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# WORLD-RADIO

## DOMINION & FOREIGN PROGRAMMES

The Official Foreign & Technical  
Journal of the B.B.C.

Vol. XIV No. 357

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

FRIDAY, MAY 27, 1932

Three Pence

EXCLUSIVELY CULTURAL PRO-  
GRAMMES FOR AUSTRALIA

THE STORY OF BROADCASTING  
HOUSE: THE STUDIOS (contd.)

WAGNER AND LUDWIG II of  
BAVARIA  
By FRANCIS GRIBBLE

FREQUENCY CHARTS OF THE  
BRUSSELS CHECKING STATION  
(for April)

HINTS FOR NEW SHORT-WAVE  
LISTENERS

LETTERS TO EDITOR



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Letters should be addressed to the Editor,  
"WORLD-RADIO," Broadcasting House, London,  
W.1.

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## Stations for "High-brow" Programmes

IT seems certain that before long Australia will have a national broadcasting service, operated through a Broadcasting Commission. It is true that the Bill embodying such a plan, which came before the Federal Parliament, was withdrawn during the stage of the second reading. Its adoption (probably after partial redrafting) was thus postponed. The contract of the Australian Broadcasting Company, which was formed to supply programmes for the "A" Class stations, expires on June 30 next, and it is hoped that a re-organisation on the lines of a Government-controlled service will be put into force.

Australian broadcasting has made excellent progress since its inception, and now possesses a total of 350,000 listeners' licences—over fifty-two per 1,000 inhabitants. There are now twelve National, or "A" Class stations, and forty-eight "B" Class (privately owned) stations. As our Australian correspondent announces in an article printed on another page, the Postmaster-General is considering the establishment of an additional ("C") class of station, which promises to be an innovation of an interesting character.

It appears that complaints have been made from time to time by listeners that programmes in general have not sufficiently catered for those of cultivated tastes in music and literature, and it is to meet the demands of this section of the listening public that the new class of station has been planned. The transmissions of the "C" stations will be confined to music and other programme material of a character calculated to satisfy the æsthetic and intellectual demands of a cultivated public. According to the Postmaster-General, when the proposed Broadcasting Commission has settled down to its work, an effort will be made to establish one "C" Class station in each capital city. "On one day weekly, at least, a programme will be rendered which will be devoid of the more popular forms of entertainment. Grand Opera, classical concerts, chamber music, lectures by eminent scientists and *litterateurs*, and other activities of a similar nature will be radiated." Moreover, it appears probable that an additional source of programme material will be available to this station in the transmissions from the Empire Broadcasting Station. The Postmaster-General was careful to explain that the designation "C" was not to be taken to

imply any inferiority to "A" and "B," but might be regarded as standing for Culture. There appears to be some doubt whether or not the programmes from the new class of station will be sponsored by advertisers, and it appears that if such is the intention of the Government, considerable opposition would be forthcoming from the owners of the "B" Class stations, which depend upon this source of revenue.

The scheme appears to us to be a sound one and to be likely to provide Australia with just that element necessary to complete the ideal scheme of programmes, which must include listening material for all grades of culture.

## Viâ Ether

### Next Week's Concerts

AN outstanding orchestral broadcast is announced from Brussels No. 1 for 2.30 p.m. on SUNDAY. This is a relay from the Brussels Conservatoire and the concert is held in celebration of the hundredth anniversary of that institution. M. Désiré Defauw will conduct the orchestra, and Arthur de Greef will be the soloist. A Gounod programme to be broadcast from Copenhagen at 8.30 p.m. on MONDAY should prove well worth listening to; and at 9 p.m. I shall endeavour to get Langenberg. Walter Braunfels, an exquisite player of Mozart, will then play the solo part in a Mozart Concerto for Pianoforte and Orchestra. Beethoven's Second Symphony will be transmitted twice during the week—namely, from Heilsberg and Munich on TUESDAY and THURSDAY, respectively. Strasbourg announces a Beethoven Festival for 8.45 p.m. on WEDNESDAY. By far the most interesting orchestral broadcasts appear to take place on FRIDAY. Warsaw, Stockholm, Vienna, to name but three stations, all offer very attractive programmes.

### International Operatic Broadcasts

It has often been said that music knows no boundary. This truth has become the more impressed upon us since broadcasting has come into being, and is well illustrated by next week's programmes. At 8.30 p.m. on SUNDAY the North Italian group of stations are to transmit a performance of Wagner's *Tannhäuser*. The same opera will again be performed on THURSDAY, this time at our own Covent Garden Opera House. Act I is then to be relayed by the British Regional stations, Acts II and III by Berlin (Witzleben) and Breslau. Another Covent Garden performance to be relayed internationally is that of *Die Meistersinger* on TUESDAY. The Prelude and Act I are to be taken by the British Regional stations, Act III by a number of German stations, including Königs Wusterhausen. MONDAY's outstanding operatic broadcast is Vienna's relay from the State Opera of a performance of Weber's *Der Freischütz*. D'Albert's one-act opera, *The Departure*, which is to be broadcast by Schweizerischer Landessender at 8 p.m. the same evening, should also be mentioned, for I think this may be in the nature of a commemoration. An *In Memoriam* D'Albert broadcast is announced

from Berlin—and relayed by Königs Wusterhausen and Heilsberg—for 8 p.m. on THURSDAY. It is organised by the Union of German Composers; von Schillings is to conduct, Mafalda Salvatini is the soloist, and Prof. Paul Graener, himself an outstanding composer, is to give the memorial address.

### The Swiss Ober-Ammergau

THOUGH not, by a very long way, so old as its Bavarian counterpart, the Selzach Passion Play has already made the name of that picturesque village widely known beyond the frontiers of Switzerland. Lying close to the foot of the Jura mountains, Selzach is within easy reach of Salothurn, the capital of the canton of the same name; its two thousand inhabitants are either engaged in the traditional Swiss industry of watchmaking or working on the land. As at Ober-Ammergau, the villagers themselves are the actors and actresses in the play, lending themselves to its preparation and performance with a devotion which gives it an immensely impressive sincerity. It is in three parts, of which the first is taken from the Old Testament, carrying the story as far as the Ten Commandments and the Brazen Serpent. The second begins with the Herald Angels and the Birth of Christ, and ends with the Entry into Jerusalem. These two parts occupy the morning performance. The third, in the afternoon, tells of the Passion and Death of our Lord, closing with the Ascension. The villagers have built their own theatre, one which seats 1,200 people, all of whom are under cover, and the cast for the play numbers 300. It is to be given this year, at intervals of a few days, from June 5 until October 2, and next THURSDAY, at 9.45, Schweizerischer Landessender is to broadcast a talk on the play and part of a rehearsal, as well as conversations with a number of the leading personalities concerned in its production.

### Why Climb Mountains?

"WHY must you, at the cost of such toil and fatigue, often with so much risk to life and limb, insist on reaching to the highest peaks?" It is a question which is constantly asked of mountaineers, of those especially whose holidays are spent year after year amid the Alps; and it is one which the enthusiast finds it very difficult to answer. Peter von le Fort is making it the subject of a talk, to be broadcast by Berlin (Witzleben) and Königs Wusterhausen, next FRIDAY afternoon, at 4.5; he is calling it "Vom Sinn des Alpinismus"—the import, or significance, of Alpinism, if we may borrow so useful a term. He will take the standpoint that mountain-climbing is something more than merely an achievement in the realm of sport, something more than the ordinary joy of overcoming obstacles and facing peril. He thinks of it as a spiritual experience, intimately bound up, of course, with the exercise of mental and bodily faculties at their highest pitch of alertness and endurance, but raising thoughts as well as limbs to a level far above the prose of everyday to a true vision of Nature's most splendid beauty.

ETHERVIATOR



## Exclusively Cultural Programmes

Plan for "C" Class Stations in Australia

(From our Australian Correspondent)

THE Postmaster-General has announced that consideration is being given to the establishment of C Class broadcasting stations in each capital city, from which high-class programmes would be radiated.

This new type of station, it is explained, would be established and conducted by the Commonwealth Government (or the proposed Broadcasting Commission), and would broadcast only the highest class of music and discussions on the most important literary, scientific, artistic and intellectual movements of the day. They would in no way interfere with existing stations.

This is the Government's answer to complaints, made by those who are more aesthetically inclined, that little provision had been made for the broadcasting of matter suited to cultivated musical, artistic, and literary tastes. It had been pointed out that the A Class (National) programmes must necessarily be designed to meet the requirements of all types of listeners, and this gave little scope for programmes of a character that would have the greatest appeal to the intellectual public.

Although four years have elapsed since the idea of the C Class station was first mentioned, nothing had since been heard of the proposal until now.

The P.M.G. states that his Department has been considering the proposal for some months. "When the proposed Broadcast Commission is functioning smoothly," he said, "an effort will be made to establish one C Class station in each capital city. On one day weekly, at least, a programme will be rendered which would be devoid of the more popular forms of entertainment. Grand opera, classical concerts, chamber music, lectures by eminent scientists

and *littérateurs*, and other activities of a similar nature will be radiated." Arrangements were being completed in England for an Empire broadcasting programme which would reach all corners of the Empire, and those suitable for the purpose would be relayed throughout Australia by the C Class stations.

The Minister said that the designation



Mr. Lang, the then Premier of New South Wales, speaking into the microphone at the opening of the Sydney Harbour Bridge. The Governor, Sir Philip Game, is seen on his left

"C Class" must not be taken to mean that the programmes would be third-rate. The term "C" is merely a convenient classification. The stations will rank in importance at least with the A Class. C might be said to stand for Culture, and the assistance of theatres and aesthetic bodies is hoped for. Actual concerts

given by the world's greatest artists in England or elsewhere could be "bottled" by a recording system and broadcast by the C stations in Australia. When the C Class station was first mooted, the intention, as expressed, was that they should broadcast programmes sponsored by business firms as a form of advertising. The Minister declines to state whether the same course is now contemplated, but the proprietors of the B Class (privately owned) broadcasters fear that such is the intention. In that case the scheme will be strenuously

resisted. The Australian Broadcasting Commission Bill, which was recently before the Federal Parliament and was postponed owing to opposition from all parties, provided for sponsored programmes through the A Class stations. This was resisted so vigorously by the B Class stations and the listening public that the Government has undertaken to eliminate that provision when the Bill again comes before the House.

It is hardly likely, therefore, that a proposal to radiate sponsored programmes through C Class stations will be agreed to by Parliament, and it is difficult also to understand where the necessary finance will be obtained to erect special stations for the C Class programmes.

Amplifying the statement of the Postmaster-General, the Director of Postal Services states that it was lack of funds only which prevented the introduction of the C Class station four years ago. The plans are ready to be put into operation as soon as the Government gives a decision. In the case of an epidemic a broadcast could be linked up with each state, and warnings

or advice would cover practically the whole of the Commonwealth at once. It was not intended, he said, to restrict C Class stations to certain hours. They would provide a full-time service of a programme of an entirely different class from that normally broadcast by other stations.

## El Kantara

(From our Algiers Correspondent)

A talk on El Kantara will be broadcast from the Algiers Station on Tuesday, May 31, at 9.55 p.m., by the British Vice-Consul.

SOME thirty-five miles before reaching Biskra and the Garden of Allah, on the road from Algiers, is the famous gorge of El Kantara. The village of El Kantara is about half a mile north of the gorge. The Arabs call this picturesque oasis Foun-es-

Sahara—the Mouth of the Sahara. It is a good centre for hunting and mountain-climbing in the Aures Mountains. El Kantara was an important Roman fortress under the Romans, who called it Calceus Herculis. All around are scattered Roman ruins and the remnants of the settlements of the Third Roman Legion. To-day in the three villages that make up the oasis there are over 100,000 date palms, a source of a good deal of wealth to their owners.

Possibly nowhere else in the world is there such a vivid contrast as the passage from the wild and sombre gorges of El Kantara into

the wide, unsheltered Sahara. The change takes place in a few moments. El Kantara in Arabic means The Bridge. The actual gorge is a natural defile about 325yds. long, and at its narrowest part 120yds. wide, crowned on each side with rocks rising to 400ft. This gorge is the passage from the valley to the silent desert. When the river is in spate it rushes through under the single-arched bridge, built originally by the seventh Syrian Legion, but since modernised, and after leaving the gorge the stream widens and passes through

(Continued on page 1060)



The famous gorge of El Kantara, showing the railway tunnel



In a few moments the scene undergoes a complete change to a typical oasis such as that shown above



# Wagner and Ludwig II of Bavaria

By FRANCIS GRIBBLE

IN listening to *Tristan*, which, at the time of writing, is to be played at Covent Garden on May 26, one thinks not only of Wagner, but of that King Ludwig of Bavaria whose friendship and lavish patronage came to the composer's rescue at an hour of dark despair and made the adequate production of his greatest masterpieces possible.

It was Wagner's favourite opera—for sentimental as well as musical reasons. "Even though in my life," he wrote to a friend, "I have not found the true happiness of love, I still want to raise a monument to this most beautiful of dreams." *Tristan* was that monument. He worked at it for years. He was in love with Matilda Wesendonck when he began it, and—his heart being a bird of passage—with Cosima von Bulow when he put the final touches to it; but he was poor, his creditors were pressing him for payments on account, and he was at loggerheads with the directors of the only theatre which made him an offer for it. Here is his own account of his position and his quarrel:—

"My operas were to be heard right and left, but I could not live on the proceeds. At Dresden *Tamnhäuser* and the *Holländer* had grown into favour; yet I was told that I had no claim with regard to them, since they were produced during my Capellmeistership, and a Hofcapellmeister in Saxony is bound to furnish an opera once a year. When the Dresden people wanted *Tristan* I refused to let them have it unless they agreed to pay for *Tamnhäuser*. Accordingly they thought they could dispense with *Tristan*."

And then, all of a sudden, the situation was transformed, almost as if a fairy had waved a magic wand, by an unexpected visit from the King of Bavaria's secretary.

