p.m.—English Language Lesson.
 7.45 p.m.—Market Prices and News.
 8.0 p.m.—Concert. 1. "The Taming of the Shrew"—Comedy (Shakespeare). 2. Songs and Chamber Music. News and Exchange in the intervals.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). 980 kh (306 m.); 25 kw. Relayed at intervals on 4,805 kh (62.5 m.).
 Transmits at intervals from 2.45 p.m. 11.30 p.m.—Variety Programme of Music, Talks, Concerts, Time and Weather Reports, etc.
 4.15 a.m. (approx.). Thurs.—Close Down.

POSEN (Poland)

Polskie Radio. 892.9 kh (336 m.); 1.5 kw.
 Transmits at intervals from 12.0 noon. 6.10 p.m.—Programme from Warsaw.

6.35 p.m.—Talk in French on French Matters.
 6.50 p.m.—"Broadway"—Play, relayed from the New Theatre.
 9.30 p.m.—Time and News.
 9.45 p.m.—Dancing Lesson.
 10.5 p.m.—Dance Music relayed from the Café Wielkopolanka.
 11.0 p.m. (approx.)—Close Down.

PRAGUE (Czechoslovakia)

Strasnice. 873.4 kh (341.9 m.); 5 kw.
 Transmits at intervals from 10.15 a.m. 6.0 p.m.—Time and News.
 6.5 p.m.—Programme from Brünn.
 7.0 p.m.—Jugoslavian Programme.
 9.0 p.m.—Time, News and Sports Notes.
 9.15 p.m.—Theatre Notes.

ROME (Italy)

Unione Radiofonica Italiana (IRO). 676.25 kh (443.6 m.); 3 kw.
 Transmits at intervals from 12.0 noon. 6.50 p.m.—"Giornale parlato," Sports Notes, News, Exchange and Weather.
 7.20 p.m.—Time, "Giornale parlato" and Press Review.
 7.45 p.m.—Relay of an Opera from the Teatro Reale or from the Studio. In the intervals, Humorous Items.
 9.50 p.m.—"Giornale parlato," and News.
 10.0 p.m. (approx.)—Close Down.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kh (380 m.); 50 kw. Relayed by 2XAD on 15,337 kh (19.56 m.) from 11.0 p.m.
 Transmits at intervals from 11.45 a.m. 11.0 p.m.—Stock Reports, Produce Market Report, Farm Forum, and News Items.
 11.20 p.m.—Weather Forecast.
 11.30 p.m.—Telechron Time, followed by Dinner Music from the Hotel DeWitt Clinton, Albany, N.Y.
 11.45 p.m.—Woodlawn Landscape Service, from Rochester, N.Y.
 12 (midnight)—Mr. and Mrs. Radio Skits (also WFBL, WHAM and WMAK).
 12.30 a.m. (Thurs.)—"La Touraine Tableau," relayed from New York.
 1.0 a.m.—General Electric Programme.

2.0 a.m.—Ipana Troubadours. Relayed from New York.
 2.30 a.m.—Palmolive Hour. Relayed from New York.
 3.30 a.m.—American Wire Fabrics Corporation Programme, with Gold Strand Orchestra. Relayed from New York.
 4.0 a.m. (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiotjänst (SASA). 685 kh (438 m.); 1.5 kw. Relayed by Eskilstuna, 1,208 kh (248 m.); Gäddede, 1,470 kh (204 m.); Göteborg, 864.9 kh (344.3 m.); Kalmar, 1,184.5 kh (253 m.); Karlstad, 1,361 kh (220 m.); Motala, 218.9 kh (1,370 m.); Saffle, 1,190.35 kh (252 m.); Sundsvall, 550.9 kh (544.5 m.); and Uppsala, 600 kh (500 m.).
 Transmits at intervals from 11.30 a.m. 6.15 p.m.—Talk on Social Hygiene.
 6.45 p.m.—"The Hangman"—Play (Schmidt) from Göteborg.
 7.30 p.m.—Song Recital by Carin Edelberg (Soprano). 1. Maria i rosengård (Hallén). 2. (a) Jag längtar dig, (b) Skogen sover (Alfvén). 3. (a) Tag imod kranen, (b) Ingerid Stetten (Södermann).
 7.55 p.m.—Talk on Sport.
 8.15 p.m.—News and Weather.
 8.40 p.m.—Relay of Foreign Stations.
 11.0 p.m. (approx.)—Close Down.

STUTTGART (Germany)

Sddeutscher Rundfunk. 800.9 kh (374.6 m.); 4 kw. Relayed by Freiburg, 520 kh (576.9 m.).
 Transmits at intervals from 9.30 a.m. 3.15 p.m.—Orchestral and Instrumental Concert.
 4.45 p.m.—See Langenberg Programme.
 5.30 p.m.—Talk on Sardinia.
 6.0 p.m.—Talk, "Voltaire as a Philosopher."
 6.30 p.m. (from Mannheim)—Relay from the Festhalle Rosengarten, Symphony Concert. 1. Military Symphony in G major (Haydn). 2. Dem Unendlichen (Schubert). 3. Kleine Abendmusik (Grabner). 4. An die Hoffnung (Reger). 5. Symphony No. 4 in D minor (Schumann). Followed by News, Wireless Announcements, Time and Silent Night for Long-distance Reception.

TOULOUSE (France)

Radiophonie du Midi. 602.75 kh (495.9 m.); 8 kw.
 Transmits at intervals from 12.30 p.m. 8.0 p.m.—Exchange and News.
 8.30 p.m.—Concert: Songs from the following Operas: (a) "Lakmé" (Delibes), (b) "Mireille" (Gounod) (c) "La Tosca" and (d) "La Bohème" (Puccini). (e) "Cavalleria Rusticana" (Mascagni), (f) "Mignon" (Thomas), (g) "Don Quichotte" (Massenet).
 9.0 p.m.—Concert. During the interval, Accordion Selections.
 11.0 p.m.—North African News.
 11.15 p.m. (approx.)—Close Down.

VIENNA (Austria)

Radio-Wien. 576.9 kh (528.7 m.); 20 kw. Relayed by Graz, 847.75 kh (353.9 m.); Klagenfurt, 658 kh (456 m.); Innsbruck, 1,059.2 kh (281.1 m.); and Linz, 1,209.4 kh (243 m.).
 Transmits at intervals from 10.0 a.m. 5.55 p.m.—Time and Weather.
 6.0 p.m.—"Lohengrin"—Opera (Wagner), from the Vienna Opera House, followed by Concert of Light Music. Phototelegraphy Transmission after the Programme.

WARSAW (Poland)

Polskie Radio. 215.2 kh (1,393.6 m.); 8 kw.
 Transmits at intervals from 10.56 a.m. 6.10 p.m.—Talk: "Poland in the Exhibition at Posen."
 6.35 p.m.—News and Time.
 7.0 p.m.—Agricultural Talk.
 7.30 p.m.—Programme of Jugoslavian Music. Theatre Notes in the Interval.
 8.0 p.m.—Literary Programme.
 8.25 p.m.—Concert (contd.).
 9.0 p.m.—Aviation and Weather Reports, News and Sports Notes.
 9.30 p.m.—Dance Music from the Oaza Restaurant.
 10.30 p.m. (approx.)—Close Down.

WILNO (Poland)

Polskie Radio. 955 kh (314 m.); 0.6 kw.
 Transmits at intervals from 10.56 a.m. 6.15 p.m.—Surprise Programme.
 6.40 p.m.—News and Time.
 7.0 p.m.—Programme for Students.
 7.30 p.m.—Programme from Warsaw.
 9.30 p.m.—Dance Music Programme.

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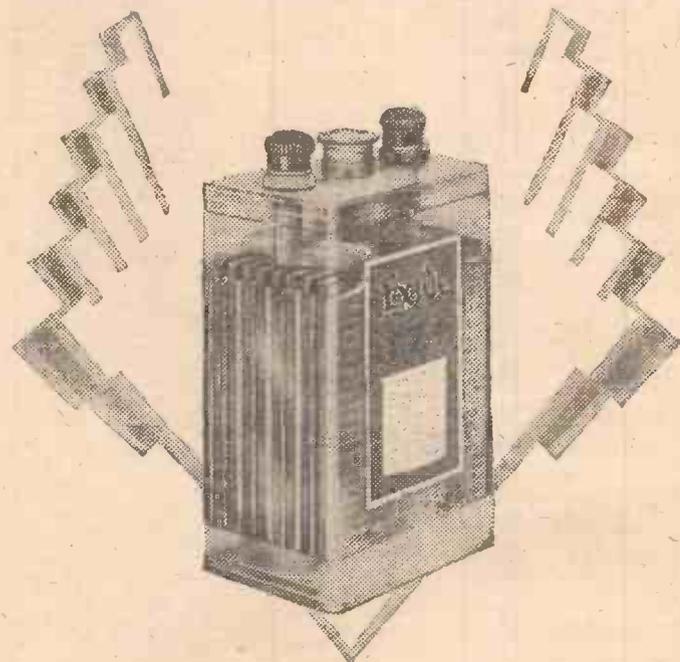
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PROGRAMMES FOR THURSDAY (February 21)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio Barcelona (EAJ1). 857.4 kh (347.6 m.); 2 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—International Market Prices.
6.5 p.m.—Sextet Selections.
6.30 p.m.—Programme for Children.
6.40 p.m.—Readings from the Book, "Lost among Wild Animals."
6.50 p.m.—Reading by the Author from "The Streets of Barcelona" (Toretsky).
8.30 p.m.—English Language Lessons, Elementary and Advanced.
9.0 p.m.—Chimes and Weather.
9.5 p.m.—Exchange and News.
9.10 p.m.—Orchestral Selections. 1. Fingal's Cave—Overture (Mendelssohn). 2. Invitation to the Waltz (Weber). 3. Danza mora (Fernández). 4. Sevilla (Albéniz). 5. Hymn to the Sun (Rimsky-Korsakoff).
9.45 p.m.—Dramatic Selections from the Dramas, "Caridad" (Echegaray) and "Los Campanilleros" (Seca and Fernández).
10.0 p.m.—Selections from "La Ventana de Anís"—Musical Play (Valls and Godes).
11.0 p.m. (approx.)—Close Down.

BERGEN (Norway)

(Kringkastingselskapet). 819.6 kh (366.6 m.); 1 kw.
Transmits at intervals from 11.0 a.m.
6.30 p.m.—Orchestral Selections.
6.50 p.m.—Talk in English.
7.20 p.m.—Orchestral Selections.
7.50 p.m.—Topical Talk.
8.0 p.m.—Song Recital: Romances and Folk Melodies.
8.30 p.m.—Talk, "Eroticism and Culture."
9.0 p.m.—Weather, News and Time.
9.15 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. 181.7 kh (1,651 m.); 20 kw.
Transmits at intervals from 9.15 a.m.
3.30 p.m.—Programme from Voxhaus.
4.30 p.m.—Talk: "German Life in Rome."
5.0 p.m.—Talk: "Friedrich Schlegel" on the occasion of the Hundredth Anniversary of his Birth.
5.30 p.m.—Advanced Spanish Lesson.
5.55 p.m.—Gardening Talk.
6.20 p.m.—Talk: "The Commercial Traveller."
6.45 p.m.—Talk on the following Transmission.
7.0 p.m.—Programme from Voxhaus.

BERLIN (Germany)

Voxhaus. 630.7 kh (475.6 m.); 4 kw.
Transmits at intervals from 9.10 a.m.
3.30 p.m.—Concert: 1. Comedy Overture (Aletter). 2. Waltz from "The Count of Luxemburg" (Lehár). 3. Selection from "Turandot" (Puccini). 4. Adagio from the String Quartet in D minor (Lorenz). 5. Extase (Ganne). 6. Humoresque (Dvorak). 7. Selection from "La Bohème" (Puccini).
4.30 p.m.—Talk and Reading, followed by Advertising Notes.
5.30 p.m.—Talk: "Wages and Conditions in the United States of America."
6.0 p.m.—Talk: "Problems of World Industry."
6.30 p.m.—Talk on the following Transmission.
7.0 p.m.—"The May Queen"—Pastoral Play (translated from the French "Favart" by Kalbeck Music by Gluck), followed by "Versiegelt"—Comic Opera in One Act (Blech).
7.0 p.m.—Weather, News, Time, Sports Notes and Dance Music after the Opera.
11.30 p.m. (approx.)—Close Down.