Ludwig, when he came to the throne of Bavaria, was little more than a boy—just eighteen years of age—but he was already a Wagnerian, having been converted to the cult by his cousin, afterwards the Empress Elizabeth of Austria, or, rather, by a pamphlet from Wagner's pen which he found lying on her piano and carried off to read. His enthusiasm was quickened when, at the age of fifteen, he saw *Lohengrin* in Paris. It affected him so much that he devoted all his time, thenceforward, to the study of Wagner's musical works and writings. He wrote him flattering letters then and afterwards; but he could do nothing to help him while he was only Crown Prince. He tried to do so, but failed. He told Wagner of his failure; and Frau Wille, in whose house at Mariäfeldt, near Zürich, Wagner was staying, has given us, in a letter quoted in Miss Frances Gerard's *Romance of Ludwig II*, this picture of his deep dependency:—

"I see him now, sitting on a stool near the window, listening impatiently to my prophecies of a splendid future that was certainly to come some day. Wagner said, 'How can you talk to me of a brilliant future when my manuscripts are locked up in a press? Who will give to the world those works of art which only I can produce in the way they should be produced? All the world knows that it is the creator alone who can give birth to his creations.' His excitement increased, he walked up and down the room. Suddenly he paused before me and

said, 'I am differently organised from others; I have excitable nerves. I must have about me light and luxury and beauty, and what I crave is mine by right; the world owes it to me. I cannot live on the miserable pay of an organist as Bach did. Is it an unreasonable demand that I, who have prepared so much enjoyment for millions of people, should have the small luxuries that I need.'"

Whereto Frau Wille replied, trying to comfort him:—

"Something will happen—I know not what, but



Schloss Linderhof, one of King Ludwig's palaces, in the private theatre of which Wagner's operas were performed.

I am sure that everything will be different from what you think. You must have patience. Good fortune is on the way."

And she was right, though she did not know it, and spoke at random. King Maximilian of Bavaria was about to die. Wagner's friend, Crown Prince Ludwig, was about to succeed to the throne; and almost his first act, when he did succeed to it, was to send his secretary to look for Wagner, invite him to Munich, and promise him a stipend from his privy purse—proposals which drew from Wagner this grateful and eloquent reply:—

"DEAR KING AND BENEFACTOR,

"I address to you these tears of celestial tenderness in order to tell you that now, at last, the miracle of poetry has entered into my poor life, which was athirst for love as a divine reality. And this life, these last creations of poetry and music, all belong to you, my young and gracious King. Dispose of them, now and henceforward, as you dispose of your own possessions.

"Your faithful and devoted subject plunged in inexpressible rapture. RICHARD WAGNER."

Thus the path was smoothed. *Tristan* was produced, in circumstances of pomp and splendour, for the first time, on June 10, 1865.

Wagner drew a salary of £320 a year, and was assigned apartments in the royal palace and a seat at the royal table; and, reviewing his experiences some twelve years later, he wrote:—

"My creditors were quieted. I could go on with my work—and this noble young man's trust made me happy. There have been many troubles since—not of my making nor of his—but, in spite of them, I am free to this day, and by his grace."

## Letters to Editor

Reception Conditions in Gibraltar

To the Editor of WORLD-RADIO

SIR,—I am afraid my intentions, when writing my last letter, have been misunderstood.

Neglecting my own individual experiences, which are very good indeed, I based all my statements on an average which I personally have obtained from over fifty different receivers of various types and makes which are situated in all parts of Gibraltar.

Of course, as I stated in my last letter, there are exceptions, among whom I should include G. M. B., but it is hardly fair to your thousands of readers all over the entire Empire to give them the impression that these exceptions are the rule. For this reason also, I neglected the S.W. band, as these are also in a minority.

To state my own personal results, as I am very well situated, any of the above-mentioned receivers have all given splendid results, but I had to neglect these results for a basis in order to give a fair account of conditions here. As it happens, I must agree with G. M. B. with regard to the reception of Daventry 5XX when I deal with my own reception, but even I also experience the average conditions when it comes to Madrid, Seville, and Lisbon.

I thank him for his apology *re* the population, and hope he will excuse me for saving him from a further slip by correcting his last statement to read "Italian blood" instead of "Spanish blood," as, after capturing Gibraltar, with its consequent evacuation in 1704, the British had to invite the Genoese to settle here in order to repopulate the town. It is from these settlers that the present population has descended, intermarrying mainly with British people.

Yours faithfully,

Gibraltar, May 15, 1932. W. H. L.

Poland's Chopin Competition

To the Editor of WORLD-RADIO

SIR,—I was interested to read in your issue of May 13 the letter of Mr. John Lothian, written in reply to my article "Poland's Chopin Competition."

We have our musical festivals and tournaments, as well I know, but what struck me as strange was to be suddenly informed, whilst listening (as I at first thought) to a recital of wonderful tone-poems, that a Chopin competition was in progress. A competition devoted to one composer! I'd have been less surprised had I been somewhat prepared for such an announcement.

Competition suggests skill, but skill of technique does not necessarily convey to one the meaning of a composer. The rendering of several performers of perfect technical skill would not appeal to us in the same way; they may in fact leave us unmoved. Interpretation, if it is to convey the intentions of the composer, is not acquired by skill alone—it is born in one, and brought out only after technical difficulties are overcome.

It was indeed gratifying to hear such wonderful performances of works of high technical degree rendered exquisitely by so many "unknowns," and the thrill was all the greater when I discovered I was listening, not to the giants, but to those striving for recognition amongst the world's best.

Sanderstead, May 16, 1932. A. R. H.

(Continued in col. 2, page 1060)



# Dominion and Foreign Broadcasting Intelligence

## Broadcasting Developments in Australia

(From our Australian Correspondent)

### Licence Increases

In connexion with the Radio Exhibition held in Melbourne in April, Mr. H. P. Brown, Director of Postal Services, recently pointed out that despite the depression in trade and commerce of Australia during the past year the radio business has been one of the exceptions in an atmosphere of doubt and stagnation. In the year ended March, 1932, there has been a renewal of 250,000 listeners' licences and an issue of nearly 100,000 new licences. Australia now has twelve National stations, forty-eight licensed, or Class B, stations, and a total of 350,000 listeners' licences. Roughly, the Commonwealth is receiving from its broadcasting stations systematic transmissions at the rate of 153,000 hours annually.

### Early Obstacles

The advance of broadcasting, Mr. Brown remarked, had been by jerks and jumps. There had been struggles on tariff matters, copyright questions, patent royalties, apparatus design, and manufacturing problems; disputes concerning the use of gramophone records for broadcasting purposes, controversies on the (alleged) rights to use the ether without let or hindrance, resentment at wavelength allocations, complaints of difficulties in reception, because of one station interfering with the transmissions of another, and on many other matters. Now a stage had been reached when a further re-organisation of the National Service seemed due, and the Government was confronted with the task in this sphere of national interest.

### Orchestral Plans

Mr. Brown stated that four years had elapsed since the establishment of a National Orchestra for broadcasting first received consideration. He doubted whether it would be practicable in the near future to establish an orchestra as a permanent concrete unit, but he was satisfied that it was possible to assemble and maintain two or more selected groups of instrumentalists, associated with the larger national broadcasting centres, which would serve the normal requirements of the studios with which they were connected, and permit a periodical fusion of the separate units—supplemented, if need be—to give great musical treats otherwise unattainable.

### Gramophone Music

The expansion of all classes of recorded music, wonderful and valuable though it was, he considered pregnant with danger to the development of Australian musical talent. It was imperative that a means be found of encouraging those who have the aptitude, and particularly those who possess the genius. When all had been said for the great merit of recorded music—and no one wished to discourage its great value and influence—people could never be satisfied without the personal performer in their midst.

### Helped by the Telephone Service

Mr. Brown pointed out that the long-distance telephone service had been of great benefit in providing for the simultaneous transmission of special programme items from a number of stations, and had been applied on several occasions for connecting together the whole broadcasting chain, reaching from Rockhampton, in Queensland, to Perth, in Western Australia, a distance of nearly 4,000 miles. The National Orchestra idea would receive enormous support in its development because of the existence of the nation-wide telephone network, which would permit the simultaneous rendering of the great performances from every national station from one end of the Commonwealth to the other.

## CANADA

A Canadian Television Company

(From our Montreal Correspondent)

Canadian Television, Ltd., is being incorporated under a Federal charter to engage in the manufacture of television transmitting apparatus for broadcasting stations and the construction and sale of television receiving equipment. The Canadian organisation has secured exclusive licences for the use in Canada of television patents and equipment of two outstanding groups in this industry—the Baird Television Company, of England, and the De Forest-Jenkins Television Corporation, of Passaic, N.J. The rights of the Canadian company will include not only existing, but all future, developments.

### Broadcasting and Women's Institutes

Women's Institutes throughout Canada are finding that broadcasting is an effective means of reaching their various objectives—mainly the achieving of home betterment. Addresses on Canadian industries and household economics are broadcast, and various women official organisers give regular talks on the subjects of public health, immigration, agriculture, education, and the League of Nations.

## FRANCE

(From our Paris Correspondent)

### Late Transmissions from Radio Toulouse.

Radio Toulouse will now continue transmitting each night until half-an-hour after midnight. One reason for this alteration is that there are many listeners in North Africa, where solar time is used instead of Summer Time.

### Radio Normandie

Radio Normandie has recently increased its wavelength to 232 metres, because of interference with maritime wireless communications.

## GERMANY

England-Germany Operatic Relays

(From our Berlin Correspondent)

Relays to German stations of Covent Garden opera, under Sir Thomas Beecham, are being highly welcomed as England's return for the German operas which, it is stated in Berlin, are to form a regular feature of English programmes. On May 31 Königs Wusterhausen will relay the third act of *Die Meistersinger*, with Lotte Lehmann, Friedrich Schorr, and Heinrich Tessmer as prominent Germans in the cast, and on June 2 the second and third acts of *Tannhäuser*, with Lotte Lehmann, Ludwig Hoffmann, and Tessmer. The rendering of the other parts by English singers is of the greatest interest to German listeners. Sir Thomas Beecham had a very warm welcome on his last visit to Germany, two years ago, when he conducted at the Philharmonic Hall. The first opera which Berlin will relay to all English stations will be Saint-Saëns's *Samson and Delilah* (Act II), from the Municipal Opera House, Charlottenburg, on June 22. On July 1 Verdi's *Sicilian Vespers* will be relayed from the State Opera, Unter den Linden, and on July 8 the performance will be one given by the Funk Stunde orchestra under Cornelius Bronsgeest's management. For this Weber's *Euryanthe* has been chosen.

### Gustavus Adolphus Celebrations

(From our Leipzig Correspondent)

This year Germany and the Lutheran Church are preparing to celebrate the memory of King Gustavus Adolphus, who fell in the battle of Lützen, near Leipzig, in 1632. The celebrations open on May 28, with a special service before, and in, the Gustavus Adolphus Memorial

Chapel in Lützen, on the occasion of the tenth anniversary of the "Deutscher Evangelischer Kirchenbund." This service will be relayed by the stations of Central Germany and probably other German stations.

## U.S.A.

Winners of NBC Music Competition

(From our Washington Correspondent)

The results of the £2,000 competition—sponsored by the National Broadcasting Company—for symphonic compositions by American composers, suitable for broadcasting, and of which details were published in *World-Radio* of January 8 last, were recently announced. Five scores were selected from a total of 573 submitted and played on two occasions "over the air" by a symphony orchestra conducted by Eugene Goossens, the English conductor, who now directs the Cincinnati orchestra. The final awards were as follows: "Station WGZBX," by Philip James, of New York—a prize of \$5,000; "The Dancer Dead," by Max Wald, of Paris—\$2,500; "Traffic," by Carl Eppert, of Milwaukee, Wisconsin—\$1,250; "Symphonic Intermezzo," by Florence Galajikian, of Maywood, Ill.—\$750; "Sinfonietta," by Nicolai Berezowsky, of New York—\$500. The five judges who chose the winning compositions were Walter Damrosch, Tullio Serafin, conductor of the Metropolitan Opera House, Nikolai Sokoloff, Frederick Stock, conductor of the Chicago Symphony orchestra, and Leopold Stokowski, conductor of the Philadelphia Symphony orchestra. The judges, however, did not determine the order of the winners. This was left to a committee, composed of 150 men and women, scattered all over the United States, who were chosen as representing a cross-section of the country's most enlightened musical opinion. On May 1, the five winning compositions were performed and the committee, listening from every State in the Union, sent in their votes on the respective merit of the pieces. These were tabulated in the NBC offices and the winners' order decided on the basis of the vote. On Sunday, May 8, the compositions were again performed; this time in order of award, the presentations were made, and the composers made brief talks into the microphone. As the second prize winner is in Paris, his voice was brought to these shores by short-waves.

### Station WGN, Chicago

(From our Chicago Correspondent)

One of the most successful broadcasting stations in the United States is WGN, the western key station of the Columbia Chain. It operates eighteen hours a day on an exclusive wave, using a power of 25kW. The transmitter plant is in Elgin, forty miles from Chicago. The broadcasting studios, of which there are five, are in the Drake Hotel, not far from the business district of Chicago. To satisfy the demands of listeners, WGN maintains a symphony orchestra, a string trio, and a composer of note. The station is known for its service record. It broadcasts, daily, weather reports, market and general news, and talks on health and child training. It co-operates with the police in broadcasting news of missing persons and furnishes its listeners with news of happenings of national importance sent direct from the town or city in which such events take place. No expense is spared in bringing to the public the programmes which they request. There are numerous advertising and commercial programmes on the station, but all are strictly censored. They are never accepted unless the advertised article is of proved worth and the accompanying programme of artistic merit.



# TECHNICAL SECTION

## Broadcasting House

### 7.—The Studios

(Continued from page 1004, May 20)

WE come now to the consideration of the design of the actual studios in Broadcasting House, on the basis of the principles which have just been described.

Sound-absorbing materials must be employed in the treatment and decoration of a broadcasting studio because the materials which would otherwise be used for decoration and furnishing are of comparatively low absorption. In considering the necessary treatment it is to be assumed, in the first place, that the untreated studios are solid structures, sensibly free from partition resonance. On the basis of providing a fairly uniform reverberation time over the range of important audible frequencies, it is necessary to find materials for the treatment of walls, floor and ceiling which, whilst reasonably adaptable to decorative use, shall have uniform sound-absorbing properties over the range of frequencies concerned.

With the object of finding such materials, experiments have been made by the B.B.C. to test the absorptive properties of a very large number of materials. The reverberation chamber method, well known to workers in the field of acoustics, was employed. Two methods of studio treatment were found to be satisfactory. The first involves the use of building board and the second of felt and wallpaper.

A number of different materials are on the market described by the general term "building board." All are pulp boards of various kinds

and the usual thickness is about half an inch. For acoustical treatment of studios the board is cemented in intimate contact with the hard surface of the wall or ceiling behind it. Used in this way the amount of absorption is practically constant over the range of frequencies from 100 to 4,000 cycles per second and its value is 25 per cent. approximately. This means that in a single reflection from the surface of the building board a ray of sound decreases in intensity by 25 per cent. owing to absorption of energy by the board.

Felt and wallpaper treatment consists in cementing to the hard wall first a layer, one inch thick, of ordinary hair-felt. The surface of this is then covered with one or two layers of lining paper and finally with a soft porous wallpaper of medium thickness. The absorption of this treatment is approximately 40 per cent. over the whole of the range of frequencies concerned.

#### Decorative Effects

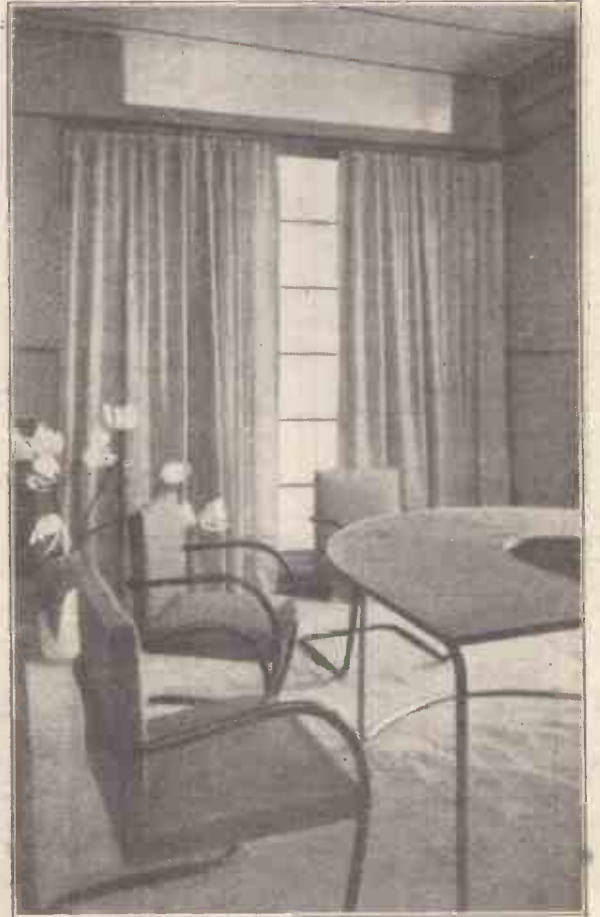
Where it is desired, as in the case of the Broadcasting House studios, to obtain a pleasing effect to the eye as well as to the ear, methods of using acoustic materials which can be made to produce a decorative effect are of considerable importance. Different varieties of building board provide in themselves a number of textures and tints, mostly of a biscuit colour.

They lend themselves quite readily to decorative design work without any attempt at colouring or disguising the surface. This method has been adopted in a very large number of the studios in Broadcasting House. Studio 8A is a typical example of a building-board-treated studio. Actually the acoustical properties of building board are spoilt by colouring it in any way except by tinting with dyes or thin water-colour. It is also permissible to stretch over the surface of the board a thin decorative fabric. As in the case of building board, no form of paint or distemper may be used for decorative purposes in conjunction with felt and wallpaper treatment. Here, however, some scope is available in the selection of a suitably decorative wallpaper.

If the amount of necessary absorption in a studio is calculated from the assumed value of optimum reverberation time it is found that, over the range of volumes and shapes among the studios at Broadcasting House, the average absorption of the whole of the exposed surface in the studio works out at between 15 per cent. and 20 per cent. Both the methods of treatment available provide more absorption than this, and it is therefore

unnecessary to treat the whole of the exposed surface with acoustic material.

The general scheme of treatment adopted for music and general purpose studios in Broadcasting House has been first of all to cover either the floor or the ceiling completely with building board. In the former and more usual case a suitable carpet is laid on the top of the board. This treatment having been decided upon, consideration is given to the wall surfaces. These may be treated with either building board or felt and wallpaper, or even a combination of



[Architect for the Interior: Serge Oheimyoff.]

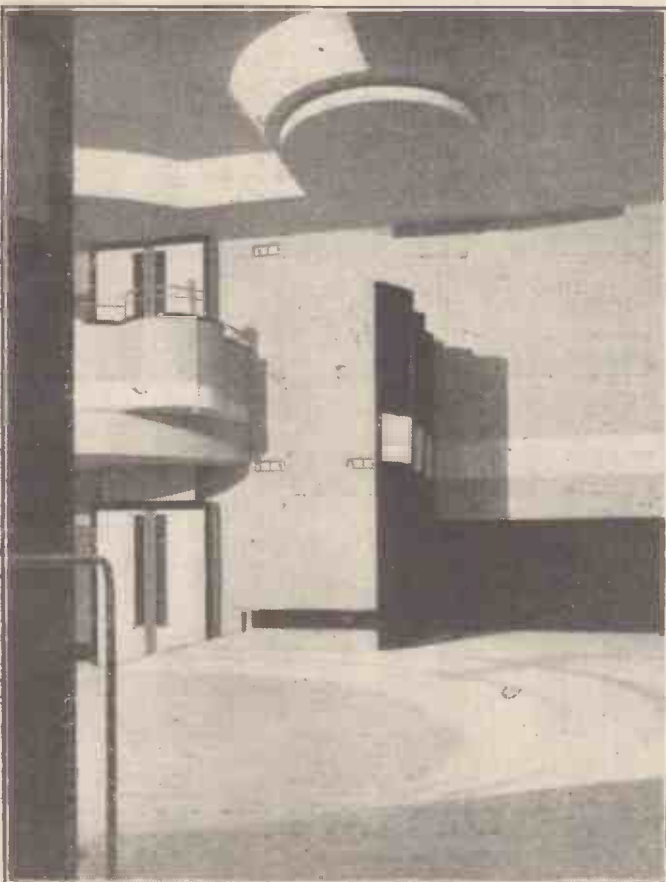
Studio 8B (Debates)

the two. The amount required generally works out at about 80 per cent. of the total wall surface to be covered with building board or 50 per cent. with felt and wallpaper.

Studios in Broadcasting House which have been given "normal" acoustic treatment are BA, BB, 3E, 6A, 6B, 7B and 8A. All these studios are to be used for purposes in which music plays a prominent part, with the exception of 6B and 7B, which form part of the Productions group. As, however, they are to be used on frequent occasions for piano music, their acoustic treatment has been as described. All seven studios have been treated with building board, but in BA and BB a certain amount of felt and wallpaper, covered with a decorative fabric, has been incorporated as well.

It must be understood that all the studios contain, in addition to the acoustic treatment applied to the walls, a certain amount of additional sound-absorbing material, such as upholstery, decorative hangings and carpet. All these materials are more effective absorbers at the high frequencies than at the low. This is no disadvantage, provided the area of such materials is comparatively small compared with

(Continued on page 1053)



Architect for the Interior: Raymond McGrath, B. Arch., A.R.I.B.A.

Studio BA (Vaudeville) showing stage



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*Resists damp.*

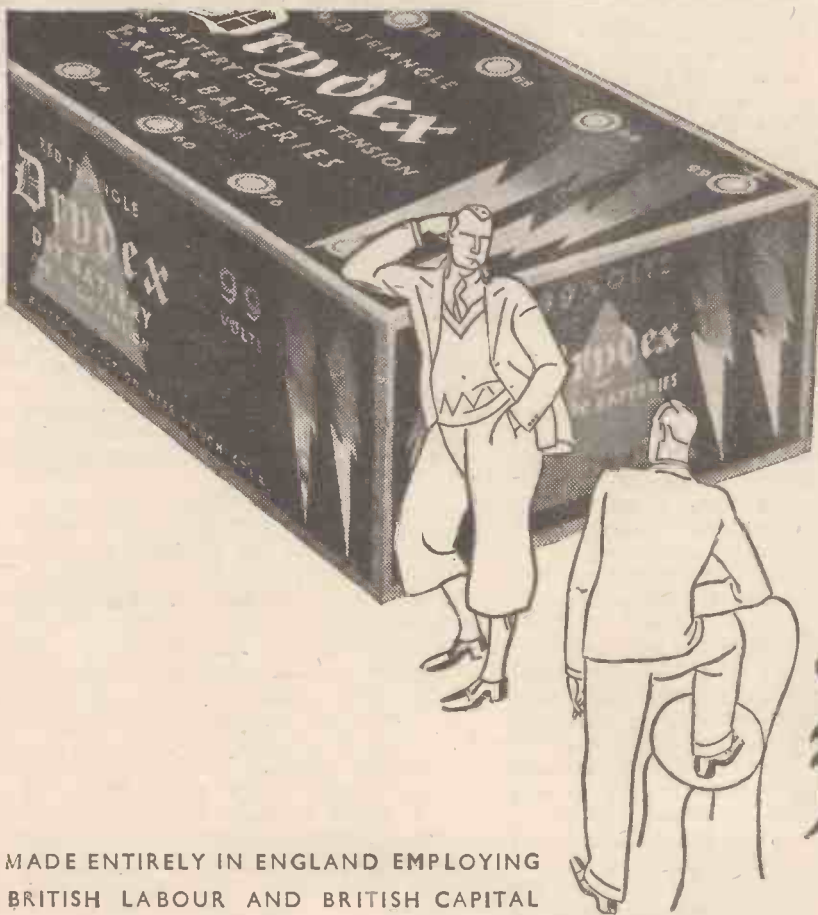
*Speeds up  
construction.*

*An Empire Product.*

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**BROADCASTING HOUSE**

(Continued from page 1051)

that of the remainder of the acoustic treatment, since it results in the slightly decreasing reverberation time with increasing frequency which experience has shown to be desirable.

It has already been explained that, in the case of studios to be used for speech, the best results are obtained with acoustically dead studios: persons with little experience of broadcasting are, however, likely to be disturbed by the lack of reflected sound in such a studio. Hence in the case of the talks studios, whilst 3C has been made completely dead by the use of mineral wool treatment behind a decorative fabric, 3B and 3D have received building board treatment. These two studios have, however,



[Architect for the Interior: Edward Maufe, M.A., F.R.I.B.A.]

Studio 3E (Religious Services)

been made less reverberant than usual by covering the ceiling with felt and wallpaper treatment. Studio 3B, intended for debates and discussions, falls into a similar category, since the whole of the floor and ceiling, as well as the greater part of the wall surface, has been treated with building board.

The news studios, 4A and 4B, on the other hand, will always be used by professional broadcasters, and hence they have been completely treated with mineral wool. The majority of the studios in the Productions group have been similarly treated, including the effects studios. Their designations are 6C, 6D, 7A, 7C and 7D. The gramophone effects studios, 6C and 7E, are not treated acoustically, since neither will contain a microphone.

The only studio, with the exception of the Concert Hall, which still has to be described from the point of view of its acoustical treatment, is 3A. This, in addition to its use as the Children's Hour studio, is to be used for the broadcasting of dance music. For the latter purpose much reverberation is a disadvantage, since it tends to blur the predominant rhythm and disguise the individuality of the instruments. Practically the whole of the surface of walls, floor and ceiling of this studio is, therefore,

covered with building board to reduce the reverberation time. The average reverberation time of the studio is approximately 0.6 second instead of 0.9 to 1.0 second for "normal" acoustics.

Finally, the acoustics of the Concert Hall require consideration. In planning the design of Broadcasting House care was taken that this studio should possess none of the more striking architectural features which contribute to the peculiar acoustics of many large public buildings. Although it tapers somewhat, the end at which the platform is situated being narrower by about twelve feet, its surfaces are all sensibly plain, being broken only by coffering in the ceiling, pilasters on the walls and similar minor features. Its approximate volume is 125,000 cubic feet, and according to the standard which has been adopted by the B.B.C., therefore, its optimum reverberation time should be 1.75 seconds.

Calculations have shown that when it contains its normal complement of performers and audience its reverberation time will approximate to this figure at intermediate frequencies, rising to about two seconds at the lower frequencies. Thus in these circumstances the acoustics of the hall may be considered as satisfactory, without any specific acoustic treatment. The difference between this condition and that normally experienced in broadcasting studios is due entirely to the relatively large number of persons and padded seats in the studio. This experience is normal for concert halls in general. Trouble often occurs, however, owing to the very large change in acoustic conditions with varying audience. In the Broadcasting House Concert Hall this difficulty is largely obviated by the use of comparatively heavily-upholstered seats for the audience, so that the change in the total absorption in the hall with varying audience is minimised. Should it ever become desirable at a later date to provide specific acoustic treatment for any reason in the Concert Hall, it will be easy to adapt the decorative treatment to this end, on account of the panelled nature of the design of walls and ceiling.

(To be continued)

**A Flying Broadcast**

A WIRELESS broadcast from a flying studio over New York took place recently. A regular piano programme was sent by wireless from the aeroplane to the ground, and re-broadcast over sixty-three stations of the Columbia Broadcasting System. The object of this experiment was to demonstrate the great advance made in the silencing of air transport 'planes, and the improvement in both aircraft wireless and short-wave reception.

The aeroplane was an eighteen-passenger machine, the largest in regular transport service in the country, with a cabin divided into three compartments. The front compartment was fitted out as a broadcast control room, while two small pianos, together with microphones and other equipment, were placed in the rear compartment. The aeroplane used has two 625-horse-power engines, each fitted with mufflers to decrease the motor noise, and the 57ft. length of the 'plane gave ample room for anti-noise precautions as taken in the regular broadcasting studios.

The programme is reported to have been entirely satisfactory. The music and speech was received with the greatest clarity, and in the background there was heard only the slight hum of the motors. It is believed that this is the most noise-free programme ever sent out from an aeroplane.