BERNE (Switzerland)

Radio Berne. 738.3 kh (406.3 m.); 1.3 kw.
Transmits at intervals from 11.43 a.m.
6.0 p.m.—Talk on Wireless Technique.
6.23 p.m.—Time and Weather.
6.30 p.m.—(from Basle, 290.1 kh; 1,034 m.). Talk on the Swiss Folk-song.
7.0 p.m.—Pianoforte Recital of French Works of the 18th Century.
7.35 p.m.—(from Geneva, 394.7 kh; 760 m.). Concert by the Suisse Romande Orchestra, with the collaboration of the Romand Choir and Ernest Bauer, Tenor. News and Weather during the interval.

BRESLAU (Germany)

Schlesische Funkstunde. 937.3 kh (320.7 m.); 4 kw. Relayed by Gleiwitz, 918.5 kh (326.5 m.).
Transmits at intervals from 10.15 a.m.
6.25 p.m.—Talk for Workers.
6.50 p.m.—Talk in English: "Something to read."
7.15 p.m.—Variety Programme.
9.0 p.m.—News and Announcements.
9.30 p.m.—Dance Music Programme.
11.0 p.m.—Orchestral Concert.
12.30 a.m. Fri. (approx.)—Close Down.

BRÜNN (Czechoslovakia)

Komarov. 693.9 kh (432.3 m.); 2.4 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—See Prague Programme.
6.5 p.m.—"How to make him jealous"—Comedy (Mansfeld).
6.30 p.m.—See Prague Programme.
9.15 p.m.—Theatre Review.

BRUSSELS (Belgium)

Radio-Belgique. 585.9 kh (512 m.); 10 kw.
5.0 p.m.—Concert from the Armenonville Tea-rooms.
6.0 p.m.—Flemish Language Lesson.
6.30 p.m.—Colonial Bulletin.
6.35 p.m.—Concert by Station Trio. 1. Selection (Florendas). 2. Petite Marquise (Strauss). 3. A Lane in Spain (Lewis). 4. Marquise (Massenet). 5. Tes yeux miroirs d'amour (Hamy). 6. Selection from "Paul et Virginie" (Masse).
7.0 p.m.—Gramophone Records.
7.30 p.m.—"Radio-Chronique."
8.15 p.m.—Concert devoted to the Works of Messager. 1. Selection from "Scaramouche." 2. Song. 3. Selection from "La petite fonctionnaire." 4. Song. 5. Selection from "La fauvette du Temple." 6. Selection from "François les bas bleus." 7. Song. 8. Selection from "Les dragons de l'Impératrice." 9. Song. 10. Ballet Music from "Véronique." 11. Song. 12. Passionnement. 13. Song. 14. Selection from "Monsieur Beaucaire." 15. Song. 16. Ballet Music from "Madame Chrysantheme." In the intervals: Talk in English on Virginia Woolf, and Topical Review.
10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)

Magyar Téliphon Himnido es Radio R.T. 540.8 kh (554.6 m.); 20 kw.
Transmits at intervals from 8.15 a.m.
6.20 p.m.—Talk on the Hungarian Parliamentary Museum.
6.40 p.m.—"Eva"—Operetta (Lehár).
9.10 p.m.—Time, News and Weather, followed by Concert by the Tzigane Orchestra from the Café Spolarich.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,139.5 kh (263.1 m.); 4 kw.
See Langenberg Programme.

COPENHAGEN (Denmark)

Copenhagen Radio. 883.8 kh (339.4 m.); 1 kw. Relayed by Kalundborg, 259.7 kh (1,155.2 m.).
Transmits at intervals from 6.30 a.m.
6.0 p.m.—News, Exchange and Time.
6.30 p.m.—Agricultural Talk, "The Feeding and Housing of Poultry," relayed from Aalborg Studio.
7.0 p.m.—Town Hall Chimes.
7.2 p.m.—Concert from the Axelborg Studio. Part One. Danish Music. 1. "Maskarade"—Overture (Nielsen). 2. Suite for Oboe and Strings (Henriques). 3. Four Songs with Piano accompaniment. 4. Suite from the Music to Drachmann's "Der var engang" (Müller). Part Two. Romantic Music. 1. Fingal's Cave—Concert Overture (Mendelssohn). 2. Aria from "Der Freischütz" and 3. Selection from "Die drei Pintos" (Weber). 4. Walter's Prize Song from "The Mastersingers" and 5. Selection from "The Rhinegold" (Wagner). After the Concert, News.
9.15 p.m.—Dance Music relayed from Nimb's Restaurant.
11.0 p.m.—Town Hall Chimes.
11.30 p.m. (approx.)—Close Down.

CORK (Ireland)

Cork Broadcasting Station (6CK). 1,350 kh (222 m.); 1 kw.
1.30 p.m.—Weather Forecast, and Gramophone Record Music.
6.0 p.m.—Exchange Quotations, News and Gramophone Selections.
6.15 p.m.—Programme from Dublin.

CRACOW (Poland)

Polskie Radio. 955 kh (314 m.); 1 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—English Language Lesson.
6.56 p.m.—Time Signal from the Astronomical Observatory.
7.0 p.m.—Relay of Chimes from the Church of Notre Dame, News.
7.15 p.m.—Vocal Concert.
8.15 p.m.—Literary Programme.
9.0 p.m.—Programme from Warsaw.
9.30 p.m.—Concert from the "Pavilion" Restaurant.
10.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw.
Transmits at intervals from 1.30 p.m.
6.0 p.m.—Gramophone Records.
6.15 p.m.—Programme for Children.
7.0 p.m.—Gramophone Records.
7.10 p.m.—News and French Lesson.
7.45 p.m.—Historical Talk.
8.0 p.m.—Concert. 1. Station Orchestra, with Pat Ryan (Clarinet). 2. Mercy Gibbons (Soprano). 3. Pat Ryan. 4. Dorothy Day and Co: Play—"bout Ship." 5. Adolphe Borschke (Piano). 6. Grattan Kelly's Dance Band.
10.30 p.m. (approx.)—News, Weather Report and Close Down.

FRANKFURT-am-MAIN (Germany)

Südwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relayed by Cassel, 1,200 kh (250 m.).
Transmits at intervals from 5.30 a.m.
3.35 p.m.—Orchestral Concert.
5.30 p.m.—(from Cassel).—Talk: "Green in Village and Town Scenery."
6.0 p.m.—Programme arranged by the Frankfurter Zeitung.
6.30 p.m.—Programme from Munich.
8.15 p.m.—Concert of Waltz Music: 1. Delirium (Jos. Strauss). 2. Barcarolle after Offenbach's "Tales of Hoffmann" (Fétras). 3. Wiener Bürgerlied (Ziehren). 4. Waltz Boston from "Les millions d'Arlequin" (Drigo). 5. Morgenblätter (Joh. Strauss). 6. Waltz from "Faschingssee" (Kálmán). 7. Waltz from "Eva" (Lehár).

HAMBURG (Germany)

Norag (ha, in Morse). 765.5 kh (390.6 m.); 4 kw. Relayed by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); Kiel, 1,200.4 kh (249.9 m.).
Transmits at intervals from 5.50 a.m.
4.0 p.m.—Talk on Strindberg.
5.0 p.m.—Popular Programme.
5.45 p.m.—Talk for Housewives.
6.5 p.m.—Talk, "The Woman in the Mask—The Great Tragedienne."
6.30 p.m.—Talk on Premature Old Age and its Prevention.
6.55 p.m.—Frankfurt Exchange and Weather Report.
7.0 p.m.—Military Band Concert.
9.0 p.m.—Dancing Lesson.
9.30 p.m.—Weather Report, News and Sports Notes.
9.45 p.m.—Relay of Foreign Stations.
10.50 p.m.—North and Baltic Sea Weather and Ice Report.

HILVERSUM (Holland)

Algemeene Vereeniging Radio Omroep. 279.6 kh (1,072.8 m.); 5 kw.
9.40 a.m.—Time; Daily Service.
10.10 a.m.—Gramophone Records.
10.25 a.m.—Trio Concert.
11.40 a.m.—Police Announcements.
11.55 a.m.—Lunch-time Concert.
1.40 p.m.—Talk (to be announced).
2.10 p.m.—Gramophone Records.
2.40 p.m.—Talk on Fashions.
3.40 p.m.—Programme for Hospitals.
4.40 p.m.—Talk on Sport.
5.40 p.m.—Time, and Trio Concert. 1. Spanish Comedy Overture (Kéler-Béla). 2. Une fête à Aranjuez (Demerssemann). 3. Un Soir de fête à la Havane (Filippucci). 4. Selection from "Carmen" (Bizet). 5. Estudiantina—Waltz (Waldteufel). 6. Jota (Cools). 7. Ay Chiquita (Yradier). 8. La Serenata (Metra). 9. Torero ramon (Kostal). 10. Toréador et Andalous (Rubinstein).
6.55 p.m.—English Conversation.
7.25 p.m.—Police News and Time.
7.55 p.m.—Concert relayed from the Amsterdam Concert Hall. Reading in the Interval.
10.10 p.m.—Weather and News.

HUIZEN (Holland)

889.8 kh (337 m.); 6.5 kw. (Until 5.40 p.m.) From 5.40 p.m. 162.5 kh (1,846.1 m.).

10.40 a.m.—Programme for Hospitals.
12.10 p.m.—Concert.
1.40 p.m.—Programme for Schools.
5.40 p.m.—Organ Recital.
6.40 p.m.—Elementary Book-keeping Lesson.
7.10 p.m.—Talk on Music.
7.40 p.m.—Choral and Organ Music and Talk from the Church at Doetinchem, followed by News.

KALUNDBORG (Denmark)

Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw.
See Copenhagen Programme.

KATOWICE (Poland)

Polskie Radio. 721.7 kh (414.3 m.); 10 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—Talk, "The Beauty of Sport."
6.56 p.m.—Time and News.
7.15 p.m.—Programme from Cracow.
8.15 p.m.—Programme from Posen.
9.0 p.m.—Weather and News.
9.30 p.m.—Dance Music Programme.

KÖNIGSBERG (Germany)

Ostmarken Rundfunk. 1,070 kh (280 m.); 4 kw. Relayed by Danzig, 658 kh (456 m.).
Transmits at intervals from 8.0 a.m.
6.30 p.m.—Wireless Talk.
7.5 p.m.—(from Danzig).—Chamber Music Concert.
8.5 p.m.—Popular Concert.
9.20 p.m.—News, Weather, Sports Notes and Silent Night.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relayed by Aix-la-Chapelle, 657.1 kh (456.4 m.); Cologne, 1,139.5 kh (263.1 m.); Münster, 1,129.1 kh (265.6 m.).
Transmits at intervals from 9.15 a.m.
12.5 p.m.—Orchestral Concert.
1.30 p.m.—Film Notes (Langenberg only).
1.30 p.m.—(for Aix-la-Chapelle, Cologne and Münster).—Household Hints.
2.0 p.m.—Children's Programme.
2.30 p.m.—Economic Report.
2.45 p.m.—Talk, "Pompeii."
3.5 p.m.—Talk, "Wine from the Vine to the Bottle."
3.30 p.m.—Reading from "Timakria" (Sander).
4.0 p.m.—Reading or Children, "The Ugly Duckling."
4.20 p.m.—Talk, "Handicrafts for Children."
4.45 p.m.—Orchestral Concert. 1. Concert Overture (Herrried). 2. Pianoforte Solos: (a) Danse sacrée, (b) Danse profane (Debussy). 3. Perpetuum mobile (Riess). 4. Concert Piece in G major (Schumann).
5.30 p.m.—Talk, "Good German."
5.50 p.m.—Economic Report, Weather and Sports Notes.
6.15 p.m.—Spanish Language Lesson.
6.40 p.m.—Talk, "The Spiritual Life of Young People."
7.0 p.m.—Orchestral Concert. 1. "The Gipsy Baron"—Overture (Strauss). 2. Jägerlieder—Waltz (Goldmann). 3. Chorus and Prelude from "Das Pensionat" (Suppé). 4. (a) Liebesleid (Engelberger), (b) Mutterlied (Eysler). 5. Melodies from "Cavalleria Rusticana" (Mascagni). 6. Prairie Lily—Intermezzo (Mills).
8.0 p.m.—Concert by the Prisca Quartet, followed by News, Sports Notes, Commercial Announcements and Concert from the Café Corso, Dortmund.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relayed by Dresden, 775 kh (387 m.).
Transmits at intervals from 9.5 a.m.
3.30 p.m.—Variety Concert.
4.45 p.m.—Advertising Notes.
5.5 p.m.—Taxation Talk.
5.20 p.m.—Weather and Time.
5.30 p.m.—See Königswusterhausen.
6.0 p.m.—Two Economic Talks.
7.0 p.m.—Concert of Old English Music: 1. Cembalo Solos: (a) Pavane, and (b) The King's Hunting (John Bull); (c) John, come kiss me now (William Byrd). 2. Songs. 3. Cembalo Solos: (a) Daphne and (b) Selection (Giles Farnaby); (c) Fantasia (John Munday). 4. Songs. Cembalo Solos: (a) Pavana dolorosa and (b) Galiarda dolorosa (Peter Philips); (c) Goe from my Window (Thomas Morley). 6. Songs.
8.0 p.m.—"Partie verspielt"—A Wireless Short Story.
9.5 p.m.—Labour Market Report, News, Weather and Sports Notes.
9.30 p.m. (approx.)—Silent Night.