**ELEMENTS OF WIRELESS**

(Continued from page 1056)

and B, for example, we have to consider the effect which A has upon B, and also the effect which B has simultaneously upon A. The total effective inductance will therefore be expressed as

$$L_{(Total)} = L_A + L_B + 2M,$$

when the coils A and B are electro-magnetically coupled in the same sense. When the coupling is in the opposite sense, the total effective inductance will be

$$L_{(Total)} = L_A + L_B - 2M.$$

Perhaps an extreme example of the application of this last rule will make the matter quite clear. Suppose a length (say 20 feet) of insulated copper wire is taken, doubled back from the mid-point so as to form a double ten-foot length, and is then wound closely upon (say) a one-inch diameter cardboard former or tube, the winding terminating with the two free ends of the wire. Such a winding will be, for all practical purposes, non-inductive. Incidentally, if the wire employed had been insulated resistance wire, the finished coil would have been a wire-wound non-inductive resistance.

Each coil, regarded separately, possesses inductance. As they are each of exactly similar dimensions—length of wire, number and diameter of turns, etc.—they will have the same inductance value; and as they are connected in series those inductance values are to be added together. It will be seen, therefore, that for the total effective inductance of the double winding to have zero value, the term 2M must equal the total inductance of the coils, and must be subtracted from that value.

A practical application of this principle occurs in a device, very popular in wireless receivers some years ago and still used, although on a very much larger scale, for obtaining a fine adjustment of the inductance value of a transmitting aerial. This device has been given the rather peculiar name of *variometer*, but it is actually a smoothly-variable inductance consisting of

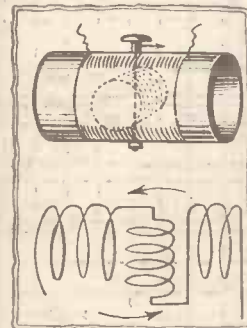


Fig. 50

two inductance coils, one being mounted within the other upon a spindle or axis and being capable of movement through an arc of 180 degrees. The two coils are connected in series and rotation of the inner coil varies the value and effect of the mutual inductance between them, and, consequently, varies the total effective inductance smoothly over a given range of values, dependent upon the actual proportions of the coils. A typical receiving variometer is illustrated in Fig. 50.

**Inductances in Parallel**

If two (or more) inductances are connected in parallel the total effective inductance may be found by proceeding exactly as in the case of resistances connected in parallel. That is to say, the total inductance is the reciprocal of the sum of the reciprocals of the separate inductances.

The formula, therefore, is as follows:—

$$L_{(Total)} = \frac{1}{\frac{1}{L_1} + \frac{1}{L_2} + \frac{1}{L_3} \text{ etc.}}$$

It is to be noted that this formula applies only to the case where several inductance coils are situated so as to be uninfluenced by one another, or, in other words, that mutual induction effects are not present.

(To be continued)

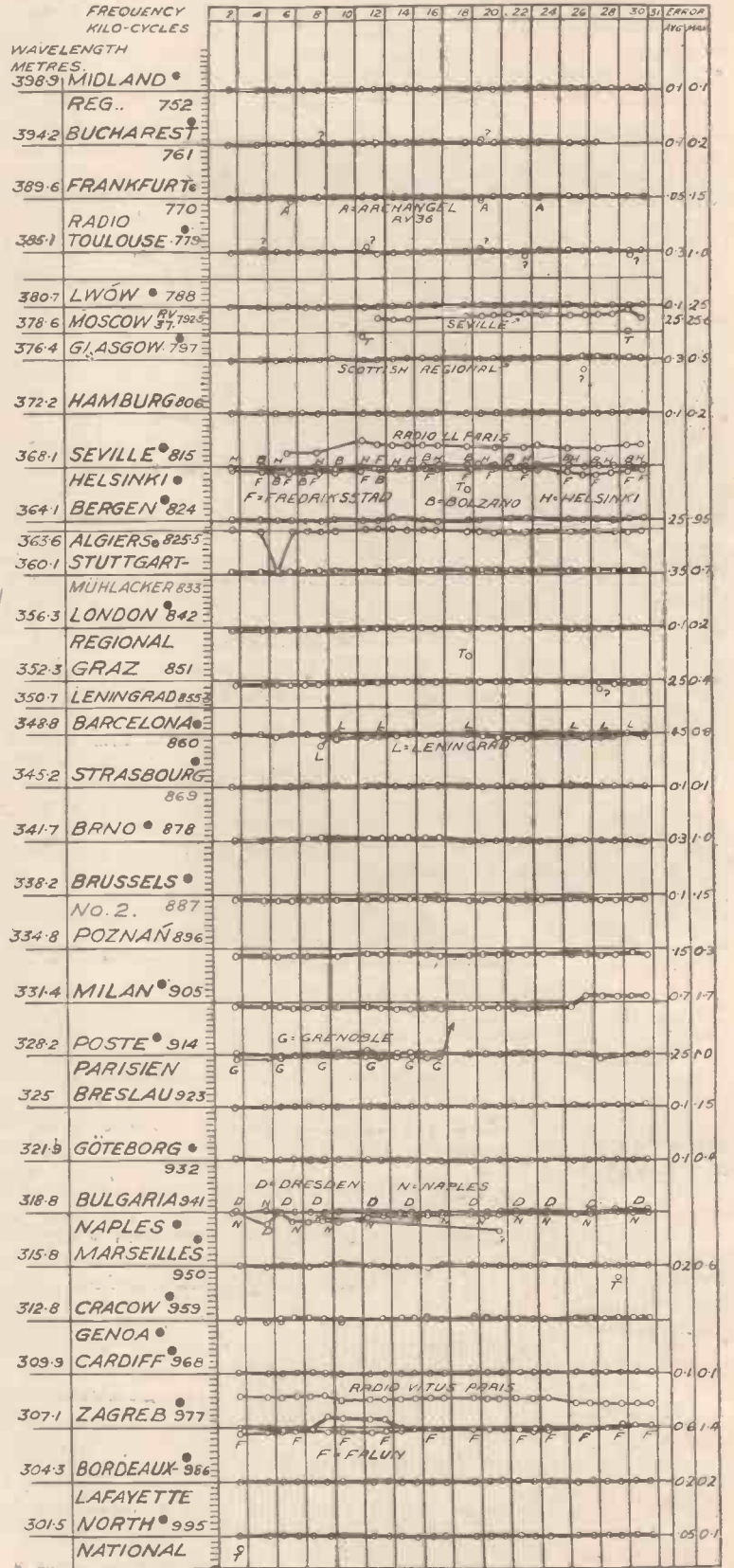
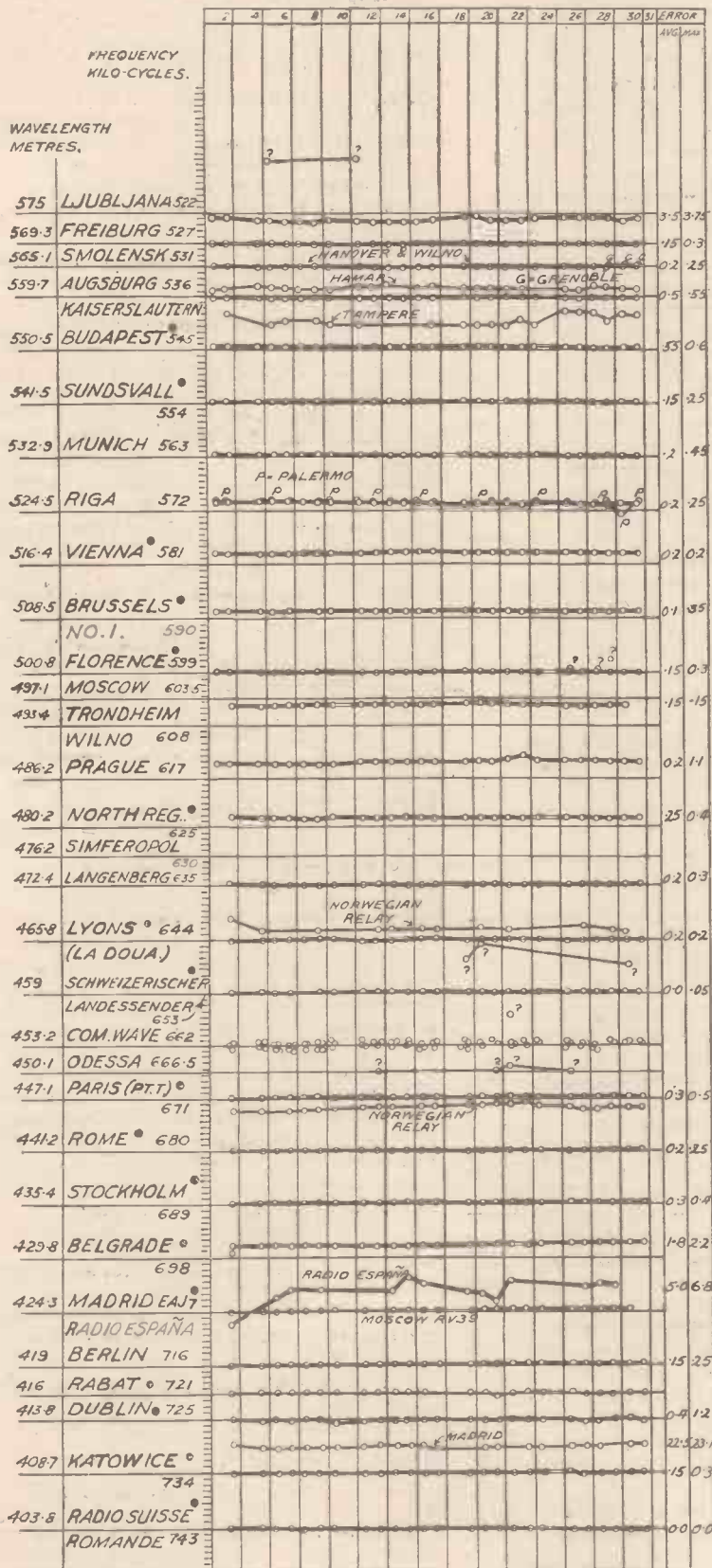


April, 1932

# Frequencies of European

Measured at the Brussels  
Technical Committee of the Union

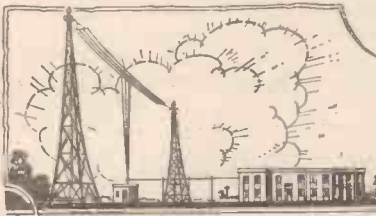
The letter **T** indicates wireless telegraphy transmission.







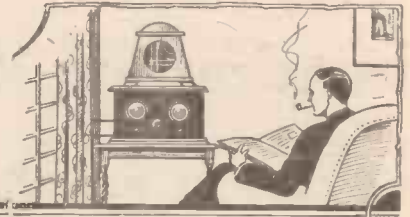




# The Elements of Wireless

(Part 16)

By RALPH STRANGER and E. REDPATH



## ALGEBRA

In arithmetic we are dealing with problems which are concerned with just one particular case. Thus in studying the relation between current, E.M.F., and resistance, we find that with the E.M.F. at 6 volts and the resistance at 2 ohms we obtain a current of 3 amperes, which is  $\frac{6}{2}$ . In checking up this relation with the help of a large number of tests we may come to the conclusion that the numerical value of current is always the result of division of the E.M.F. by the resistance. In order to express such a conclusion in a general way what we do is to introduce symbols which represent the various quantities involved and arrange these symbols in such a way as to express clearly how they are inter-related.

If we call the E.M.F. (any E.M.F.) E, the intensity of current I, and the resistance R, we shall find that for each particular case  $I = \frac{E}{R}$  and if we substitute for E and R a number of different numerical values we shall find the corresponding values for I. This use of letters instead of figures enables us to lay down a general law connecting three or more quantities.

The expression  $I = \frac{E}{R}$  is an *algebraical* formula. Since there is a sign of equality between I and  $\frac{E}{R}$  we call such an expression an *equation*.

Unequal quantities are shown as follows:—

$A > B$ , which means A is *greater than* B.

$A < B$ , which means A is *smaller than* B.

There are two things to be remembered in dealing with equations:—

1. If we add to or subtract from both sides of an equation *the same number* the equation is not altered. Taking a numerical case:—

$$\begin{aligned} 2+2 &= 4 \\ 2+2+1 &= 4+1 \\ 5 &= 5 \end{aligned}$$

Similarly:—

$$\begin{aligned} 2+2 &= 4 \\ 2+2-1 &= 4-1 \\ 3 &= 3 \end{aligned}$$

2. If we multiply or divide both sides of the equation by *the same number* the equation still holds good. Thus:—

$$\begin{aligned} 2+2 &= 4 \\ (2+2) \times 2 &= 4 \times 2 \\ 8 &= 8 \end{aligned}$$

Similarly:—

$$\begin{aligned} 2+2 &= 4 \\ \frac{2+2}{2} &= \frac{4}{2} \quad \text{or} \quad 2=2 \end{aligned}$$

You will notice that in order to multiply a sum  $2+2$  by a number we have introduced brackets, thus:  $(2+2) \times 2$ . The brackets indicate that an addition has to be carried out first before the multiplication takes place. If we did not do this and wrote  $2+2 \times 2$  it would mean  $2+4=6$  instead of  $(2+2) \times 2$  or  $4 \times 2=8$ . This being the case, we are in a position now to investigate how the three formulæ relating to Ohm's Law came into existence.

Starting with  $I = \frac{E}{R}$ , which merely means that current always equals the E.M.F. divided by resistance, if we multiply both sides of the equation by R (R being some definite quantity or other) an equation will still hold good.

Thus  $I \times R = \frac{E \times R}{R}$ . But just as  $\frac{2}{2} = 1$  so any quantity such as R divided by itself will be

unity. Therefore  $\frac{R}{R} = 1$ . This means that

$I \times R = E \times \frac{R}{R}$  can be expressed as  $I \times R = E \times 1 = E$ .

Hence our second formula  $I \times R = E$  or  $E = I R$  (the multiplication sign in algebra is usually omitted), which means that the E.M.F. is equal to the product of current and resistance.

Now, taking again the formula  $I = \frac{E}{R}$ , let us divide both sides of the equation by I, i.e.:—

$$\frac{I}{I} = \frac{E}{R I}$$

$I = 1$ . Thus we have  $1 = \frac{E}{R I}$ . Now let us multiply both sides of the last equation by R

so that we have  $1 \times R = \frac{E \times R}{R I}$ , which is the same

as  $R = \frac{E \times R}{I}$ , which is the same as  $R = \frac{E}{I}$ . Thus

we have found a new expression indicating that resistance equals E.M.F. divided by the current. In any of these three equations:

$$I = \frac{E}{R}; \quad E = I R \quad \text{and} \quad R = \frac{E}{I}$$

if we know two of the quantities we can discover the third.