LJUBLJANA (Yugoslavia)

Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw.
Transmits at intervals from 11.30 a.m.
4.0 p.m.—Orchestral Concert.
5.30 p.m.—Agricultural Talk.
6.0 p.m.—Czech Language Lesson.
6.30 p.m.—Talk, "The History of the Slovenes."
7.0 p.m.—Orchestral Concert, followed by Relay of Foreign Stations.
9.0 p.m.—Tides Report, Time, News and Close Down.

MADRID (Spain)

Union Radio (EAJ7). 708.3 kh (423 m.); 1 kw.
Transmits at intervals from 11.45 a.m.
7.0 p.m.—Chimes, Exchange Quotations and Dance Music.
8.0 p.m.—Lyrical Interpretations.
8.25 p.m.—News and Announcements.
10.0 p.m.—Chimes, Exchange Quotations and Concert: 1. Selection from "Los sobrinos del capitán Grant" (Caballero). 2. Songs: (a) El reloj de arena (Calleja), (b) Mi nido (Abades), (c) Anda, mañico—Jota (Amalio). 3. Guitar Selections: (a) María—Gavotte and (b) Capricho Arabe (Tárega). (c) El dclirio (Cano). 4. Guitarra española (Alonso). 5. Songs: (a) Torna, asturiano (Romero). (b) Vuelve Mayo. 6. Guitar Selections: (a) Andaloussian Dance (Granados). (b) Guajiras (Villanueva), (c) Jota aragonesa (Arcas). 7. Selection from "La mazorca roja" (Serrano). Wireless Talk in the Interval between Items 3 and 4.
12.0 midnight.—Chimes, News and Dance Music from the Alkazar.
12.30 a.m. Fri. (approx.)—Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. 595.3 kh (503.9 m.); 7 kw.
Transmits at intervals from 10.15 a.m.
7.15 p.m.—Scientific Talk.
7.25 p.m.—News and Announcements.
7.30 p.m.—Time, News, and Introductory Talk in the following Transmission.
7.45 p.m. (approx.)—"Isabeau"—Opera (Mascagni). After the First Act, Talk: "The Joy of Living."
9.55 p.m.—News and Economic Notes.
10.0 p.m. (approx.)—Close Down.

MOTALA (Sweden)

218.9 kh (1,370 m.); 20 kw.
See Stockholm Programme.

MUNICH (Germany)

Deutsche Stunde in Bayern. 558.4 kh (537.2 m.); 4 kw. Relayed by Augsburg, 529.75 kh (566.3 m.); Kaiserslautern, 1,102.5 kh (272.6 m.); Nürnberg, 1,250 kh (273 m.).
Transmits at intervals from 5.45 a.m.
6.0 p.m.—French Language Lesson.
6.25 p.m.—Talk on the following Transmission.
6.30 p.m.—Concert from the Works of Mozart from the Odeon, Munich. 1. Kyrie. 2. Aria for Tenor—"Panis vivus," from "Litania de venerabili altaris sacramento." 3. Davidde penitente for Soloist, Choir and Orchestra.
8.20 p.m.—Orchestral Concert. 1. Aus Holbergs Zeit—Suite (Grieg). 2. Entr'acte from "Werther" (Massenet). 3. Selection from "Mignon" (Thomas). 4. Selection from "The Evangelist" (Kienzl). 5. Pesther—Waltz (Lanner). 6. Selection from "La Fille de Madame Angot" (Lecocq).
9.20 p.m.—Programme Announcements, followed by News.

OSLO (Norway)

Kringkastingselskapet. 604.7 kh (496.1 m.); 1 kw. Relayed by Porsgrund, 658 kh (456 m.); Fredrikstad, 781 kh (384.1 m.); Rykan, 1,237.5 kh (242.4 m.); Hamar, 530 kh (566 m.); and Notodden, 1,010 kh (297 m.).
Transmits at intervals from 8.50 a.m.
5.45 p.m.—Divine Service in the Studio.
6.15 p.m.—Weather and News.
6.30 p.m.—Elementary German Lesson.
7.0 p.m.—Time Signal.
7.2 p.m.—Talk by M. Sveen.
7.30 p.m.—Soloist Concert. 1. Songs: (a) Maria Gnademutter, (b) Tanzlied, (c) Kalte, (d) Den jomfru gikk i Valmue-vang, (e) Flieder, (f) Röschen biss den Apfel an, (g) Og der gikk dage, (h) Freidig flyver den unge fugl (Sinding). 2. Violin Solos: (a) Adagio (Becker).

Programmes for Thursday.—(Cont.)

(b) La Capricieuse (Elgar), (c) Valse triste (Vecsey), (d) Hallanzon Balaton (Hubay). 8.30 p.m.—Weather and News. 8.45 p.m.—Topical Talk. 9.0 p.m.—Talk in German on German Literature. 9.30 p.m. (approx.)—Close Down.

PARIS (France) Eiffel Tower (FL). 201.5 kh (1,488 m.); 12 kw. 7.56 a.m.—Time Signal on 9,231 kh (3.25 m.). 5.45 p.m.—"Le Journal Parlé." 7.10 p.m.—Weather Forecast. 7.20 p.m.—Concert of Light Music, Songs, and Dance Music with the collaboration of Parisian Music-hall Artists. At 7.56 p.m.—Time Signal on 9,231 kh (32.5 m.). 8.50 p.m.—Silent Night.

PARIS (France) Petit Parisien. 899.6 kh (333.4 m.); 0.5 kw. 8.45 p.m.—Gramophone Selections, followed by Talk and News. 9.0 p.m.—Concert. 1. "King Lear"—Overture (Berlioz). 2. Selection from the "Merry Wives of Windsor" (Nicolai). 3. "Coriolanus"—Overture, and 4. Romance in F for Violin and Orchestra (Beethoven). 5. Ballet Music from "La Source" (Delibes). 6. Danse lente (Franck). 7. Hungarian March from "The Damnation of Faust" (Berlioz). News in the interval at 9.25 and 10.0 p.m.

PARIS (France) Radio-Paris (CFR). 171.75 kh (1,746.7 m.); 12 kw. Transmits at intervals from 6.45 a.m. 12.30 p.m.—Orchestral Concert. 1. Zortzico, and 2. Pepita Jimenez (Albeniz). 3. La Mosquée, and 4. Les Buveteurs de Manzanilla (Turina). 5. Lied Maritime (D'Indy). 6. Serenade. 7. Les anes du Caire. 8. Réverie Mauresque, and 9. Ronde des Lutins (Nerini). 10. Minuet (Ravel). 11. Danse de l'éphémère (Roussel). Exchange and News in the intervals. 2.0 p.m.—Market Prices. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Gramophone Records.

4.45 p.m.—Exchange and News. 6.30 p.m.—Exchange and Agricultural Report. 6.45 p.m.—Gramophone Concert. 7.30 p.m.—Book-keeping Lesson. 7.45 p.m.—Market Prices and News. 8.0 p.m.—Literary Programme, followed by Exchange Quotations and Market Prices. 8.30 p.m.—Symphony Concert. News during the intervals.

PITTSBURGH (U.S.A.) Westinghouse Electric (KDKA). 980 kh (306 m.); 25 kw. Relayed at intervals on 4,800 kh (62.5 m.). Transmits at intervals from 2.45 p.m. 11.30 p.m.—Variety Programme of Music, Talks, Concerts, Time and Weather Reports, etc. 4.15 a.m. Fri. (approx.)—Close Down.

POSEN (Poland) Polskie Radio. 892.9 kh (338 m.); 1.5 kw. Transmits at intervals from 11.10 a.m. 6.10 p.m.—Agricultural Talks. 7.0 p.m.—Miscellaneous Items. 7.30 p.m.—Concert of Soprano and Violin Solos. 1. (a) By the River, (b) In a Deserted Orchard (Szopsky). 2. Reflection (Szymanovsky). 3. (a) Quasi ballata, (b) Appassionata (Suk). 4. (a) Song of Love, (b) In Thine Eyes, (c) My Heart (Dvorak). 5. The Sea (Novak). 8.15 p.m.—Programme to be announced. In the intervals: Theatre and Cinema Notes, News. 9.0 p.m.—Time and News. 9.15 p.m. (approx.)—Close Down.

PRAGUE (Czechoslovakia) Strasnice. 873.4 kh (341.9 m.); 5 kw. Transmits at intervals from 10.15 a.m. 6.0 p.m.—Time and News. 6.30 p.m.—Concert by the Czech Philharmonic Orchestra: 1. Symphony in F minor, Op. 4 (Tchaikovsky). 2. "The Flying Dutchman"—Overture (Wagner). 3. Le Poème de l'extase (Scriabine). 4. "The Bartered Bride"—Overture (Smetana). 8.45 p.m.—Talk: "Russian Elements in Czech Music." 9.0 p.m.—Time, News and Sports Notes. 9.15 p.m.—Theatre Notes. 9.20 p.m.—Gramophone Music. 10.0 p.m.—Time and Close Down.

ROME (Italy) Unione Radiofonica Italiana (IRO). 676.25 kh (443.6 m.); 3 kw. Transmits at intervals from 12.0 noon. 6.50 p.m.—"Giornale parlato," Sports Notes, News, Exchange and Weather. 7.29 p.m.—Time Signal, "Giornale parlato" and Press Review. 7.45 p.m.—Symphony Concert: 1. Andante solenne, on the Theme of the "Te Deum" (Sgambati). 2. Three Movements from the Symphony No. 5, in E minor, Op. 95 (Dvorak). 3. Humorous Theatrical Anecdotes. 4. Le fontane di Roma—Symphonic Poem (Respighi). 5. Selection from "Hansel and Gretel" (Humperdinck). 6. Piano Solos: (a) Gavotte in D minor (Scarlatti); (b) Second Hungarian Rhapsody (Liszt). 7. "Giornale parlato" and Review of Reviews. 8. March from "Lohengrin" (Wagner). 9. Hungarian March from "The Damnation of Faust" (Berlioz). 9.50 p.m.—"Giornale parlato" and News. 10.0 p.m. (approx.)—Close Down.

SCHENECTADY (U.S.A.) General Electric Company (WGY). 790 kh (380 m.); 50 kw. Relayed by 2XAF on 9,529 kh (31.48 m.); from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Stock Reports, Produce Market Report, Farm forum and News Items. 11.29 p.m.—Weather Forecast. 11.30 p.m.—Telechron Time, followed by Dinner Music from the Hotel Kenmore, Albany, N.Y. 12.30 a.m.—Friday.—WGY Agricultural Programme. 1.0 a.m.—The Song Shop, relayed from New York. 1.30 a.m.—Hoover Sentinels, relayed from New York. 2.0 a.m.—Seiberling Singers, relayed from New York. 3.0 a.m.—"With the Joneses." 3.30 a.m.—Halsey Stuart Presentation relayed from New York. 3.30 a.m.—Carborundum Programme, from Niagara Falls, N.Y. 4.30 a.m.—Organ Recital by Floyd Walter, from the Strand Theatre, Albany, N.Y. 5.30 a.m. (approx.)—Close Down.