Let us take another equation:—

$$R = \rho \frac{l}{a}$$

This is the formula expressing the relation between the resistance of a conductor and its resistivity, length and cross-sectional area.  $\rho$ , which is a Greek letter, pronounced *roh*, stands for resistivity, i.e., specific resistance of the material per unit volume, say per cubic inch.  $l$  stands for length of the conductor, and its value *must be* in inches if  $\rho$  is per cubic inch and in centimetres if  $\rho$  is per cubic centimetre (the dimensional units in the equation must be kept the same).  $a$  stands for cross-sectional area (the surface meeting the eye when you look at the conductor end-on) and should also be expressed in square inches if  $\rho$  is per cubic inch and square centimetres if  $\rho$  is per cubic centimetre.

Just by looking at the formula  $R = \rho \frac{l}{a}$  you can see at a glance that the right-hand fraction will grow with the increase of  $l$ , i.e. length, and will diminish with the increase of  $a$ , i.e. the cross-sectional area, so that an algebraical formula can show at a glance how the quantities involved affect each other.

It is highly important to observe the right sequence of manipulations when dealing with algebraical expressions. Thus, for instance:  $(a+b)c=d$  means that you first add  $b$  to  $a$  and multiply the sum by  $c$ . The equation  $(a+b)c=d$  can also be shown as  $a+c+b=c+d$ , i.e. first multiply  $a$  by  $c$  then multiply  $b$  by  $c$  and add the two products together. Let us check this.

$$\begin{aligned} (2+3) \times 5 &= 25 \\ 2 \times 5 + 3 \times 5 &= 10 + 15 = 25 \end{aligned}$$

So that we can say:  $(2+3) \times 5 = 2 \times 5 + 3 \times 5 = 25$ . Such an operation is called *opening the brackets*. Let us remember, therefore, that  $(a+b)c = a+c+b=c=d$ .

Similarly  $(a-b)c = a-b=c=f$  (whatever  $f$  may be).

$$\{(a+b-c)d + (a-b+c)f\} k = 1.$$

In the above equation another type of bracket is introduced. The meaning of these brackets is: add  $a$  to  $b$ , subtract  $c$  and multiply

the result by  $d$ , add to that the sum of  $a$  and  $c$  less  $b$ , multiplied by  $f$  and multiply the lot by  $k$ . The brackets can be opened as follows:—

$$\{(a+b-c)d + (a-b+c)f\} k = 1$$

$$\{a d + b d - c d + a f - b f + c f\} k = 1$$

$a d k + b d k - c d k + a f k - b f k + c f k = 1$   
Simple enough!

There is a third kind of bracket:—

$$\left[ \{(a+b)c + (d+e)f\} k + \{(a+b)g + (d+e)h\} m \right] s = t.$$

Please try to open these brackets for yourself.

(To be continued)

## INDUCTANCE COILS (continued)

A method of winding inductance coils, which provides for a variation of inductance in "steps," is illustrated in the accompanying diagram, Fig. 49. It will be seen that in the course of the winding operation, small loops known as "tappings," are made (without actually breaking the continuity of the wire), and, subsequently, the insulation is removed from these "tappings" and leads are soldered to them and connected to the contact studs of a suitable multi-point switch (sometimes termed a selector switch),

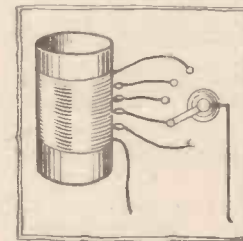


Fig. 49

from the moving arm of which a further lead is taken to the external circuit. Movement of the switch arm over the contacts causes more or less of the coil-winding to be included in circuit. Many ingenious methods were devised to provide fine adjustment of inductance values. For

example, a coil would be wound in two sections; one section consisting of ten turns with "tappings" from each individual turn, and the rest of the winding (perhaps 90 turns) would have a tapping for every ten turns. Two selector switches would then be connected up to the tapping points—one switch for each section—thus affording a means of including in circuit any number of turns from one to one hundred.

### Inductances in Series

If two (or more) inductances are connected *in series*, the total effective inductance will be the sum of the separate inductances provided they are far enough away from each other to be entirely outside the magnetic fields existing around them when alternating currents are flowing in the windings, or, in other words, provided that mutual induction does not occur. In this case  $L_{\text{Total}} = L_1 + L_2 + L_3$ , etc. exactly as in the case of resistances connected in series.

Should two inductances, connected in series, be so placed with regard to each other that mutual induction occurs, the total effective inductance will be the sum of the two inductances *plus or minus* the value of the mutual inductance according to whether the direction of the current flow at any instant in the two coils is in the *same* or *opposite* directions. If in the *same* direction the effect of the mutual induction will be to *increase* the total inductance value, and if in the *opposite* direction, the effect will be to *reduce* the total inductance.

The effect of mutual induction has to be taken into account *twice*. In the case of two coils A

(Continued in col. 3, page 1053).



## SHORT-WAVE SECTION

### Some Hints for New Short-Wave Listeners

By "VERNIER"

(Continued from page 1006, May 20)

**L**AST week I dealt with the more reliable stations on the lower waveband from 14 to 27 metres, and I trust that by now most new listeners will have successfully logged a number of these stations. If so, they will have received signals from all quarters of the globe—Java, U.S.A., Argentina, and Europe, etc., and should have no cause to complain of the range obtained by their receivers.

The new listener should, by now, have attained some proficiency in the art of operating and tuning his receiver; and will have found it a much more difficult task than on the medium or long wavebands. This is because tuning is so much sharper, and selectivity is so much greater "below 100 metres." Even if the receiver is equipped with slow-motion dials, the condensers should be turned with the minimum of speed, otherwise all except the most powerful stations will be missed.

When searching for a station, as I have said before, keep the set just in a state of oscillation, revolving the condenser dials until a heterodyne is heard which denotes the presence of a station. When such a heterodyne has been located, reduce the reaction and again adjust the condensers until the station can be heard intelligibly at sufficient volume. I would strongly advise the novice to practise this difficult art of tuning on the more powerful stations, such as Rome and Moscow.

Assuming, however, that the new listener has attained a proficiency in tuning on the lower waveband during the past week, we will plug in another set of coils which will give us a tuning range of from 25 to 40 metres. It is quite probable that at the lower end of this waveband, the listener will receive the same stations as on the upper end of the 14- to 27-metre waveband. If so, these stations should be temporarily disregarded.

#### The 30-Metre Waveband

The first station on this waveband from which reliable reception may be obtained is Madrid (EAQ), which operates on a wavelength of 30.4 metres. The only time at which this station may be received with regularity is from 6 to 8 p.m. on Saturdays, although it is often "on the air" at other times. The Saturday night programme, I understand, usually consists of a special broadcast for the benefit of Latin-American listeners.

A station which operates on a very regular schedule, but is not very well heard in this country at the moment, is VK2ME, Sydney, Australia, which transmits on a wavelength of 31.28 metres. Listeners may have some difficulty in tuning-in this station, but the best time is usually from 4.30 to 5.30 p.m. on Sundays. His complete schedule, however, will be found in the *World-Radio Short-Wave List*. VK2ME, which is situated at Pennant Hills, some fifteen miles from Sydney, is operated by Amalgamated Wireless of Australasia, Ltd., a fact which is announced frequently and which may assist the listener to establish identification. The programme is usually made up of gramophone records, and the final item is always a special record of the song of the kookaburra.

One of the best heard stations on the short-wave medium band is Poznań (Poland), on 31.35 metres, which relays the broadcast programmes of the medium-wave transmitter on 335 metres. Transmissions take place on Tuesdays, from 6.45 to 9.45 p.m., and on Thursdays, from 6.30 p.m. to 1 a.m., but other transmissions take place frequently outside these hours.

Just above Poznań will be found Zeesen (Berlin), on 31.38 metres. This transmitter does not operate on any regular schedule, but is frequently to be heard in the afternoons and evenings at great volume. Relays are usually made from Königs Wusterhausen. Quality of reproduction is nearly always excellent.

On 31.48 metres will be found W2XAF, a sister transmitter to W2XAD, to which I referred at some length last week. Like W2XAD, W2XAF relays the programmes of WGY and those from the "red" network of the National Broadcasting Company. At the moment W2XAF is "beamed" on South America, and for this reason signals in this country are usually received at very poor strength. I am mentioning this transmitter here, however, because for some unknown reason it has been heard quite well during the past fortnight. New listeners, however, should not waste much time searching for this station.

Skamlebaek (Denmark), relays from the programmes of Copenhagen on 31.51 metres at frequent intervals, although judging by reception at the present moment, this station does not appear to be working on a regular schedule.

Last week I referred to the usual Tuesday afternoon broadcasts from Bandoeng, on 15.93 metres. These broadcasts are also relayed by another transmitter, with a similar power of 80 kW., on 31.86 metres. Listeners may find that towards the end of the scheduled programme, signals will be stronger on the higher wavelength than on the lower. Anyhow, it is always most interesting to make the comparison.

Rabat, which I also mentioned last week, works on another wavelength of 32.26 metres, from 8 to 10 p.m. on Sundays, and provides a signal of excellent strength and quality at this time.

#### From 35 to 100 Metres

The above includes all the more reliable transmitters on the medium waveband "below 100 Metres," and we must now change coils once again to cover the waveband from 35 to 100 metres.

The first and most reliable station on this waveband is Lisbon (CT1AA), which operates on a wavelength of 42.9 metres, on Fridays, from 11 p.m. onwards. This station is always received at excellent volume in this country, and it is one of the first stations for which the new listener should try. Announcements are made in Portuguese, Spanish, French, German, and English.

Two Russian transmitters, are also received at excellent volume on this waveband—Moscow (REN), on 45.38 metres, and Moscow (T.U.), on 50 metres. Frequent propaganda talks in English take place from both these stations, which the listener cannot fail to receive at enormous volume. I might mention here, by the way, that a harmonic of the 50-metre transmitter can often be picked up on 25 metres at considerable strength. The T.U. transmitter is most often to be heard from 8 to 10.30 p.m.

Between 48 and 50 metres, the new listener will find in the *World-Radio Short-Wave List* a great number of American transmitters. These, however, are not often received at great volume in this country during the summer months, and I shall refer to them more fully, later in the year, in my column "Below 100 Metres." In the early hours of the morning, however, the listener may hear W3XL on 46.9 metres, W3XAL on 49.18 metres, and W8XK on 48.86 metres.

The first two stations relay the programmes of WJZ, New York, and the latter of KDKA, Pittsburgh. All three broadcast programmes from the "blue" network of the National Broadcasting Company.

With the Vatican station, which also broadcasts on 50.26 metres, I think I have now given a complete list of the more reliable short-wave transmitters heard in this country, at the present time. I shall, of course, report further details of reception every fortnight. The new listener may ask, however, "But what about the other stations which are mentioned in the *World-Radio Short-Wave List*?" It must be explained therefore, that although this list is compiled from official sources received from time to time, owing to the distance at which many of the stations are situated, it is impossible to obtain notice of changes in wavelength, power, and schedule, etc., until some time has elapsed. Many of these stations, therefore, are not to be relied upon, but those heard are reported regularly by my colleague "Microm" and myself.

Listeners must remember, also, that reception conditions change not only from day to day, and from season to season, but according to the location of the receiver. It is for this reason that "Microm" who lives in the North of England, and I, who live in the South, describe reception conditions "below 100 metres" alternately in the North and South of England.

## Correspondence

### The Mystery Moscow Transmitter

To the Editor of WORLD-RADIO

SIR,—In "Below 100 Metres" on April 22, "Microm" stated that he believed the mystery Moscow transmitter on approximately 25 metres to be the half-wave of the Trades Union Station. On several occasions a month or so back I received this station slightly below the harmonic of Moscow Trades Union, and although the programmes were occasionally similar, those of the unidentified station were usually musical programmes much superior to those emanating from the Trades Union Station.

Although I knew it to be a Moscow station, I could never catch the second word of the call. Perhaps someone with a knowledge of Russian will be able to solve the problem.

Yours faithfully,

C. R. SOUTHALL.

Birmingham.

### Reception of Schenectady

To the Editor of WORLD-RADIO

SIR,—I wonder if any other listeners noticed the wonderful reception of W2XAD's 19.56-metre transmission on Sunday night, May 8.

The signal strength of this station on this particular time was amazing, in fact it sounded more like the local station instead of New York.

Perhaps it has something to do with Schenectady's rather unusual aerial, as described by "Microm" a few weeks ago, because it so happened that the NBC of America was relaying a speech by Mr. Winston Churchill from London, and the announcer, at New York end, called Australia and New Zealand before the broadcast, telling them of this special speech by Mr. Churchill. Every word was heard of the speech, as clear and distinct as though Mr. Churchill was in the very room.

Surely this shows the better of the two ways of broadcasting and also that more of the short waves should be used to bring the value of them to the listening public, and therefore would be as common as ordinary broadcasts at the present time.

Yours faithfully,

LAWRENCE MOGFORD.

Glasgow.

## SPECIAL SHORT-WAVE RELAYS

Arrangements have been made for short-wave station G5SW to be in operation for the following events: June 1.—2.40 to 3.15 p.m.—Running commentary on the Derby. June 4.—10.45 a.m. to 12.45 p.m.—Trooping of the Colour.