STOCKHOLM (Sweden) Radiotjänst (SASA). 685 kh (438 m.); 1.5 kw. Relayed by Eskilstuna, 1,208 kh (248 m.); Gävle, 1,470 kh (204 m.); Göteborg, 864.9 kh (344.3 m.); Kalmar, 1,184.5 kh (253 m.); Karistad, 1,361 kh (220 m.); Motala, 218.9 kh (1,370 m.); Saffle, 1,190.35 kh (252 m.); Sundsvall, 550.9 kh (544.5 m.); and Uppsala, 600 kh (500 m.). Transmits at intervals from 11.30 a.m. 6.15 p.m.—French Language Lesson. 6.45 p.m.—Talk from Uppsala, "The Theory of Evolution." 7.15 p.m.—Concert. 1. "Die Weihe des Hauses"—Overture (Beethoven). 2. Baritone Solos: (a) Arioso, (b) Romance from "Floridante" (Handel). 3. Suite from "A Midsummer Night's Dream" (Mendelssohn). 4. Baritone Solos: (a) Aria from "Don Carlos" (Verdi), (b) Ideale (Tosti), (c) Mantilla (Alvarez), (d) Amapola (Lacalle). 8.15 p.m.—News and Weather. 8.40 p.m.—Topical Talk. 9.10 p.m.—Chamber Music. 1. Quartet for Strings, No. 2 in D major (Borodine).

STUTTGART (Germany) Süddeutscher Rundfunk. 800.9 kh (374.6 m.); 4 kw. Relayed by Freiburg, 520 kh (576.9 m.). Transmits at intervals from 9.30 a.m. 3.35 p.m.—Programme from Frankfurt. 5.0 p.m. (from Freiburg)—Talk: "Deafness and its Origin." 5.30 p.m.—Talk on Vegetarianism. 6.0 p.m.—Talk on Careers. 6.30 p.m.—Talk: "The Employment of Electricity in Industry." 7.0 p.m.—"Turandot"—Opera (Puccini), relayed from the Württ. Landestheater. 9.30 p.m.—Orchestral Concert: 1. Bachantenzug—Intermezzo (Siede). 2. Rose mousse (Bosc). 3. Extase (Ganne). 4. Zum Rendez-vous—March (Blon). News.

TOULOUSE (France) Radiophonie du Midi. 602.75 kh (495.9 m.); 8 kw. Transmits at intervals from 12.30 p.m. 8.0 p.m.—Exchange and News. 8.30 p.m.—Concert. 1. Selections for Military Band. 2. Instrumental

Duets: (a) El pano moruna (de Falla), (b) Romance (Faure), (c) Arlequin (Popper), (d) Jota (de Falla). 3. Programme of Vocal Music arranged by "Le Haut Parleur." 10.15 p.m.—North African News. 10.30 p.m. (approx.)—Close Down.

VIENNA (Austria) Radio-Wien. 576.9 kh (528.7 m.); 20 kw. Relayed by Graz, 847.75 kh (353.9 m.); Klagenfurt, 658 kh (456 m.); Imstbruck, 1,059.2 kh (281.1 m.); and Linz, 1,200.4 kh (243 m.). Transmits at intervals from 10.0 a.m. 6.25 p.m.—Time and Weather. 6.30 p.m.—Symphony Concert from the Grosse Musikvereinsaal: 1. "Oberon"—Overture (Weber). 2. Concerto for Violin in E minor (Mendelssohn). 3. Four Songs (Ast): (a) Unvergesslicher Abend, (b) Der stille Hain, (c) Und gegen Abend, (d) Es ist alles wie ein wunderbarer Garten. 4. The Fifth Symphony in E minor (Tchaikovsky), followed by Concert of Light Music. Phototelegraphy Transmission after the Programme.

WARSAW (Poland) Polskie Radio. 215.2 kh (1,393.6 m.); 8 kw. Transmits at intervals from 10.56 a.m. 6.10 p.m.—Agricultural Talk. 6.35 p.m.—News and Time. 7.0 p.m.—Talk on Economics. 7.30 p.m.—Orchestral Concert. Selections from the Works of Weber: (a) Jubel Overture, (b) Fantasia on Themes from "Der Freischütz," (c) Invitation to the Dance, (d) "Peter Schmolli"—Overture. 8.15 p.m.—Programme from Posen. 9.0 p.m.—Aviation and Weather Reports, News, and Sports Notes. 9.30 p.m.—Dance Music from the Hotel Bristol. 10.30 p.m. (approx.)—Close Down.

WILNO (Poland) Polskie Radio. 955 kh (314 m.); 0.6 kw. Transmits at intervals from 10.56 a.m. 6.20 p.m.—Talk: "Life on the Earth." 6.45 p.m.—News and Time. 7.5 p.m.—Choral Concert. 8.15 p.m.—Programme from Posen. 9.0 p.m.—News and Announcements. 9.30 p.m.—Dance Music Programme

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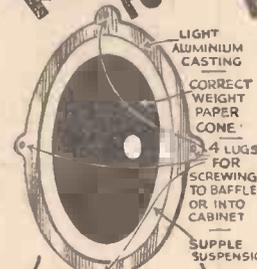
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PROGRAMMES FOR FRIDAY

(February 22)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)
Radio Barcelona (EAJ1). 857.4 kh (347.6 m.); 2 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—International Market Prices.
6.10 p.m.—Fashion Talk for Women.
6.30 p.m.—Sextet Selections.
7.30 p.m.—Medical Talk, "Accidents during Work."
8.30 p.m.—Singing Lesson.
9.0 p.m.—Chimes and Weather.
9.5 p.m.—Exchange and News.
9.10 p.m.—Orchestral Selection: Ruy Blas—Overture (Mendelssohn).
9.20 p.m.—Dance Music Programme.
10.0 p.m.—Programme from Madrid (EAJ7).

BERGEN (Norway)
Kringkastingsselskap. 819.6 kh (366.6 m.); 1 kw.
Transmits at intervals from 11.0 a.m.
6.30 p.m.—Orchestral Selections.
6.50 p.m.—Talk in English.
7.20 p.m.—Orchestral Selections.
7.50 p.m.—Topical Talk.
8.0 p.m.—Talk by Mrs. Esther Meidell.
8.30 p.m.—Sonata for Violin and Piano in Three Parts (Guillaume-Léclue).
9.0 p.m.—Weather, News and Time.
9.15 p.m. (approx.)—Close Down.

BERLIN (Germany)
Konigswusterhausen. 181.7 kh (1,651 m.); 20 kw.
Transmits at intervals from 9.15 a.m.
3.30 p.m.—Programme from Leipzig.
4.30 p.m.—Talk, "Railway and Motor Traffic."
5.0 p.m.—Psychological Talk.
5.30 p.m.—Advanced English Lesson.
5.55 p.m.—Talk on Electro-Technics.
6.20 p.m.—Talk for Veterinary Surgeons.
7.0 p.m.—Programme from Voxhaus.
8.30 p.m.—Talk, "Ford and the Reasons for his Success," followed by News.
9.45—10.15 p.m.—Phototelegraphy Transmission.

BERLIN (Germany)
Voxhaus. 639.7 kh (475.6 m.); 4 kw.
Transmits at intervals from 9.10 a.m.
3.30 p.m.—Orchestral Concert.
5.10 p.m.—Reading in Esperanto.
5.35 p.m.—Talk: "Work in the Literature of the Last Hundred Years."
6.0 p.m.—Talk: "Chemistry in Everyday Life—Water."
6.30 p.m.—Talk: "The Career of the Catholic Priest."
7.0 p.m.—Concert: 1. "Giroflé-Girofla"—Overture and Selection for Baritone (Lecocq). 2. Selection and Waltz Song from "Les Cloches de Corneville" (Planquette). 3. Selection and Song from "La Poupée" (Audran). 4. Baritone Solo from "Mam'selle Nitouche" (Hervé). 5. Selection from "Die kleinen Lämmer" (Herblay). 6. Baritone Solo and Overture from "La Vie Parisienne" (Offenbach).
8.0 p.m.—Programme from Frankfurt. After the Programme, Talk relayed from Königswusterhausen, followed by Weather, News, Time, and Sports Notes.

BERNE (Switzerland)
Radio Berne. 738.3 kh (406.3 m.); 1.3 kw.
Transmits at intervals from 11.43 a.m.
6.0 p.m.—Review of the Week's Music.
6.20 p.m.—Tourists' Report from the Swiss Automobile Club and Winter Sports Bulletin.
6.29 p.m.—Time and Weather.
6.30 p.m.—(from Basle, 290.1 kh, 1,034 m.)—Talk on Egyptian Art.
7.0 p.m.—"Le Violoncelle"—Musical Play (Offenbach).
7.55 p.m.—The Karsaal Orchestra.
8.45 p.m.—News, Weather and Close Down.

BRÜNN (Czechoslovakia)
Kofnarov. 693.9 kh (432.3 m.); 2.4 kw.
Transmits at intervals from 11.0 a.m.
6.0 p.m.—See Prague Programme.
6.5 p.m.—Orchestral Selections: Overtures from the Works of Suppé.
6.45 p.m.—Musical Selection: Dreams (Smetani).
7.0 p.m.—Talk on the Dramatist, Stroupeznicky.
7.15 p.m.—A Drama in Three Acts (Stroupeznicky).

9.0 p.m.—See Prague Programme.
9.15 p.m.—Programme Announcements.
9.20 p.m.—See Prague Programme.

BRUSSELS (Belgium)
Radio-Belgique. 585.9 kh (512 m.); 10 kw.
5.0 p.m.—Concert from the Bon Marché Tea-Rooms.
6.0 p.m.—Flemish Literature Lesson.
6.15 p.m.—Selected Readings.
6.30 p.m.—Colonial Bulletin.
6.35 p.m.—Concert by the Station Trio. 1. All Together (Robert). 2. Sweet Carolina (Demaret). 3. Sais-Tu ce que disent les roses (Harras). 4. The Three Masks (de Lara). 5. Selection from "Sigurd" (Reyer). 6. The Skaters (Worsley).
7.0 p.m.—Gramophone Selections.
7.30 p.m.—"Radio-Chronique."
8.15 p.m.—Selections from "The Barber of Seville" (Rossini). In the Interval: Topical Talk.
9.5 p.m.—"The Barber of Seville" (contd.).
10.15 p.m.—News and Close Down.

BUDAPEST (Hungary)
Magyar Téliphon Híradó és Radio R.T. 549.8 kh (554.6 m.); 20 kw.
Transmits at intervals from 8.15 a.m.
6.50 p.m.—Recital of Songs, accompanied by Tzigane Orchestra.
7.50 p.m.—Readings from his own Works by the Prize-winner of the Baumgarten Institute.
9.15 p.m.—Time, Weather and News.
9.30 p.m.—Concert by the Royal Opera House Orchestra.

COLOGNE (Germany)
Westdeutscher Rundfunk. 1,139.5 kh (263.1 m.); 4 kw.
See Langenberg Programme.

COPENHAGEN (Denmark)
Copenhagen Radio. 883.8 kh (339.4 m.); 1 kw. Relayed by Kalundborg, 259.7 kh (1,155.2 m.).
Transmits at intervals from 6.30 a.m.
6.0 p.m.—News, Exchange and Time.
6.16 p.m.—Relay from the University: Talk, "National Economy."
7.0 p.m.—"Le Bourgeois Gentilhomme"—Comedy in Three Acts (Molière, translated Overskou). Music by Lully.
8.0 p.m.—Pianoforte Recital. 1. Passacaglia (Händel). 2. Le caquet (Dandricu). 3. Étude symphonique (Schumann). 4. (a) Étude, (b) Spinning Song (Mendelssohn). 5. (a) Capriccio, (b) Waltz Paraphrase (Dohnányi). News after the Programme.
9.0 p.m.—Programme of Recitations and Songs from the Works of the Danish Poet, Ludvig Holstein.
9.30 p.m.—Relay of Foreign Stations.
11.0 p.m.—Town Hall Chimes and Close Down.

CORK (Ireland)
Cork Broadcasting Station (6CK). 1,350 kh (222 m.); 1 kw.
1.30 p.m.—Weather Forecast and Gramophone Record Music.
6.0 p.m.—Exchange Quotations, News and Gramophone Selections.
6.15 p.m.—Programme from Dublin.

CRACOW (Poland)
Polskie Radio. 955 kh (314 m.); 1 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—Talk on a Religious Subject.
6.56 p.m.—Time Signal from the Astronomical Observatory.
7.0 p.m.—Relay of Chimes from the Church of Notre Dame, Sports Notes.
7.15 p.m.—Programme from Warsaw.
9.0 p.m.—Programme from Warsaw.
9.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)
Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw.
Transmits at intervals from 1.30 p.m.
6.0 p.m.—Gramophone Records.
6.15 p.m.—Programme for Children.
7.0 p.m.—Gramophone Records.
7.20 p.m.—News and Announcements.
7.30 p.m.—Talk on Gardening.
7.45 p.m.—Welsh Language Lesson.
8.0 p.m.—Concert by the Dublin Philharmonic Society.
10.30 p.m.—News, Weather Report and Close Down.

FRANKFURT-am-MAIN (Germany)
Südwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relayed by Cassel, 1,200 kh (250 m.).

Transmits at intervals from 5.30 a.m.
4.15 p.m.—Talk for Women.
4.45 p.m.—See Langenberg Programme.
5.30 p.m.—Talk, "The Second Faust Monologue and the Easter Walk in Goethe's 'Faust, I.'"
6.0 p.m.—Elementary Chess Lesson.
6.30 p.m.—Lesson in Shorthand.
7.0 p.m.—Vocal Quartet Concert.
8.0 p.m.—Orchestral Concert. Orchestral Suite, Op. 48 (Ernst Toch): 1. March. 2. Intermezzo for Wood-Wind Instruments. 3. Adagio espressivo for Strings. 4. Marionette Dance. 5. Galante passacaglia. 6. Karussell.
8.20 p.m.—Concert. 1. Air from the Suite in D major (J. S. Bach). 2. (a) Bach, (b) Kapuziner, (c) Boxer (von Kleist). 3. (a) Serenade from the String Quartet in F major (Haydn), (b) Der Leierkasten—German Dance (Mozart). 4. (a) The Drunkard and the Berlin Bells, (b) New Year's Wishes of a Gunner to his Captain, (c) The newer, happier Werther (v. Kleist). 5. (a) Scottish Dance, and (b) Turkish March from "The Ruins of Athens" (Beethoven). 6. (a) Wedell—Anecdote on Frederick the Great, (b) Dankbarkeit, (c) Der geheilte Patient (Hebel). 7. Im Kloster (Borodine). 8. Im letzten D Zuwagen (Schäfer).
12.30 a.m. Sat. (approx.)—Close Down.

HAMBURG (Germany)
Norag (ha, in Morsc). 765.5 kh (390.6 m.); 4 kw. Relayed by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); Kiel, 1,200.4 kh (249.9 m.).
Transmits at intervals from 5.50 a.m.
4.0 p.m.—"Tales of a Great City" (Bruno Schönlanck) assisted by the Scarpa Orchestra.
5.0 p.m.—Orchestral Concert.
5.30 p.m.—See Königswusterhausen.
6.0 p.m.—Concert (contd.).
6.25 p.m.—Talk: "The Salutary Effects of Fire."
6.50 p.m.—Frankfurt Exchange, Hamburg Agricultural Prices.
6.55 p.m.—Weather Report.
7.0 p.m.—"Etagehaus"—Comedy (Paltzsch).
8.15 p.m. (from Kiel).—Programme of Old Folk-songs and Popular Choral Selections.
9.30 p.m.—Topical Talk, Weather, News, Sports Notes.
10.0 p.m.—Concert from the Café Wallhof.
10.50 p.m.—North Sea and Baltic Weather and Ice Report.

HILVERSUM (Holland)
Algemeene Vereeniging Radio Omroep. 279.6 kh (1,072.8 m.); 5 kw.
9.40 a.m.—Time, Daily Service.
10.10 a.m.—Gramophone Records.
10.25 a.m.—Trio Concert.
11.25 a.m.—Gramophone Records.
11.40 a.m.—Police Announcements.
11.55 a.m.—Lunchtime Concert.
1.40 p.m.—Programme for Schools.
2.25 p.m.—Gramophone Records.
3.40 p.m.—Talk for Women.
4.40 p.m.—Gramophone Records.
5.10 p.m.—Technical Talk.
5.40 p.m.—Time and Trio Concert.
6.55 p.m.—Talk (to be announced).
7.25 p.m.—Police News and Time.
7.41 p.m.—Orchestral Concert: 1. "Iphigenia in Aulis"—Overture (Gluck). 2. Andante favori (Mozart). 3. (a) Ochsenmennett, and (b) Rondo all'Ongharese (Haydn). 4. Wiener Nacht (Schubert-Liszt). 5. Turkish March (Mozart).
8.10 p.m.—Talk (to be announced).
8.40 p.m.—Chamber Music by the Utrecht Quartet: 1. Quartet for Strings in G minor (Schubert). 2. Quartet for Strings in E flat major (Dvorak).
9.40 p.m.—Weather and News.
9.55 p.m.—Orchestral Concert: 1. "Barbe bleue"—Overture (Offenbach). 2. Kind du kannst tanzen—Waltz (Fall). 3. Lincke-Wincke (Lincke).
10.40 p.m.—Dance Music Programme.
11.40 p.m. (approx.)—Close Down.

HUIZEN (Holland)
889.8 kh (337 m.); 6.5 kw. (Until 5.40 p.m.). From 5.40 p.m. 162.5 kh (1,846.1 m.).
10.40 a.m.—Programme for Hospitals.
12.10 p.m.—Concert of Trio Music.
2.40 p.m.—Programme for Women.
3.40 p.m.—Gramophone Records.
4.40 p.m.—Vocal Concert.
6.25 p.m.—Talk by M. Pecters.
6.40 p.m.—Talk by M. v. d. Mast.

7.15 p.m.—Vocal and Instrumental Concert from the Works of Debussy, and Two Talks.
9.40 p.m.—Recitations by M. Sternheim.
KALUNDBORG (Denmark)
Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw.
See Copenhagen Programme.

KATOWICE (Poland)
Polskie Radio. 721.7 kh (414.3 m.); 10 kw.
Transmits at intervals from 10.56 a.m.
6.10 p.m.—Talk: "Polish Painting."
6.45 p.m.—Sports News and Time.
7.0 p.m.—Programme from Warsaw.
9.0 p.m.—Weather and News.
9.30 p.m.—Answers to Correspondents in French for Foreigners.

LANGENBERG (Germany)
Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relayed by Aix-la-Chapelle, 651.7 kh (456.4 m.); Cologne, 1,139.5 kh (263.1 m.); Münster, 1,120.1 kh (265.5 m.).
Transmits at intervals from 9.15 a.m.
12.5 p.m.—Orchestral Concert.
1.30 p.m.—Household Hints.
2.0 p.m.—Children's Programme.
2.30 p.m.—Economic Report.
3.0 p.m.—Talk: "Places of Pilgrimage in India."
3.25 p.m.—Illustrated Debate on Modern Music. Piece for Piano-forte, Op. 14, No. 2 (Schönberg).
4.5 p.m.—Musical Programme for Young People.
4.45 p.m.—Orchestral Concert: 1. Carnival Overture (Glazounoff). 2. Concert Waltz in E major (Moskovsky). 3. Three Oriental Miniatures (Fischer). 4. Hungarian Rhapsody No. 14 (Liszt). 5. Melodies from "Der Waffenschmid" (Lortzing).
5.20 p.m.—Talk: "In the Neighbourhood of Münster."
5.50 p.m.—Economic Report; Weather and Sports Notes.
6.15 p.m.—Talk for Workers: "The Significance of the Reparations Problem to the German People."
6.40 p.m.—Legal Talk: "Marriage and Divorce."
7.0 p.m.—Orchestral Concert: 1. Hungarian March from "The Damnation of Faust" (Berlioz). 2. "Tiefand"—Prelude (d'Albert). 3. Scenes from "Samson and Delilah" (Saint-Saëns). 4. Intermezzo from "The Jewels of the Madonna" (Wolf-Ferrari). 5. Second Suite from "L'Arlesienne" (Bizet).
8.0 p.m.—Programme from Frankfurt.
8.20 p.m.—"The Lesser-known Waltzes of Johann Strauss": 1. Die Publizisten. 2. Flugschriften. 3. Sinnen und Mienen. 4. Feuilleton. 5. Bürgersinn. 6. Feenmärchen. 7. Wiener Frauen, followed by News, Sports Notes, Advertising Talk, and Concert from the Café Handelshof, Essen.
11.0 p.m. (approx.)—Close Down.

LEIPZIG (Germany)
Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relayed by Dresden, 775 kh (387 m.).
Transmits at intervals from 9.5 a.m.
3.30 p.m.—Orchestral Concert: 1. "Ruslan and Ludmilla"—Overture (Glinka). 2. Die Schönbrunner—Waltz (Lanner). 3. Selection from "Der Kuhreigen" (Kienzl). 4. Die Libelle—Polka-Mazurka (J. Strauss). 5. Ballet Music from "Coppélia" (Delibes).
5.5 p.m.—Espéranto Talk.
5.20 p.m.—Weather and Time.
5.30 p.m.—See Königswusterhausen.
6.0 p.m.—Wireless Talk.
6.30 p.m.—Talk for Parents.
7.0 p.m.—Chamber Music Concert: 1. Quartet in A Major for Violin, Viola, Cello and Pianoforte (Brahms). 2. Quartet in E Flat Major for Pianoforte, Violin, Viola and Cello, Op. 87 (Dvorak).
8.0 p.m.—Programme from Frankfurt.
8.25 p.m.—Orchestral Concert: 1. Music from "Egmont" (Beethoven). 2. Nocturne and Scherzo from "A Midsummer Night's Dream" (Mendelssohn). 3. (a) Morgenstimmung, (b) Solvejg's Song, (c) Anitra's Dance, (d) Peer Gynt's Homecoming (Grieg). 4. "The Taming of the Shrew"—Suite (Zilcher).
9.15 p.m.—Labour Market Report, Snow Report, Weather, News, Sports Notes, Dancing Lesson and Dance Music Programme.
11.0 p.m. (approx.)—Close Down.

LJUBLJANA (Yugoslavia.)
Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw.
Transmits at intervals from 11.30 a.m.
4.0 p.m.—Orchestral Concert.
5.30 p.m.—Talk: "Domestic Economy."
6.0 p.m.—French Language Lesson.
6.30 p.m.—Talk: "A Guide to the World of Music."
7.0 p.m.—Song Recital, followed by Orchestral Concert.
9.0 p.m.—Tides Report, Time, News and Close Down.

MADRID (Spain)
Union Radio (EAJ7). 708.3 kh (423 m.); 1 kw.
Transmits at intervals from 11.45 a.m.
7.0 p.m.—Chimes. Exchange Quotations and Variety Concert.
8.0 p.m.—Astronomical Talk.
8.25 p.m.—News and Announcements.
10.0 p.m.—Chimes, Exchange Quotations and Symphony Concert. 1. "Der Freischütz"—Overture (Weber). 2. Scherzo from "The Flight of the Bumble Bee" (Rimsky-Korsakoff). 3. L'après midi d'un faune (Debussy). 4. Fifth Symphony (Beethoven). 5. Siegfried Idyll, and 6. "The Mastersingers"—Overture (Wagner).
12.0 midnight.—Chimes, News and Dance Music from the Alhambra.
12.30 a.m. (approx.)—Saturday—Close Down.

MILAN (Italy)
Unione Radiofonica Italiana. 595.3 kh (503.9 m.); 7 kw.
Transmits at intervals from 10.15 a.m.
7.15 p.m.—Talk and News.
7.30 p.m.—Time and News, followed by Symphony Concert: 1. "Medea"—Overture (Cherubini). 2. The Third Symphony (Beethoven). 3. Literary Talk. 4. (a) Selection for Piano and Orchestra: Nights in the Gardens of Spain; (b) Vocal Selection and Four Lyrics (De Falla). 5. Musical Criticisms. 6. A Botticello Tryptych (Respighi). 7. "Tannhäuser"—Overture (Wagner).
9.55 p.m.—News and Economic Notes.
10.30 p.m. (approx.)—Close Down.

MOTALA (Sweden)
218.9 kh (1,370 m.); 20 kw.
See Stockholm Programme.