### Short-Wave Reports

To the Editor of WORLD-RADIO

SIR,—My S.W. reception report is as follows:—

- May 5—15.00 IAC (23.5 m.) R8/LS/FN.
- 5—16.20 2RO (43m.) R8/FN.
- 5—22.45 CT1AA (31.25m.) R9/N/N.
- 6—01.45 W3XAL (49.18m.) R9/FSX.
- 6—15.00 Zeesen (31.38m.) R9/FSN.
- 6—15.45 GSWV (24.5m.) R9/NN.
- 6—16.00 PLV (31.86m.) R9/NN.
- 6—16.20 Moscow (50m.) R9/NN.
- 6—23.25 CT1AA (42.9 m.) R9/FN.
- 7—00.45 W3XAL (49.18) R8/FR/X.
- 8—00.50 W2XAF (31.48 m.) R9/NN.
- 8—01.30 W3XAL (49.18 m.) R9/FR/X.
- 8—01.35 WEM (40.5 m.) R8/LS/N/N.
- 8—23.30 W2XAD (19.56 m.) R5/FN.
- 9—01.15 WOO (35.25 m.) R9/FN.
- 9—01.30 W2XAF (31.48 m.) R6/FN.
- 9—17.55 FYA (25.2 m.) R9/NN.
- 9—23.40 W2XAD (19.56 m.) R6/FN.
- 9—23.45 FYA (25.63 m.) R8/NN.
- 10—01.00 San Sebastian (42 m. approx.) R9/FN. Testing.
- 11—18.00 2RO (25.4 m.) R6/FN.
- 11—23.00 OXY (31.51 m.) R7/FN.
- 11—23.10 W2XAD (19.56) R4/FN.
- 12—18.00 G5SW (25.53 m.) R9/FN.
- 12—22.40 CT1AA (31.25 m.) R9/NN.
- 13—02.00 WOA (43 m. approx.) R8/LS/NXX.
- 14—01.45 W8XK (48.86 m.) R5/FX.

Receiver is Adaptor—2 LF, the adaptor being made from instructions given in *World-Radio* some time ago, and is used with an outdoor aerial.

Yours faithfully,  
W. H. L.

Scarborough.

To the Editor of WORLD-RADIO

SIR,—The following S.W. reception report may be of interest to your readers:—

- May 7—15.00 WPG? (20 m.) Tel R6/FF/X. Dance Music.
- 8—16.30 WPG? (20 m.) Tel/R4/F/XX. Music.
- 8—16.45 Zeesen (31.38 m.) LS R8/N/N. Calling Rocky Point.
- 9—23.15 W2XAD (19.56 m.) LS R5/FFS/N. Dance Music.
- 10—20.00 Rome (25 m. approx.) R8/LS/FS/X.
- 10—22.30 W2XAF (31.48 m.) LS R4/FR/XX. Call.
- 10—22.35 W1XAZ (31.35 m.) Tel. R5/FS/XX. Children's Hour.
- 10—23.00 W2XAD (19.56 m.) Tel. R5/FR/X. Call.
- 11—22.30 Rome (25 m. approx.) LS R9/N/N. Music.
- 11—23.00 Zeesen (31.38 m.) LS R8/FFS/N. Dance Music.
- 12—22.25—CT1AA (31.25 m.) LS R9/N/N. Asking for Reports.
- 12—W2XAF (31.48 m.) LS R3/FFS/X. Music.
- 12—22.40 W1XAZ (31.35 m.) Tel. R3/FS/X. Music and Call.
- 12—23.30 LS R5/N/X. This was an American Station broadcasting College Talk to England on 30 metres (approx).
- 12—22.40 W3XAU (31.33) Tel. R3 FS/X. Music.

Receiver: Commercial 3-valve set with *World-Radio* Adaptor used on an indoor aerial. Wishing your paper every success.  
Yours faithfully,  
Beeston, Nottingham. G. T.

To the Editor of WORLD-RADIO

SIR,—The following is my reception report for May 5 to May 10:—

- May 5—15.00 Rabat (23.8 m.) R6/FS/N.
- 5—15.20 Coltano IAC (23.5 m.) R9/FS/N.
- 5—17.00 Moscow (25 m.) R8/FFS/N.
- 5—17.15 Zeesen (31.38) R8/FS/N.
- 5—18.00 Moscow TU (50 m.) R9/FFR/X.
- 5—18.10 Moscow QEN (45.38 m.) R6/FFS/N.
- 5—21.50 Radio Colonial (25.6 m.) R5/FFR/N.
- 6—17.30 Radio Colonial (25.2 m.) R8/FS/N.
- 6—18.30 Zeesen (31.38 m.) R6/FFS/N.
- 6—18.40 Moscow TU (50 m.) R5/FFS/N.
- 6—23.00 Rome (80 m.) R8/FS/N.
- 7—13.00—19.00 WQB (14,800 kc/s) R7/FFS/N. (NBC programme all day).
- 7—17.10 Radio Colonial (25.2 m.) R9/FFS/N.
- 7—17.15 Zeesen (31.38 m.) R8/FS/N.
- 8—00.00 W2XAF (31.48 m.) R6/FFR/N. (Outside Broadcast.)
- 8—00.10 W1X1AZ (31.35 m.) R4/FFR/N.
- 8—00.30 WGM (47 m. approx.) R8/FR/N. NBC programme.
- 8—13.20—19.00 WAJ (13,800 kc/s) R4-5/FFS/N. NBC programme.
- 8—15.00 Coltano IAC (23.5 m.) R8/N/N. Call.
- 8—18.45 Radio Colonial (25.2 m.) R8/N/N.
- 8—18.30 Berlin (19.7 m.) R9/FFS/N. Relay of speech to America.
- 8—18.45 W2XAD 24—5/FSX.
- 8—22.40 W2XAF (31.48 m.) R5/FFS/N.
- 8—22.45 OXY (31.51 m.) R6/FS/N.
- 8—22.30 Rome 25.4 RS/FR/N.
- 9—22.30 Berlin (31.38 m.) R7/FS/N.
- 9—22.35 Rome (25.4 m.) R8/FS/N.
- 9—22.40 Radio Colonial (25.2 m.) R7/FR/N.
- 9—22.45 OXY (31.51 m.) R5/FSX.
- 9—23.00 Radio Normandie (52 m. approx.) R6/FS/X. Concert.
- 10—16 Nordeich (24 m.) R7/FS/N. Calling Paris.
- 10—16.15 Bandoeng (31.86 m.) R3/FFR/XX.

My receiver is: Oscillator—SG—Det.—2 trans. coupled LF stages on which all the above stations were received on the loud-speaker. I should be glad to know whether any other reader has received the Radio Normandie programme on approximately 52 metres. This station is received here regularly at good strength.  
Yours faithfully,  
Dublin. C. J. D.

### Below 100 Metres

By "MICROM"

I SHOULD like to amplify a brief reference to a 19.73 metre transmission by Zeesen made in this column two weeks ago. Zeesen has recently been allotted two call-signs, DJA for use with the 31.38 metre wave, and DJB for use with a 19.737 metre wave.

The 19-metre wave is used generally for liaison work with New York in connexion with trans-Atlantic relays and on these occasions is generally in "tied" operation with the Königs Wusterhausen beam transmitter DIQ on 29.18 m. (10,290 kc/s). The Berlin programme is often relayed on this wave, previous to putting the station into operation as a telephone transmitter. DJB was last heard on 19 metres on May 13, and was a fine loud-speaker signal in the North from 3.15—3.30 p.m.

It is interesting to note that the only Marconi Beam transmitter in the United States, WAJ, Rocky Point, on 22.25 metres (13,480 kc/s), was recently brought into use in connexion with the N.Y.—Berlin relays and was very well received here during the afternoon.

Another interesting signal heard recently, on Tuesday, May 17, at 9.15 p.m., and Friday, May 20, at 8.45 p.m., was the 3rd harmonic of Moscow T.U. (50 metres) on 16.67 metres. On both occasions slow fading from Ro-R7/8 was observed. On the first occasion a French lesson was in progress, the woman announcer's "Ecoutez-Ici Moscou" being well received, and on the second occasion the more guttural German tones were heard. Both the fundamental and 2nd harmonic could also be heard at these times, much quicker fading being present on these waves.

Conditions for reception of "local" stations have undoubtedly been very good, and on Wednesday, May 18, from 6.15 p.m. until nearly 7 p.m. G5SW was as strong as the Vatican and Moscow. Practically no fading was observed until 6.50 p.m.

W2XAD has been heard several times this week on his 9—12 p.m. schedule and was a good loud-speaker signal at 11.15 p.m., Wednesday, May 18. It is interesting to recall that barely a month ago W2XAD could not be heard later than 8 p.m.

Rome is now being well heard again on his 25.4 metre wave, and at 8.20 p.m. on Friday the Copenhagen relay, Skamlebek, on 31.51 metres, was a good loud-speaker signal, the best, in fact, since the station was moved from Lyngby; but the reproduction was somewhat low-toned.

The "Songs from the Shows" programme, "Leicester Square," which was broadcast to America at 11 p.m. on Friday last, was transmitted via the Rugby S.W. telephone transmitter GBU on 24.4 metres and, apart from slight distortion caused by fading, was well received there.

Rabat has been operating off schedule recently, and was well heard on 32.26 metres at 9.40 p.m., Saturday evening, May 21, the usual "B.B.C." interval signal being observed during the brief pauses between the musical items and advertisements.

W2XAD was a fair loud-speaker signal on Saturday evening at 10.35 p.m., but the modulation appeared to be weaker than usual.

A QSL card has recently been received from Bandoeng, in which the details of the following crystal-controlled telephone transmitters are given.

- PMB—14.60 m.—20,530 kc/s—60 kW.
- PLE—15.93 m.—18,821 kc/s—60 kW.
- PMC—16.56 m.—18,115 kc/s—60 kW.
- PLV—31.86 m.—9,415 kc/s—60 kW.
- PMY—58.3 m.—5,145 kc/s—2 kW.

The postcard also states that the Tuesday afternoon broadcast (14.40—16.40 B.S.T., 21.00—23.00 Java Mean Time) is carried out on PLE, and, if possible, PLV & PMY also.

### SHORT-WAVE STATIONS

The times quoted are reduced to B.S.T.

M.	Kc/s	Station
70.2	4273	Khabarovsk (U.S.S.R.), 20 kW. 10—1 p.m.
62.5	4800	Long Island, W2XV, Fri., 12—2.30 a.m.
58.3	5145	Bandoeng (PMY) 2 kW. TUES. 2.40—4.40 p.m.
58	5172	Prague. TUES. and FRI., 8.30—10.30 p.m.
54.52	5502	Brooklyn (N.Y.) W2XBI. Relays WCGU.
51.22	5857	Chapultepec (Mexico) XDA, 20 kW. Daily 4—5 p.m.
50.26	5969	Vatican City (Italy) HVJ. 10 kW. D'ly 9.0—9.15 p.m. SUN. 12—12.30 p.m. also.
50	6000	Barcelona Radio Club EAJ25. SAT. 9—10 p.m.
50	6000	Bucharest (Romania), 0.3 kW.
50	6000	Moscow (Relays Moscow T.U.).
49.96	6005	Drummondville, Quebec VE9DR. 4 kW.
49.96	6005	Tequicigalpa (Honduras), HRB. 2.5 kW. Daily (except SUN.), 1 a.m.—6 a.m.
49.83	6020	Chicago (Ill.) W9XF, 5 kW. Relays WENR. SUN., 5—7 a.m., 1—5.30 p.m., 8.30—11 p.m., and 1—6 a.m. (MON.). Weekdays, 3.15—4.45 p.m., 8.30 p.m.—12 m't and (ex. SAT.) 1.30—6 a.m.
49.59	6050	Halifax, N.S. Relays CHNS.
49.5	6060	Cincinnati, W8XAL, 10 kW. Relays WLW.
49.5	6060	Nairobi (Kenya), 7LO.
49.5	6060	Philadelphia (Pa.) W3XAU, 0.5 kW. Relays WCAU. Daily 2—9 p.m. THURS. and FRI., 2 p.m.—6 a.m.
49.43	6069	Vancouver (B.C.) VE9CS.
49.4	6072	Johannesburg (S. Africa). D'ly 4.30—9.30 p.m.
49.4	6072	UR2, Vienna Experimental.
49.34	6080	Chicago (Ill.) W9XAA, 0.5 kW. Relays WFL. Daily 2—5 a.m.
49.22	6095	Bowmanville (Canada) VE9GW, 0.028 kW. Weekdays, 11.45 a.m.—3 p.m. and 8 p.m.—3 a.m. SUNDAYS, 5.30 p.m.—4.15 a.m.
49.18	6100	Bound Brook (N.J.) W3XAL, 20 kW. Daily 10 p.m.—6 a.m.
49.05	6116	Saigon (French Indo-China) F3ICD, 12 kW. Daily 1 p.m.—4.45 p.m.
49.02	6120	Richmond Hill (N.Y.) W2XE, 0.5 kW. Relays WABC, D'ly 1 p.m.—5 p.m. next day.
48.86	6140	Pittsburgh East (W8XK). Relays KDKA. WED., and SAT., 10 p.m.—5 a.m.
48.8	6147	Winnipeg (Canada) VE9CL, 2 kW. Daily (except SUN.) from 12.30—2.30 a.m.
48.65	6167	Mexico City X1F.
48.35	6205	Bogotá (Colombia) HKC. Daily, 4 p.m.
48.05	6243	Barranquilla (Colombia), HKD.
48.2	6220	Rome (Italy) 2RO, 9 kW.
48	6250	Casablanca (N. Africa) CN8MC. Relays Rabat, MON., 9—10 p.m. TUES., 1 p.m.—2 p.m. and 4—6 a.m. SAT. 6.30—11.45 p.m. and 4—6 a.m.
46.69	6425	Bound Brook (N.J.) W3XL. FRI. 10—11.45 p.m. and 4—6 a.m. SAT. 6.30—11.45 p.m. and 4—6 a.m.
45.38	6611	Moscow, RDN (Russia).
45	6667	Constantine (Algeria) 8KR, 0.2 kW.
43	6876	Madrid (EAR 110), TUES. & SAT., 11.30 p.m.
42.9	6891	Lisbon, CT1AA, 2 kW. FRI., 11 p.m.
41.7	7195	Singapore VS8AB, SUN. & WED. 3.30—5 p.m.
41.6	7211	Tenerife Radio Club EAR58, 0.05 kW.
41	7313	Bangkok HSP2, 2.5 kW. (Testing). MON. only 2—5 p.m.
39.7	7556	Bogotá (Colombia) HKF.
39.4	7612	Nuevo Laredo (Mex.) X26A. THUR., 5—6 p.m.
34.68	8650	Long Island W2XV. FRI. 11 p.m.—1.30 a.m.
33	9090	Radio LL (France), 0.5 kW. Daily 12.30—1 p.m. and 6—6.30 p.m. SUN., MON., WED. and FRI., 8—10 p.m. SAT., 7—8.30 p.m. SUN., 10 a.m.—12.30 p.m. and 2.30—4 p.m.
32.5	9230	Paris (FLJ). Time Sig. 8.56 a.m. and p.m.
32.26	9300	Rabat (Radio Maroc), 6 kW. SUN. 8—10 p.m.
31.86	9415	Bandoeng (PLV) 80 kW. TUES. 2.40—4.40 p.m.
31.75	9450	Rio de Janeiro (Brazil), 10.30 p.m.—12.30 a.m.
31.55	9510	Melbourne (Australia) VK2ME, 5 kW. WED. and SAT., 11 a.m.—12.30 p.m.
31.51	9520	Skamlebek (Denmark) OXY, 0.5 kW. Relays Copenhagen. Daily from 7 p.m.
31.48	9530	Schenectady, N.Y. (W2XAF), 40 kW. Relays WGY. Daily, 10 p.m.—4 a.m.
31.38	9560	Zeesen (Germany), 8 kW. Relays various stations, generally 1 p.m.—1.30 a.m.
31.35	9570	Poznań (Poland), SRP, 1 kW. TUES. 6.45—9.45 p.m. THURS., 6.30 p.m.—1 a.m.
31.35	9570	Springfield (Mass.) W1XAZ.
31.3	9582	Philadelphia (Pa.) W3XAU, 0.5 kW. Daily (except THURS. and FRI.), 9 p.m.—6 a.m.
31.28	9590	Melbourne (Australia) VK2ME, 20 kW. WED. and SAT., 11 a.m.—12.30 p.m.
31.28	9590	Sydney (Australia) VK2ME, 20 kW. SUN., 7—9 a.m. and 3.30—5.30 p.m.
30.4	9869	Madrid (Spain) EAQ, 20 kW. Daily, 12.30 a.m.—2 a.m. SAT. 6—8 p.m.
30	10,000	Belgrade. MON. only 8—9 p.m.
29.3	10,238	Heredia (Costa Rica) NRH, 7.5 watts. Daily 11 p.m.—12 m't and 3—4 a.m.
28.98	10,350	Buenos Aires LSX, 20 kW. 9.30 p.m.—1.30.
25.63	11,705	Radio-Colonial (Paris). D'ly 9 p.m.—12 m't.
25.53	11,750	Chelmsford (G5SW), 12 kW. 12.30—1.30 p.m. & 6.45 p.m.—12 m't. News Bulletins at 12.30 p.m. (SAT. 12.45) 6.15 p.m. & 12 m'd't.
25.5	11,763	Chapultepec XDA, 20 kW. Daily, 9—10 p.m.
25.46	11,777	Saigon (French Indo-China) F3ICD, 12 kW.
25.4	11,810	Bowmanville (Canada) VE9GW. (Exptl.).
25.4	11,810	Rome (Italy) 2 RO, 0 kW.
25.34	11,840	Chicago (Ill.) W9XAA. Relays WFL.
25.25	11,880	Pittsburgh East (W8XK). 5 p.m.—3 a.m.
25.2	11,905	Radio-Colonial (Paris). Daily 4.30—7.30 p.m.
24	12,500	Funchal (Madeira) CT1AQ, 0.05 kW. TUES. and THURS. 10.30—12.30 a.m. SUN. 4.30—6 p.m.
23.8	12,605	Rabat (Radio Maroc), 2.5 kW. SUN. 12.30 p.m.
20.5	14,630	Chapultepec XDA, 20 kW. D'ly 8.30—9 p.m.
19.84	15,123	Vatican City (Italy) HVJ. 10 kW. Daily 12 noon—12.20 p.m.
10.72	15,210	Pittsburgh East (W8XK). Relays KDKA WED. and SAT., 12 noon—4 p.m.
19.68	15,234	Radio-Colonial (Paris). Daily, 1—4 p.m.
19.56	15,340	Schenectady (W2XAD), 20 kW. Weekdays, 9 p.m.—12 m't. SAT. and SUN., 7 p.m.—12 m't.
16.67	18,105	Chicago (Ill.) W9XAA. Relays WFL.
15.93	18,821	Bandoeng (PLE) 80 kW. TUES. 2.40—4.40 p.m.