MUNICH (Germany)
Deutsche-Stunde in Bayern. 558.4 kh (537.2 m.); 4 kw. Relayed by Augsburg, 529.75 kh (566.3 m.); Kaiserslautern, 1,102.5 kh (272.1 m.); Nürnberg, 1,250 kh (240 m.).
Transmits at intervals from 5.45 a.m.
6.0 p.m.—Talk: "The Week's Sport."
6.15 p.m.—Talk on Electro-Technics.
6.30 p.m.—Symphony Concert: 1. "Romco and Juliet"—Fantasia Overture (Tchaikovsky). 2. Songs and Dances of Death (Moussorgsky). 3. Concerto for Violin and Orchestra in D major, Op. 35 (Tchaikovsky).
7.45 p.m.—Talk: "Considerations and Observations."
8.0 p.m.—Programme from Frankfurt, followed by First Performance of "Das Galgenmädchen"—A Winter Scene (Schildt).
9.20 p.m.—Wireless News.
9.30 p.m.—News and Snow Report.

OSLO (Norway)
Kringkastingsselskapet. 604.7 kh (496.1 m.); 1 kw. Relayed by Porsgrund, 658 kh (456 m.); Fredrikstad, 781 kh (384.1 m.); Rjukan, 1,237.5 kh (242.4 m.); 532 kh (566 m.); and Notodden, 1,070 kh (297 m.).
Transmits at intervals from 9.0 a.m.
5.40 p.m.—Elementary French Lesson.
6.15 p.m.—Weather and News.
6.30 p.m.—Elementary English Lesson.
7.0 p.m.—Time Signal.
7.2 p.m.—Symphony Concert. Programme from the Works of Tchaikovsky. 1. Polonaise from "Eugen Onegin". 2. Romeo and Juliet—Symphonic Poem. 3. Symphonie pathétique in B-minor.
8.30 p.m.—Weather and News.
8.45 p.m.—Topical Talk.
9.0 p.m.—Relay of European Stations.
10.30 p.m. (approx.)—Close Down.

PARIS (France)
Eiffel Tower (FL). 20.5 kh (1,488 m.); 12 kw.
7.56 a.m.—Time Signal on 9,231 kh (32.5 m.).
5.45 p.m.—"Le Journal Parlé."
7.10 p.m.—Weather Forecast.

Programmes for Friday.—(Cont.)

7.20 p.m.—Concert of Songs, Orchestral Music and Sketch—'Dialogue de Minuit' (Pierre Chaniaine). At 7.56 p.m.: Time Signal on 9,231 kh (32.5 m.). 8.50 p.m.—Silent Night.

PARIS (France) Petit Parisien. 899.6 kh (333.4 m.); 0.5 kw. 8.0 p.m.—Concert of Dance Music. 9.0 p.m. (approx.)—Close Down.

PARIS (France) Radio-Paris (CFR). 171.75 kh (1,740.7 m.); 12 kw. Transmits at intervals from 6.45 a.m.

12.30 p.m.—Orchestral Concert: 1. Etienne Marcel—Suite (Saint-Saëns). 2. Dansa Española 5 and 6 (Granados). 3. Tanit Serenade (Lears). 4. Songs: (a) Violetta (Scarlati) (b) Aria from 'Manon Lescaut' (Auber). 5. Violin Solo from the Spanish Symphony (Lalo). 6. Selection from 'La Navarraise' (Massenet). 7. El ultimo canto (Maurage). 8. Sevilla, Sevillana (Albeniz). 9. Cello Solo: Caprice hongrois (Dunkler). 10. Aria from 'Louise' (Charpentier). 11. Variations japonaises (Vidal). 12. Selection from 'Mother Goose' (Ravel). Exchange and News in the Interval.

2.0 p.m.—Market Prices. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Concert: 1. 'Rosiki'—Overture (Lecocq). 2. 'Cello Solos: (a) Andante appassionato (Soudry), (b) Berceuse de Dolly (Fauré), (c) Tarentella (Popper). 3. Intimité (Golestan). 4. Piano Solos: (a) La Plainte au loin du Faune (Dukas), (b) Sonata (Scarlati). 5. Valse Lumineuse (Ganne). 6. Sonata for Violin (Beethoven). 7. Suite pittoresque (Fourdrain).

4.45 p.m.—Exchange and News. 6.30 p.m.—Exchange and Agricultural Report.

6.45 p.m.—Gramophone Concert. 7.30 p.m.—Elementary English Lesson. 7.45 p.m.—Market Prices and News. 8.0 p.m.—Talk: 'The Role of Amateur Musical Societies from a Social and Educational Standpoint' followed by Exchange Quotations.

8.30 p.m.—Symphony Concert: 1. Concerto for Horn and Orchestra (Busser). 2. Wotan's Farewell (Wagner). News in the intervals.

PITTSBURGH (U.S.A.) Westinghouse Electric (KDKA). 980 kh (306 m.); 25 kw. Relayed at intervals on 4,800 kh (62.5 m.). Transmits at intervals from 2.45 p.m. 11.30 p.m.—Variety Programme of Music, Talks, Concerts, Time and Weather Reports, etc. 4.15 a.m. (approx.) Sat.—Close Down.

POSEN (Poland) Polskie Radio. 892.9 kh (338 m.); 1.5 kw. Transmits at intervals from 12.0 noon. 6.20 p.m.—Educational Talk. 6.45 p.m.—Miscellaneous Items. 7.15 p.m.—Programme from Warsaw. In the Intervals: Theatre and Cinema Notes, News. 9.0 p.m.—Time and News. 9.15 p.m.—Dance Music from the Carlton Restaurant. 11.0 p.m.—Close Down.

PRAGUE (Czechoslovakia) Strassnice. 873.4 kh (341.9 m.); 5 kw. Transmits at intervals from 10.15 a.m. 6.0 p.m.—Time and News, followed by Popular Orchestral Music. 6.45 p.m.—Talk on Drugs and Medicines, followed by a Play (Kanes).

8.0 p.m.—Popular Song Recital. 8.15 p.m.—Concert. 1. Fantasia for Violin and Piano. Op. 149, and 2. Carnival. Op. 9 (Schumann). 9.0 p.m.—Time, News and Theatre Notes. 9.20 p.m.—Concert from the Hotel Stramota. 10.0 p.m.—Time and Close Down.

ROME (Italy) Unione Radiofonica Italiana (IRO). 676.25 kh (443.6 m.); 3 kw. Transmits at intervals from 12.0 noon. 6.50 p.m.—'Giornale parlato,' Rome Government Notes, Sports Notes, News, Exchange, Weather and Time. 7.30 p.m.—'Giornale parlato' and News. 7.45 p.m.—'La Bayadère'—Oper-

etta in Three Acts (Kálmán). After the First Act, 'Il Radio-Travoso.' After the Second, Topical Talk. 9.50 p.m.—'Giornale parlato' and News. 11.0 p.m. (approx.)—Close Down.

SCHENECTADY (U.S.A.) General Electric Company (WGY). 790 kh (380 m.); .50 kw. Relayed by 2XAD on 15,337 kh (19.56 m.) from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Market Prices. 11.20 p.m.—Weather and Time. 11.30 p.m.—Raybestos Programme, from New York. 12.0 midnight.—Talk: 'The Non-commercial Theatre and the Future of American Drama.' 12.15 a.m. (Saturday).—Dinner Music from the Hotel Kenmore, Albany, N.Y. 12.23 a.m.—'Footnotes,' by T. A. Cohen. 12.25 a.m.—Talk on Health. 12.30 a.m.—The Arpeake Minstrels, from New York. 1.0 a.m.—Musical Programme from New York. 2.0 a.m.—'An Evening in Paris,' from New York. 2.30 a.m.—Schraderstown Brass Band, from New York. 3.0 a.m.—National Broadcasting and Concert Bureau Hour, from New York. 4.0 a.m. (approx.)—Close Down.

STOCKHOLM (Sweden) Radiotjänst (SASA). 685 kh (438 m.); 1.5 kw. Relayed by Eskilstuna, 1,208 kh (248 m.); Gävle, 1,470 kh (204 m.); Göteborg, 864.9 kh (344.3 m.); Kalmar, 1,184.5 kh (253 m.); Karlstad, 1,361 kh (220 m.); Motala, 218.9 kh (1,370 m.); Saffle, 1,190.35 kh (252 m.); Sundsvall, 550.9 kh (544.5 m.); and Uppsala, 600 kh (500 m.). Transmits at intervals from 11.30 a.m. 6.0 p.m.—Talk for the Housewife. 6.15 p.m. (from Göteborg).—German Language Lesson. 6.45 p.m.—Talk: 'Among the Natives of Indo-China.' 7.15 p.m.—Organ Recital from the Town Hall. 1. Canzona (Gabrieli). 2. Pavane (Byrd). 3. Passacaglia (Kerll). 4. Sonata, Op. 5, in E minor for Violin and Organ (Corelli). 5. Soeur Monique Ron-

deau (Couperin); 6. Musette en Rondeau (Rameau). 7. Sonata in D major, Op. 2, for Violin, Cello and Organ (Buxtehude). 8. Concerto for Organ (Handel). 8.15 p.m.—News and Weather. 8.40 p.m. (from Göteborg).—Talk on Psycho-Analysis. 9.10 p.m. (approx.)—Close Down.

STUTTGART (Germany) Süddeutscher Rundfunk. 800.9 kh (374.6 m.); 4 kw. Relayed by Freiburg, 520 kh (576.9 m.). Transmits at intervals from 9.30 a.m. 3.15 p.m.—Orchestral Concert. 5.0 p.m.—Time, Weather and Agricultural Report, followed by Programme Announcements in Esperanto. 5.15 p.m.—Talk, 'Irkutsk, on the Trans-Siberian Railway.' 5.45 p.m.—Talk on Irish Economics. 6.15 p.m.—Lesson in Esperanto. 6.30 p.m.—Orchestral Concert. 1. 'The Barber of Baghdad'—Overture (Cornelius). 2. Selection from 'Czar and Carpenter' (Lortzing). 3. 'Cello Solo: O cara memoria (Servais). 4. 'Martha'—Overture (Flotow). 5. Two Legends (Dvorak). 6. 'Cello Solos: (a) Cantabile (Cui), (b) Elfentanz (Popper). 7. Waltz from 'A Thousand and One Nights' (Strauss). 8. Poet and Peasant—Overture (Suppé). 8.0 p.m.—Programme from Frankfurt, followed by News and Sports Notes. 9.30 p.m. (from Karlsruhe).—Concert from the Café Bauer.

TOULOUSE (France) Radiophonie du Midi. 602.75 kh (495.9 m.); 8 kw. Transmits at intervals from 12.30 p.m. 8.0 p.m.—Exchange and News. 8.30 p.m.—Concert. 1. Arias from: (a) 'Carmen' (Bizet), (b) 'La Bohème' (Puccini), (c) 'Rigoletto' (Verdi), (d) 'Thais' (Massenet), (e) 'Comte Obligado' (Moretti), (f) 'Le Petit Duc' (Lecocq), (g) 'Miss Decima' (Audran). 9.0 p.m.—Gala Concert: (a) 'Tanhäuser'—Overture (Wagner), (b) Song and Op. 5, in E minor for Violin and Organ (Corelli). 5. Soeur Monique Ron-

Damnation of Faust" (Berlioz), (g) 'Tristesse (Kunc), (h) Selection from 'Galatée' (Massé), (i) Olav Trigravson (Grieg), (j) Fontaines lumineuses—Waltz (Waldteufel). In the Interval: 'Selections for Balalaikas. 11.0 p.m.—North African News. 11.15 p.m. (approx.)—Close Down.

VIENNA (Austria) Radio-Wien. 576.9 kh (528.7 m.); 20 kw. Relayed by Graz, 847.75 kh (353.9 m.); Klagenfurt, 658 kh (456 m.); Innsbruck, 1,059.2 kh (281.1 m.); and Linz, 1,209.4 kh (243 m.). Transmits at intervals from 10.0 a.m. 6.0 p.m.—Finance Talk. 6.30 p.m.—Advanced Italian Lesson. 6.55 p.m.—Time and Weather. 7.0 p.m.—'Der Löwe Alois und andere Durchwanderer'—A Short Story related by A. Heine and 'Hin und zurück'—A Sketch that can be played both forwards and backwards (Heim), followed by 'Concert. 1. 'Der Freischütz'—Overture (Weber). 2. 'Seid umschlungen Millionen—Waltz (Strauss). 3. Selection from 'The Geisha' (Jones). 4. Extase (Ganne). 5. Dance Music Selections: Phototelegraphy Transmission after the Programme.