## FRENCH

(Supplementary Notes in connexion with the French Talk, Tuesday, May 24)

(A) *Le négation ne employée seule.*

Nous avons déjà vu qu'en ancien français le mot *ne* s'employait presque toujours seul, tandis qu'en français moderne l'emploi de *pas* ou *point* est devenu à peu près indispensable pour renforcer la négation. Toutefois l'ancien usage n'a pas complètement disparu, et nous allons indiquer ce qui en reste.

1. Tout d'abord *ne* se construit seul et l'on supprime *pas* ou *point* avec *n'avoir garde*, *n'avoir cure*, *il n'importe*, et *n'importe*, *n'ayez crainte*: Ex. *Je n'ai garde de le contredire; elle n'en a cure; il ne l'a pas encore fait.*—N'importe. *Approchez-vous*, *n'ayez crainte.*

2. *Ne* se construit seul et l'on supprime d'ordinaire *pas* ou *point* avec les quatre verbes *cesser*, *oser*, *pouvoir* et *savoir*.

(a) Le verbe *cesser* peut se conjuguer avec *ne* tout seul devant un infinitif pour marquer la constance d'un fait: Ex. *Il ne cesse de pleurer; elle ne cessait de pleurer; vous ne cesserez de perdre votre temps*, etc. . . .

Mais, si la négation porte sur un complément il faut employer *pas*: Ex. *Elle ne cesse de lire (c'est-à-dire elle lit constamment); mais il faudra dire: elle ne cesse pas de lire avant midi.*

(b) Le verbe *oser* se passe assez volontiers de *pas* surtout dans la langue écrite, et plus particulièrement au présent, à l'imparfait et au conditionnel: Ex. *Je n'ose y aller; il n'osait entrer; vous n'oseriez le répéter.*

(c) Avec *pouvoir pas* peut se supprimer s'il est question de la capacité ou de la faculté de faire une chose; mais *pas* ne peut se supprimer s'il s'agit d'exprimer l'autorité ou la puissance. Il en résulte que, à part certaines expressions telles que *on ne peut plus*, *on ne peut mieux*, *je ne puis*, c'est seulement devant un infinitif qu'on peut supprimer *pas*. Et même devant un infinitif le *pas* se maintient pour exprimer une impossibilité réelle: Ex. *Il ne pouvait pas se lever; vous ne pouvez pas l'ouvrir*, etc. . . .

Il en résulte que *je ne puis*, *je ne pouvais*, etc. signifient plutôt: *il m'est difficile de*, *il m'était difficile de*. . . . Devant une autre négation il faut dire *je ne puis pas*, *je ne pouvais pas*. . . . Ex. *Je ne puis pas ne pas le croire, vous ne pouviez pas ne pas venir*, etc.

(d) *Savoir* demande *pas* au négatif quand on veut marquer l'ignorance; mais quand on veut marquer l'incertitude *pas* se supprime généralement: Ex. *Il ne savait pas sa leçon; je ne sais pas s'il est parti; je n'ai pas su ces choses à temps; mais nous dirons en mettant ne tout seul: Je ne sais trop si je dois le croire; je ne savais ce qui m'empêchait d'y aller.*

On voit donc qu'il y a une différence très nette entre: *Je ne sais pas s'il est arrivé* et *je ne sais s'il est arrivé*. L'emploi ou la suppression de *pas* et de *point* après le verbe *savoir* peut même parfois changer beaucoup le sens de la phrase: Ex. *Il ne sait ce qu'il dit* (il déraisonne); *il ne sait pas ce qu'il dit* (il ignore la valeur de ce qu'il dit).

(B) Quelqu'un me demande de lui donner l'expression française correspondant à "*Let the cobbler stick to his last.*"

Nous disons "*A chacun son métier*" ou mieux encore "*A chacun son métier et les vaches seront bien gardées.*"

(C) . . . *passer à toute force* (Lettres de mon Moulin, p. 16, l. 14). *A toute force*, c'est-à-dire par tous les moyens possibles et imaginables: *Elle veut à toute force me faire parler; je voulais à toute force assister à la fête; il faut à toute force sortir d'ici.*

Voici d'autres expressions idiomatiques contenant le mot *force*:—

(a) *Il le fit entrer de vive force*—He made him go in by main force.

## FOREIGN LANGUAGES SECTION

(b) *Il était dans (toute) la force de l'âge*—He was in the prime of life. N.B. On dit aussi: *être dans la fleur de l'âge.*

(c) *Vous n'êtes pas de force à le faire*—You are not capable of doing it. *Je suis de force à discuter avec lui; elle est de force à s'en tirer.*

(d) *Etre à bout de force*—To be exhausted, played out.

(e) *Elle n'est pas de votre force*—(1) She is not so strong as you are; (2) She is no match for you.

(f) *Force m'est de vous quitter*—I am compelled to leave you.

(g) *Il y avait là force soldats*—A number of soldiers were there.

(h) *Faire une chose de gré ou de force*—To do a thing whether you like it or not.

(i) *Faire force de rames*—To row with all one's might.

(j) *A force de travailler*—By dint of hard work.

Similarly à *force de bras*—by strength of arm.

(k) *C'est un cas de force majeure*—It's a case of absolute necessity.

(l) *Force est restée à la loi*—The powers of order proved the stronger.

(m) *Un tour de force*—A feat of strength or skill.

(D) [Translation of Ex. 137 in Intermediate Exercises in French Grammar and Composition, Harrap and Co.]

Le soleil brillait, et même la légère brise avait cessé de souffler quand (au moment où) le voyageur descendait la colline. Il avait voyagé loin (fait un long voyage, une longue étape) ce jour-là, car il s'était mis en route avant le lever du soleil (avant que le soleil fût levé). Il était fatigué, il avait faim, il ne savait pas où il était (se trouvait); en un mot (bref) il s'était complètement égaré. Tout à coup son regard tomba sur la forme d'un homme qui semblait (paraissait, avait l'air de) dormir sous un arbre. Le voyageur s'approcha, se baissa et le toucha. Les yeux de l'autre s'ouvrirent et les deux hommes se regardèrent pendant quelque temps sans échanger une seule parole. Enfin le voyageur demanda: "Voulez-vous bien me dire où se trouve le village?" L'homme ne dit rien (ne souffla mot) et pour toute réponse se contenta d'indiquer le chemin du pied. "Je vous donnerai un schelling," dit le voyageur se mettant en colère, "si vous me montrez un acte de paresse plus remarquable que celui-là." "Mettez le schelling dans ma poche, dit l'homme, en se retournant et en se rendormant. E. M. STÉPHAN.

## GERMAN

## Compound Verbs—(XXIII)

THE purpose of the action for the subject or object may further be:—

(10) *to get inside*, maybe by force with intent to steal or to destroy: Sie ziehen ein (march in).—Sie ziehen heute ein (They move today into their new house).—Sie ziehen mit Musik in die Stadt ein.—Wir fahren ein (are reaching port).—Das Schiff (or Der Zug) fuhr (lief, dampfte) ein (in den Hafen or den Bahnhof).—Der Arzt rieb die Salbe ein (the doctor rubbed in the ointment). Sie brechen in die Häuser or Läden (shops) ein.—Der Feind fiel in ihr Land ein (invade).—Wir drangen in die Reihen der Feinde ein (We penetrated the enemy's lines).

(11) *to bring into line*: Er reiht sie nach ihrer Grösse ein (He places them in a row according to their height).—Er wird den Knochen wieder einrenken (He'll put the bone back in its place).—Er hat alles gut eingerichtet (He has arranged everything in

orderly fashion).—Viele Fremdwörter sind eingedeutscht worden (Many foreign words have been Germanised).

(12) *to deviate from the straight, turn in*: Er bog rechts ein (He turned in on the right).—Er hat den Draht (wire) etwas eingebogen (bent in).

(13) *to send to sleep*: Sie singt (lullt) das Kind ein.—Sie wiegt das Kind ein (rock to sleep)—die Wiege (cradle).

The force of *ein* in compound verbs may also be seen, if we look at the resultant of the action. The result may be:—

(1) *Arrival or the reaching of a fitting e.g.*:—Das Schiff (der Zug) ist eben eingelaufen (or eingefahren)—Das Geld geht ein (is coming in)—Die Gäste sind pünktlich eingetroffen (The guests arrived punctually)—Die Klinke fiel ins Schloss ein (The latch found its lock).—Er henkte (hängte) den Ring ein (He hooked the ring in).—Die Zähne der Räder (the cogs of the wheels) greifen nicht ein (do not mesh).—

(2) *Penetration of a medium*: Er hat den Namen in die Kupferplatte eingegraben (engraved).—Die Säure (acid) dringt (or beisst) in die Platte ein.—Man hat die Farbe (Glasure, den Namen, die Zeichnung) in den Ton (clay) eingebrannt.—Er hat die Achse (axel) des Wagens eingefettet (greased). Ich habe die Räder eingeeilt (oiled).—Sie hat das Mehl (flour) eingemischt or eingemengt.—Er ist tief [in den Sumpf] eingesunken (He sank deep in [into the swamp]).

(3) *Gain, acquisition*: Er nimmt viel Geld ein (His takings are considerable).—Was bringt das mir ein? (What does that bring in to me?—Where do I come in?).—Das bringt nichts ein (That does not bring in any money).—Der Zug hat die verlorene Zeit wieder eingebracht or eingeholt (The train has made up for lost time).—Er schmuggelt Tabak ein.—Er handelt Vieh ein (buys up cattle).—Er tauscht Schmucksachen ein (He exchanges jewelry).—

(4) *Loss*: Er hat dabei viel Geld eingebrockt (He has dropped a lot of money over it).—Er hat viel von seinem Ruhm eingebüsst (He has lost a good deal of his fame).

(5) *Cessation, stop*: Die Firma (das Geschäft) (business), das Institut geht ein (ceases to exist).—Die Arbeit ist eingestellt worden (work has been stopped)—Der Zug (der Wagen, das Schiff, das Pferd) hält ein.

(6) *Efficiency through practice*: Er hat das Stück einstudiert.—Er hat die Truppen einexerziert (drilled)—Sie schiessen sich erst ein (they practise (shooting) first)—Er muss sich erst einarbeiten (He must first attain efficiency by practice, i.e., get into it)—Er reitet das Pferd ein (trains)—Er muss die Sonate erst einüben.