WARSAW (Poland) Polskie Radio. 215.2 kh (1,393.6 m.); 8 kw. Transmits at intervals from 10.56 a.m. 6.10 p.m.—Talk, 'Hygiene and Medicine.' 6.35 p.m.—News and Time. 7.0 p.m.—Talk on Music. 7.15 p.m.—Symphony Concert from the Philharmonic. During the Interval: Theatre Notes: After the Concert: Aviation and Weather Reports, Police and Sports Notes, News, and Marconi Transmission of Foreign Stations.

WILNO (Poland) Polskie Radio. 955 kh (314 m.); 0.6 kw. Transmits at intervals from 10.56 a.m. 6.15 p.m.—Answers to Correspondents. 6.30 p.m.—Gramophone Selections. 6.45 p.m.—News and Time. 7.0—9.0 p.m.—See Warsaw. 9.0 p.m.—News and Weather Forecast. 9.30 p.m.—Relay of Foreign Stations.

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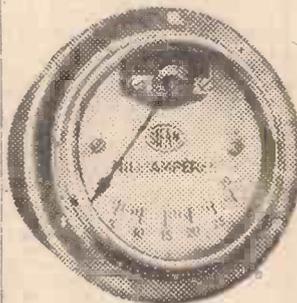
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PROGRAMMES FOR SATURDAY

(February 23)

NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO GREENWICH MEAN TIME

BARCELONA (Spain)

Radio Barcelona (EAJ7). 857.4 kh (347.0 m.); 2 kw. Transmits at intervals from 11.0 a.m. 6.10 p.m.—International Market Prices. 6.10 p.m.—Sextet Selection: Washington 1st.—March (Souza). 6.15 p.m.—Sacred Music. Relayed from the Basilica de la Merced. 6.25 p.m.—Sextet Selections: 1. Selection from "A Waltz Dream" (Strauss). 2. Sarabande (Bach). 3. Nocturne No. 1 (d'Ambrosio). 4. Hoda—Czardas (Michiels). 9.0 p.m.—Time and Weather. 9.5 p.m.—Exchange and News. 9.10 p.m.—Orchestral Selections: 1. La Dame blanche—Overture (Boieldieu). 2. L'Aplice de Saint Fariol—Sardana (Carbonell). 3. La Aparicion—Habanera (Coto). 4. Selection from "Phryne" (Saint-Saens). 5. Wienerblut—Waltz (J. Strauss). 6. Turkish March (Moussorgsky). 10.0 p.m.—Programme from Madrid (EAJ7).

BERGEN (Norway)

Kringkastingselskap. 819.6 kh (366.6 m.); 1 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Programme for Girls. 7.0 p.m.—Orchestral Selections. 7.50 p.m.—Topical Talk. 8.0 p.m.—Song Recital. 8.30 p.m.—Recitation by S. Erichsen. 9.0 p.m.—Weather, News and Time. 9.15 p.m.—Dance Music Programme. 11.0 p.m. (approx.)—Close Down.

BERLIN (Germany)

Königswusterhausen. 181.7 kh (1,651 m.); 20 kw. Transmits at intervals from 9.15 a.m. 3.30 p.m.—See Hamburg Programme. 4.30 p.m.—Talk on the Organisation of Officials. 5.0 p.m.—Talk, "Educational Travels Abroad for Young Workers." 5.30 p.m.—Elementary Spanish Lesson 5.55 p.m.—Talk, "North Africa—the Land and its People—Tripoli." 6.20 p.m.—Talk, "The Rudiments of Music in the Life of our Time." 7.0 p.m.—Agricultural Programme. 8.0 p.m.—Programme from Voxhaus.

BERLIN (Germany)

Voxhaus. 630.7 kh (475.6 m.); 4 kw. Transmits at intervals from 9.10 a.m. 4.0 p.m.—Concert of Light Music. 5.30 p.m.—Talk, "The Present Day and the Primitive World—Psycho-Analysis in the Primitive World." 6.0 p.m.—Talk, "New Taxation Law." 6.30 p.m.—Talk, "The German Electro-Technical Industry in the World Market." 7.0 p.m.—Orchestral Concert from the Hotel Kaiserhof. 8.0 p.m.—Dialogues from World Literature—VI. "Goethe." 1. Balade and Poems in Dialogue. 2. Conversations with Eckermann. 3. Napoleon's Conversation with Goethe. 4. Epigrammatic Dialogue. As a Setting, the Sonata for Violin and Pianoforte in A major, Op. 30, No. 1 (Beethoven), followed by Weather, News, Time, Sports Notes and Dance Music Programme. 11.30 p.m. (approx.)—Close Down.

BERNE (Switzerland)

Radio Berne. 738.3 kh (406.3 m.); 1.3 kw. Transmits at intervals from 11.43 a.m. 4.0 p.m.—The Kursaal Orchestra. 5.0 p.m.—(from Geneva, 394.7 kh; 760 m.)—Talk with illustrations, "The History of the French Song." 6.0 p.m.—(from Geneva)—Chimes. 6.5 p.m.—(from Lausanne, 441.1 kh; 660 m.)—Travel Talk, in French. 8.20 p.m.—Time and Weather. 8.30 p.m.—Talk, "August Strindberg's Views on Life and Art." 7.0 p.m.—(from Basle, 290.1 kh; 1,034 m.)—Fugue Recital (Bach). 9.0 p.m.—News and Weather. 9.15 p.m.—The Kursaal Orchestra. 9.40 p.m.—Programme of Dance Music. 11.0 p.m. (approx.)—Close Down.

BRESLAU (Germany)

Schlesische Funkstunde. 937.3 kh (320.7 m.); 4 kw. Relayed by Glatz, 918.5 kh (326.5 m.). Transmits at intervals from 11.15 a.m. 6.20 p.m.—Introduction to Shorthand. 6.50 p.m.—Topical Discussion. 7.15 p.m.—Orchestral Concert.

"Titus"—Overture (Mozart). 2. Romance from "La juive" (Halévy). 3. (a) Torch Dance (von Flotow), (b) Intermezzo from "L'ami Fritz" and 4. Romance from "Cavalleria Rusticana" (Mascagni). 5. March from "Prince Igor" (Borodine). 6. Selection from "Carmen" (Bizet). 7. (a) Tarantella (Nicodé), (b) Kaiser Waltz, and (c) Jubel-Festmarsch (J. Strauss). 9.0 p.m.—News and Announcements. 9.30 p.m.—Dance Music Programme. 11.0 p.m. (approx.)—Close Down.

BRÜNN (Czechoslovakia)

Komarov. 693.9 kh (432.3 m.); 2.4 kw. Transmits at intervals from 11.6 a.m. 6.0 p.m.—See Prague Programme. 6.5 p.m.—Orchestral Concert. 1. The North Star (Meyerbeer). 2. Scènes pittoresques—(Suite Massenet). 3. Selection from "Carmen" (Bizet). 4. Danse lente (Frank). 5. Selection from "Samson and Delilah" (Saint-Saens). 6.45 p.m.—Talk on Trade Unions. 7.0 p.m.—Concert of Chamber Music. 1. Summer Evening (Ambros). 2. Spring Song (Janacek). 3. Two Songs (Nesvera). 4. Song of the Ocean (Hradtka). 5. Songs (Steinmann). 6. Elegy, Op. 23 (Suk). 7. Songs (Nesvera). 8.0 p.m.—See Prague Programme. 8.25 p.m.—Selections of Popular Forsters' Songs. 8.40 p.m.—See Prague Programme. 9.20 p.m.—Programme Announcements. 9.25 p.m.—Orchestral Concert.

BRUSSELS (Belgium)

Radio-Belgique. 585.9 kh (512 m.); 10 kw. Experimental Transmission on a High Power. 5.0 p.m.—Concert from the Armenonville Tea Rooms. 6.0 p.m.—Elementary English Lesson. 6.25 p.m.—Intermediate English Lesson. 6.45 p.m.—Pianoforte Selections. 7.0 p.m.—Gramophone Records. 7.30 p.m.—Radio-Chronique. 8.0 p.m.—Concert relayed from Liège. 1. Fourth Symphony (Glazounoff). 2. Concerto for Violin and Orchestra (Mendelssohn) 3. Concerted Symphony for Organ and Orchestra (Jongen). 4. Selection from "Don Juan" (R. Strauss). Topical Talk in the interval. After the Concert, News and Close Down.

BUDAPEST (Hungary)

Magyar Téliphon Himnudo es Radio R.T. 549.8 kh (554.6 m.); 20 kw. Transmits at intervals from 8.15 a.m. 5.15 p.m.—Introductory Talk to the following Transmission. 5.30 p.m.—"Siegfried"—Opera (Wagner). Relayed from the Royal Opera House. 9.30 p.m.—Time, News and Weather, followed by Concert by the Fzigan Orchestra from the Grand Hotel Britannia.

COLOGNE (Germany)

Westdeutscher Rundfunk. 1,130.5 kh (263.1 m.); 4 kw. See Langenberg Programme.

COPENHAGEN (Denmark)

Copenhagen Radio. 883.8 kh (339.4 m.); 1 kw. Relayed by Kalundborg, 259.7 kh (1,155.2 m.). Transmits at intervals from 6.30 a.m. 6.0 p.m.—News, Exchange and Time. 6.30 p.m.—Talk on Rudyard Kipling. 7.0 p.m.—Town Hall Chimes. 7.2 p.m.—Reading from the Works of Rudyard Kipling. 7.30 p.m.—Programme of Hawaiian Music, followed by News. 8.30 p.m.—Concert of Light Music. 1. Tipperary—March (Amers). 2. Chant sans paroles (Tchaikovsky). 3. Selection (Kollo). 4. "Fatinitza"—Overture (Suppé). 5. Variations on "s kommt ein Vogel geflogen" (Ochs) in the Style of the Old Masters. In the interval: Recitations from "Lolliker" (Rosenkrantz). 9.45 p.m.—Dance Music from the Industri Restaurant. 11.0 p.m.—Town Hall Chimes. 11.15 p.m. (approx.)—Close Down.

CORK (Ireland)

Cork Broadcasting Station (6CK). 1,350 kh (222 m.); 1 kw. 1.30 p.m.—Weather Forecast and Gramophone Record Music. 7.20 p.m.—Programme from Dublin.

CRACOW (Poland)

Polskie Radio. 955 kh (314 m.); 1 kw. Transmits at intervals from 10.56 a.m. 4.0 p.m.—Talk on the Prospects for Polish Emigration into Germany. 4.25 p.m.—Talk on Wireless. 4.55 p.m.—Programme for Children. 5.50 p.m.—Miscellaneous Items. 6.10 p.m.—Talk on the Foreign Politics of the Past Week. 6.56 p.m.—Time Signal from the Astronomical Observatory. 7.0 p.m.—Relay of Chimes from the Church of Notre Dame. 7.30 p.m.—Programme from Warsaw. 10.30 p.m. (approx.)—Close Down.

DUBLIN (Ireland)

Dublin Broadcasting Station (2RN). 730.1 kh (410.9 m.); 1 kw. Transmits at intervals from 1.30 p.m. 7.20 p.m.—News and Poetry Recital. 7.45 p.m.—Irish Language Lesson. 8.0 p.m.—Concert. 1. Station Orchestra. 2. Thomas Keane (Bass). 3. Alice Feeley (Violin). 4. Mary Sheridan and Co.: Play—"Master Wayfarer." 5. Station Orchestra: Overture. 6. The Five Trumps. 7. Station Orchestra. 10.30 p.m.—News, Weather Report and Close Down.

FRANKFURT-am-MAIN (Germany)

Südwestdeutscher Rundfunk. 711.8 kh (421.4 m.); 4 kw. Relayed by Cassel, 1,200 kh (250 m.). Transmits at intervals from 5.30 a.m. 3.35 p.m.—Orchestral Concert of Modern Dance Music. In the Interval: News and Announcements. 5.30 p.m.—Answers to Correspondents. 5.45 p.m.—Lesson in Esperanto. 6.0 p.m.—Talk on the Prevention of Accidents. 6.30 p.m.—Talk, "The Social Ranks of the French People." 7.0 p.m.—Orchestral Concert. 1. "The Nuremberg Doll"—Overture (Adam). 2. 's kommt a Vogel geflogen—German Folk Song (Ochs)—in the Style of: (a) Bach, (b) Haydn, (c) Mozart, (d) Joh. Strauss, (e) Verdi, (f) Gounod, (g) Richard Wagner, (h) Beethoven, (i) Mendelssohn, (j) R. Schumann, (k) Brahms, (l) Meyerbeer, (m) Military March. 7.30 p.m.—"Indra"—Opera relayed from Stuttgart. Followed by Dance Music from Voxhaus. 11.30 p.m. (approx.)—Close Down.

HAMBURG (Germany)

Norag (ha, in Mörse). 765.5 kh (395.9 m.); 4 kw. Relayed by Bremen, 775 kh (387 m.); Hanover, 530 kh (566 m.); Kiel, 1,200.4 kh (249.9 m.). Transmits at intervals from 10.0 a.m. 3.30 p.m.—(from Kiel)—Concert of Chamber Music: 1. Grand Concerto for Oboe, Violin, Cello, String Orchestra and Piano, Op. 51 (Emborg); 2. Divertimento for Flute and String Orchestra Op. 53 (Gernsheim). 4.30 p.m.—Concert of Request Items. 5.30 p.m.—Talk on Economics. 6.0 p.m.—(from Kiel)—Talk on Handicrafts. 6.25 p.m.—Talk on Friedrich Spielhagen on the 100th Anniversary of his Birth. 6.55 p.m.—Weather Report. 7.0 p.m.—"Hullo"—Revue. 9.30 p.m.—Weather, News, Sports Notes, and Programme Announcements. 9.50 p.m.—Dance Music Programme. 10.50 p.m.—North Sea and Baltic Weather and Ice Report.

HILVERSUM (Holland)

Algemeene Vereeniging Radio Omroep. 279.6 kh (1,072.8 m.); 5 kw. 9.40 a.m.—Time, Daily Service. 10.10 a.m.—Gramophone Records. 10.25 a.m.—Concert of Trio Music. 11.25 a.m.—Gramophone Records. 11.40 a.m.—Police Announcements. 11.55 a.m.—Luncheon Concert. 1.40 p.m.—Orchestral and Organ Music from the Tuschinski Theatre Amsterdam. 3.40 p.m.—Italian Language Lesson. 4.40 p.m.—French Language Lesson. 5.40 p.m.—Orchestral Concert: 1. Selection from the Works of Waldteufel (Kling). 2. Fantasia on the Works of Joh. Strauss (Petras). 3. Fantasia on the Works of Lincke. 6.25 p.m.—German Language Lesson. 7.25 p.m.—Police Announcements. 7.45 p.m.—Concert and Talk arranged by the Workers' Radio Society. 11.10 p.m. (approx.)—Close Down.

HUIZEN (Holland)

880.8 kh (337 m.); 6.5 kw. (Until 5.40 p.m.). From 5.40 p.m. 162.5 kh (1,846.1 m.). 12.10 p.m.—Concert of Trio Music. 2.40 p.m.—Programme for Children. 5.10 p.m.—Gramophone Records. 6.10 p.m.—Talk by M. van Luin. 6.30 p.m.—Catholic Bulletin. 6.40 p.m.—Elementary English Lesson. 7.10 p.m.—Dress-making Lesson. 7.41 p.m.—Talk by Prof. van Rooy. 8.0 p.m.—Concert. 1. "Egmont"—Overture (Beethoven). 2. Choral Selections: (a) Domine non sum dignus (Haller), (b) Domine, regit me (Vollaerts), (c) Uchtend (de Nobel). 3. Selection for Soprano, Violin and Piano—Panis angelicus (Franck). 4. Sonata for Pianoforte (Appelboom). 5. Air (Bach). 6. Chanson, Louis XIII. for Violin and Piano. Couperin). 7. Choral Selections: (a) Dorschen, (b) De Theeketel, (c) De lente luwt (Appelboom), (d) Cupidoonte (Röntgen). 8. Soprano and Pianoforte Selection from the First Act of "La Bohème" (Puccini). 9. To be announced. 10. Choral Selections: (a) Ecce Quomodo Moritur (Handel), (b) Een stem aan't strand (Brandts Buys). 11. O Salutaris for Soprano, Violin and Piano (Flegier). 12. Pianoforte Solo, Boerepdans (Appelboom). 13. Der Spielmann (Hildach). 14. Andante from the Symphony in D major (Haydn). 15. Coronation March from "The Prophet" (Meyerbeer). 10.10 p.m. (approx.)—News.

KALUNDBORG (Denmark)

Kalundborg Radio. 259.7 kh (1,155.2 m.); 7.5 kw. See Copenhagen Programme.

KATOWICE (Poland)

Polskie Radio. 721.7 kh (414.3 m.); 10 kw. Transmits at intervals from 10.56 a.m. 6.10 p.m.—Talk by a Painter. 6.56 p.m.—Time and Talk. 7.30 p.m.—Programme from Warsaw. 9.0 p.m.—Weather and News. 9.30 p.m.—Dance Music Programme.

KÖNIGSBERG (Germany)

Ostmarken Rundfunk. 1,070 kh (280 m.); 4 kw. Relayed by Danzig, 658 kh (456 m.). Transmits at intervals from 5.30 a.m. 6.0 p.m.—Topical Talk. 5.30 p.m.—Elementary English Lesson. 7.0 p.m.—Programme from Voxhaus. 9.0 p.m.—Weather, News and Sports Notes. 9.15 p.m.—Orchestral Concert. 11.0 p.m. (approx.)—Close Down.

LANGENBERG (Germany)

Westdeutscher Rundfunk. 649 kh (462.2 m.); 15 kw. Relayed by Aix-la-Chapelle, 651.7 kh (456.4 m.); Cologne, 1,130.5 kh (263.1 m.); Münster, 1,129.1 kh (265.6 m.). Transmits at intervals from 9.15 a.m. 12.5 p.m.—Orchestral Concert. 1.30 p.m.—Hints for the Housewife. 2.0 p.m.—Programme for Children. 2.30 p.m.—Economic Report. 2.40 p.m.—Talk on Wireless Technique. 3.0 p.m.—Talk for Women. 3.30 p.m.—Talk, "Why is Glass transparent?" 4.0 p.m.—Talk on the Spiritual Life of Young People. 4.25 p.m.—Talk, "How to Learn to understand History." 4.45 p.m.—Gramophone Records. In an interval at 5.45 p.m. Programme Announcements. 5.30 p.m.—Talk on the Development of Culture. 5.50 p.m.—Economic Report and Sports Notes. 6.0 p.m.—Relay from the Wilhelm Marx-Haus, Düsseldorf, of the Programme of Talks and Hymns arranged by the Association for Adult and Industrial Education. 7.0 p.m.—Humorous Variety Programme, followed by News, Sports Notes, Business Announcements, Orchestral and Dance Music. 12. midnight (approx.)—Close Down.

LEIPZIG (Germany)

Mitteldeutscher Rundfunk. 828.6 kh (361.9 m.); 4 kw. Relayed by Dresden, 775 kh (387 m.). Transmits at intervals from 9.5 a.m. 3.30 p.m.—Orchestral Concert. 4.45 p.m.—Advertising Notes. 5.0 p.m.—"The Letter Box." 5.20 p.m.—Weather and Time. 5.30 p.m.—See Königswusterhausen.

6.0 p.m.—Astronomy Talk. 6.30 p.m.—Talk on Films. 7.0 p.m.—"Die Ballnacht"—Operetta Selections (O. Strauss). 8.15 p.m.—Concert of Dances. 1. Two German Dances (Mozart), (a) Der Leiermann, (b) Der Kanarienvogel. 2. Slavonic Dances (Dvorak). 3. Valse caprice (Rubinstein). 4. Norwegian Dances (Grieg). 5. Piedmontese Dance (Sinigaglia). 6. Valse de Concert (Glazounoff). 7. Hungarian Dances (Brahms). 9.0 p.m.—Labour Market Report, Snow Report, Weather, News, Sunday Programme Announcements and Sports Notes. 7.30 p.m. (approx.)—Dance Music relayed from Voxhaus.

LJUBLJANA (Yugoslavia)

Radio-Ljubljana. 517 kh (580.2 m.); 2.5 kw. Transmits at intervals from 11.30 a.m. 4.0 p.m.—Orchestral Concert. 5.0 p.m.—Talk on New Literature. 5.30 p.m.—Talk for Workers. 6.0 p.m.—German Language Lesson. 6.30 p.m.—Theological Talk. 7.0 p.m.—Slovene National Songs by a Vocal Quartet, and Orchestral Concert. 9.0 p.m.—Tides Report, Time, News and Close Down.

MADRID (Spain)

Union Radio (EAJ7). 708.3 kh (423 m.); 1 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Chimes, Exchange Quotations and Dance Music. 8.0 p.m.—Talk, "Inventions and Inventors," by Doctor Zito. 8.25 p.m.—News and Announcements. 9.45 p.m.—Weekly Agricultural Report. 10.0 p.m.—Chimes, followed by "Seraphin the Self-satisfied"—Farce in Two Acts (Foglietti-Roig). News at 12.0 midnight (approx.). 12.30 a.m. Sun. (approx.)—Close Down.

MILAN (Italy)

Unione Radiofonica Italiana. 595.3 kh (503.9 m.); 7 kw. Transmits at intervals from 10.15 a.m. 7.15 p.m.—Talk on Verdi, with Pianoforte Illustrations. News. 7.30 p.m.—Time, News and Introductory Talk on the following Transmission. 7.45 p.m. (approx.)—"Isabeau"—Opera (Mascagni). After the First Act: Readings from "Nave" (d'Annunzio). After the Second: Industrial Review. After the Third: News and Economic Notes. 10.0 p.m. (approx.)—Close Down.

MOTALA (Sweden)

218.9 kh (1,370 m.); 20 kw. See Stockholm Programme.

MUNICH (Germany)

Deutsche Stunde in Bayern. 558.4 kh (537.2 m.); 4 kw. Relayed by Augsburg, 529.75 kh (566.3 m.); Kaiserlautern, 1,102.5 kh (272.1 m.); Nürnberg, 1,250 kh (240 m.). Transmits at intervals from 5.45 a.m. 3.0 p.m.—Orchestral Concert. 4.30 p.m.—Talk, "The Town as a Guardian." 5.0 p.m.—Zither Recital. 5.35 p.m.—Labour Market Report. 6.30 p.m.—(from Nürnberg)—Talk on Family History. 7.0 p.m.—Recital of Songs. 7.30 p.m.—Orchestral Concert: 1. Nebuchadnezzar—Overture (Verdi). 2. Spanish Rhapsody for Pianoforte and Orchestra (Liszt). 3. Waltz from "Eugen Onegin." 4. Trepack (Tchaikovsky). 5. "The Thieving Magpie"—Overture (Rossini). 6. Concerto for Trumpet and Orchestra (Graf). 7. Selection from "Turandot" (Puccini). 8. Hindou Dance from "The Pearl Fishers" (Bizet). 9. The First Hungarian Rhapsody (Liszt). 10. Xylophone Solos: (a) Alsatian Peasant Dance No. 1 (Merkling), (b) Jongleur Galopp (Dittlich), (c) Helena Quadrille (Offenbach). 9.20 p.m.—News, followed by Concert from the Park Hotel. 11.30 p.m. (approx.)—Close Down.

OSLO (Norway)

Kringkastingselskapet. 604.7 kh (496.1 m.); 1 kw. Relayed by Forstrund, 658 kh (456 m.); Fredrikstad, 781 kh (384.1 m.); Rjukan, 1,237.5 kh (242.4 m.); Hamar, 530 kh (566 m.); and Norddalen, 1,010 kh (297 m.). Transmits at intervals from 10.10 a.m. 5.0 p.m.—Children's Programme.



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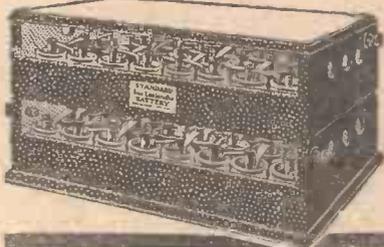


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