(7) *Reduction in size*: Sie hat das Obst (fruit) eingekocht (boiled down to jam) Wir trocknen die Pflaumen ein.—Die Strümpfe (socks) sind eingelaufen or eingegangen (shrunken)—Die Äpfel schrumpfen ein (shriveled up)—Der arme Mann ist sehr eingeschrumpft (shrunken).

(8) *Breakage, destruction, devastation*: Er hat die Scheiben (window panes) eingebrochen or eingeschlagen or eingeworfen. Sie haben die Tür eingerannt or eingedrückt or eingebrochen or eingeschlagen (They forced the door by running against it, crushing it in, breaking it in or knocking it in)—Er hat sich den Schädel eingefallen (He has broken his skull in falling)—Sie haben die Stadt eingeäschert (reduced to ashes).

(9) *Invasion*: Sie fielen in unser Land (unsre Stadt, unsre Häuser) ein (invade)—Er greift in meine Rechte ein (He encroaches upon my rights).

(10) *Collapse*: Das Dach ist eingefallen.—Der Turm ist eingestürzt.—Das Eis ist eingebrochen.

(11) *Preservation*: Sie macht die Kirschen ein (She bottles the cherries)—Die Häringe werden eingesalzen.—Das Fleisch wird einge-



pökelt (Pökelfleisch)—Die Leiche (corpse) wird einbalsamiert.

(12) *A surround*: Er rahmt das Bild ein (He frames the picture)—Er hat die Handschuhe eingewickelt (wrapped up)—Er hat die Bücher (Kleider, etc.) eingepackt (packed up)—Er hat das Buch eingebunden (bound)—Der Schneider hat ein Stück eingeflickt (The tailor has put in a patch)—Sie hat Vögel eingestickt (She has embroidered birds into the pattern)—Er hat den Garten eingefriedet (He has enclosed the garden with a fence or wall)—Man hat den Fluss eingedämmt (They have dammed the river in)—Die Fossilien sind in den Felsen eingebettet (embedded)—Er wird eingekerkert (shut up in a convict-prison=der Kerker)—Man hat ihn da eingemauert (immured)—(die Mauer=wall).

Note that the surround is sometimes indicated by the verb as in the last examples and in Häringe einsalzen (das Salz), Fleisch einpökeln (Pökel=Salzbrühe) eine Leiche einbalsamieren (Balsam=balsam), einen Brief einhändigen (to deliver a letter by hand): in die Hand geben.—den Leichnam einsargen.

(13) *Inclusion*: Das Porto ist (im Preis) einbegriffen (postage is included (in the price)).—Die Fracht (freight) ist eingeschlossen.—Dieses Recht ist in dem Kontrakt einbedungen (stipulated as included).

(14) *Confinement, restraint*: Ich habe ihn ins Zimmer eingeschlossen (locked up)—Der Hund ist im Stall (stable) eingeriegelt.—Man hat ihn eingesperrt or eingesteckt (They have locked him up, imprisoned him)—Die Hühner sind im Hühnerstall eingesperrt.

(15) *Sleep*: Er kann nicht einschlafen (go to sleep)—Er ist eben eingeschlafen (fallen asleep, or died)—Er schlummerte bald ein (He soon dozed off)—Sie hat den Kleinen eingeschaukelt, or eingewiegt (She has rocked the baby to sleep) or eingelullt (lulled to sleep)—Der Arzt hat ihn eingeschläfert (The doctor has hypnotised him).

(16) *Consolation, encouragement*: Er sprach ihnen Trost ein (He consoled them)—Er flosste ihnen Mut (Vertrauen, Liebe, Geduld) ein (He inspired them with courage—confidence—love—patience)—Er predigte ihnen Hoffnung ein (He filled them with hope). O. S.

## ITALIAN

Esisteva un "veleno a termine"?

(Idioms and words illustrating important rules of grammar are italicised.)

A.—Se tutti gli "Esperimenti" di Caterina Sforza (1463-1509) sono come quello dell'anestetico, di cui Lei mi parlò la volta scorsa, il suo libro dev'essere molto interessante.

B.—Mi piacerebbe poterle *rispondere di sì* (similarly: dire di sì, parer di sì, credere di sì; the same idioms are used with "no"), perchè, devo confessarle, io ho una gran simpatia per questa donna guerriera. Ma direi una gran bugia (lie)! La maggior parte delle sue ricette (prescriptions), infatti, sono un miscuglio di vieti (very old) rimede e di elementi fantastici. Questi ultimi, talvolta, son fondati su una pura somiglianza di parole! Per esempio, sa che cosa prescrive per le malattie di cuore? Il corallo! E per acuire la vista (sight)? Il finocchio (fennel)! (fino-occhio!) E straordinario è anche il rimedio per appianare (to smooth) le liti (quarrels) fra marito e moglie: la calamita (magnet).

Ma la ricetta che si legge con maggiore interesse e' quella del famoso "veleno (poison) a termine." Un veleno, cioè, che non uccide subito, ma dopo un certo tempo: dopo parecchi giorni, o dopo qualche (a few) settimana (singular; why?). Lei ricorderà che quei tempi, purtroppo (unfortunately), sono restati famosi nella storia per il gran numero di morti violente e misteriose che occorreano allora; molte delle quali eran dovute appunto ai veleni. Ma circa l'esistenza dei veleni "a termine," le opinioni degli storici sono discordi. Alcuni ci credono; altri (e

sono i più seri) ne negano l'esistenza. D'altra parte, in quei tempi, lì, nessuno dubitava della loro realtà. Ma Lei forse vorrà ch'io le dica quali eran gl'ingredienti del veleno a termine di Caterina Sforza. Eccoli qua: uova (eggs), bollite nell'aceto (vinegre) e polverizzate; e poi mischiate col succo di catapuzia.

A.—E cos'è questa catapuzia? Dev'essere una pianta molto velenosa, m'immagino.

B.—"Catapuzia" è il nome dato anticamente al "ricino comune," la pianta, cioè, dai cui semi (from the seeds of which) si estrae l'olio di ricino (castor oil).

A.—Là là! E Lei vorrebbe farmi credere che questo sia un veleno?

B.—Amico mio, io non voglio farle credere niente. Per conto mio, non ci credo. E se no (otherwise), come avrei avuto il coraggio di svelarle un così terribile segreto? S. BREGLIA.

## Esperanto Transmissions (May 29—June 4)

Sunday.—Hilversum, 8.10 a.m., Course.

Toulouse, 5 p.m., Course.

Leningrad, 10.5 p.m., News.

Tuesday.—Tallinn, 8 p.m., News.

Wednesday.—Marseille-Provence, 7.15 p.m., Talk.

Thursday.—Paris PTT, 5.45 p.m., Course and Talk (Prof. Rousseau).

Vienna, 4.50 p.m., News.

Grenoble, 5.45 p.m., Talk.

Kaunas, 9 p.m., Talk.

Breslau-Gleiwitz, 10 p.m., 10 minutes for workers.

Leningrad, 10.5 p.m., News.

Friday.—Stuttgart, 7.30 p.m., Programme announcements.

Radio-Côte d'Azur, 8.10 p.m., Talk.

Lisbon (CITAA—42.9 m.), 10.30 p.m., Talk.

Saturday.—Huizen, 4.55 p.m., News (P. Heilker).

Heilsberg, 6.10 p.m., Week's Programme (F. ino Wermke).

Lyon-la-Doua, 8.15 p.m., Talk.

Lisbon, 10.30 p.m., Course (282 m.).

NOTE.—These times may vary a little.

## LETTERS TO EDITOR

(Continued from page 1049.)

"Britain" or "England"?

The Editor, WORLD-RADIO

SIR,—Lt.-Col. Beadon's letter is typical of the spirit prevailing among a large section of the English people to-day. It probably does not occur to your correspondent that anyone could consider it as great an honour to be called a Scot as an Englishman.

The Scot has shown great willingness to merge with the English and other races to make a great British nation, and when referring to things outside Scotland invariably uses the word "British," but the Englishman in his pride will not fall in with this idea. He wants a still greater "English" nation, and this spirit is creating a strong nationalistic feeling in the other British countries, which bodes ill for Empire unity.

I apologise to you, Sir, for using your valuable space for a matter so remotely concerning radio.

Yours truly,

Carlisle, May 21, 1932. ROBERT SCOTT (Jnr.).

## EL KANTARA

(Continued from page 1048)

an oasis of date palms, orange, apple, and mulberry trees, to lose itself in the desert. At one moment there is the wild scenery of the gorge, the crossing of the river, the shadows of the rocks, and the cool sombre air of mystery; and then there is the vast, unshadowed space and the untempered sun of the desert. The colour scheme is formed of the red and orange rocks, the pale gold sands and the varied green of the oasis, with at times the white of a caravan defiling from the gorge.

To the traveller coming from Algiers to Biskra by road or rail it looks as if the majestic mountain wall of the Aures Mountains is unbroken and impassable. The mountains seem meant to separate the Sahara from Northern Algeria. On the northern side you are in the temperate zone with a cold winter, while on the sheer southern face dates ripen in the Saharan sun. Both for the Romans and the French the gorge of El Kantara has been the gateway to the desert.

## Last Week's Log

(May 15—21)

By "THE SEARCHER"

NOT too good a week, I am afraid, for long-distance wireless reception. During the greater part of the time the weather was very unsettled, both barometer and thermometer showing considerable fluctuations. The result, as might have been expected, was a heavy crop of atmospherics. There was a thunderstorm in my locality on the Sunday, and on this day long-distance work was hardly worth while owing to the constant and violent interference experienced. On the Monday static interference was still a great nuisance. Tuesday was almost entirely free from it; but it made an unwelcome reappearance in a mild form on the Wednesday, and for the rest of the week there were few evenings when atmospherics were absent.

In atmosphericky weather the long-wave stations are seldom receivable with real pleasure. During the week which is the subject of this report it was only on rare occasions that one could listen to any of them without there being an annoying background (and sometimes a foreground!) of crackles and bangs. Huizen, for some reason or other, has been a good deal below his normal strength, and the same kind of falling off was noticeable in the case of Warsaw. The latter station was also badly heterodyned on the Monday. Radio-Paris, Kalundborg, and Oslo have shown fine strength, but Königs Wusterhausen was below his best except on the Monday, and Motala has been rather a poor signal.

There is little reduction in the number of stations that can be received upon the medium-wave band, but there are certain interesting changes in the list of "star" stations. Some old friends are losing temporarily their proud positions in the list, but their places are being taken by new-comers. Budapest and Vienna have disappeared entirely, and, to my surprise, I never found Prague better than a "fair" signal during the week. As a compensation, Brussels No. 1 is coming in now better than he has done for weeks. He obtained, in fact, full marks on every occasion.

Quite remarkable daylight reception remains possible, atmospherics permitting. At five o'clock on the Wednesday afternoon Langenberg, Hilversum, and (rather surprisingly) Lille, were all received on the loud-speaker, and a rapid run round the long waves at the same time—there was then very little atmospheric interference—resulted in the logging of Königs Wusterhausen, Warsaw, Kalundborg, Oslo, and Huizen.

Spark signals were a nuisance below 250 metres on the Monday. Fading is slightly in evidence, but there are few heterodynes on stations of any importance from the long-distance man's point of view. Warsaw and Frankfurt have been the only two to suffer badly. A noticeable increase in the strength of both Radio-Suisse Romande and Beromünster was recorded.

The pick of the medium-wave stations during the week were Langenberg, Beromünster, Brussels No. 1, Toulouse, Poste Parisien, Hilversum, Sottens, Heilsberg, Turin, and Trieste. Rome, though generally good, was below strength on the Monday. Stockholm was at his best on the Tuesday, though pretty well received on other nights. Florence was excellent on the Sunday. Katowice has no longer a powerful voice. It was only on the Tuesday that he was recorded at all, and then he was distinctly weak. Frankfurt was fine on the Sunday and Tuesday. Brno gave excellent reception on the Tuesday, on which night Breslau and Genoa were also at their best. Other stations logged at first-rate strength were Göteborg, Leipzig, Gleiwitz, and Brussels No. 2.



**Interference between Stations**

(May 14—21)

**T**HE interference noted last week on Cardiff, which was due to Radio-Vitus using 970 kc/s, has, to a certain extent, improved by a new move of the latter station, which, since May 17, has worked on 973-974 kc/s.

The steady lengthening of the days results in an appreciable decrease in the reception of Spanish stations, and also of North African stations.

Madrid EAJ7 is still using 730 kc/s, where he heterodynes both Dublin and Katowice. He had gone, on April 1, on to this frequency to escape the interference he was experiencing on account of the presence, on his allotted wave of 707 kc/s, of the powerful station, Moscow Stalin; but as this station has not been heard on that wavelength for almost a fortnight, Madrid could again use his allotted frequency of 707 kc/s, which would be more favourable to him than 730 kc/s.

Seville, which has always been a weak signal, continues to use 790 kc/s, where it is, of course, overwhelmed by Lwów. The latter is slightly heterodyned. In any case, it seems that Seville's previous wave (815 kc/s) was more favourable than the present one, as Bolzano, Frederiksstad, and Helsinki, which used it, were small signals compared with Lwów's.

Barcelona Asociacion uses exactly 1,193 kc/s, where he interferes very badly with Trollhättan, the Swedish relay, which uses 1,194 kc/s.

Radio-España (Madrid) is no longer audible (except on Mondays at 11 p.m.), as he works from 6 to 8 p.m., and cannot interfere any more with Belgrade (696). Barcelona EAJ1 is the most reliable of Spanish stations, but is now and then slightly interfered with by a rather weak signal—probably Leningrad RV70.

L. B.

**Which Station Was That?**

Replies to Queries

**POTTERIES (Castleford)**: These stations usually close down at about 11.30 p.m.; on that evening, on account of outside broadcast, the studios may have extended the transmission. **WHAR-IZ-IT (Rotherham)**: (170) Ship-shore telephony; (171) Leningrad. **SUNBEAM (Pencalfand)**: Baku (U.S.S.R.) on 1,266 m.; news bulletin. **TIRED TIM (Wadhurst)**: Apparently British amateur transmitters. **SEAWAY (Liverpool)**: Reykjavik. **IGNORAMUS (Bowdon)**: (1) if midday, Motala relaying service from Stockholm; (2) possibly Moscow (T.U.), but cannot confirm. **R. E. G. (Walford)**: Cannot trace on that wavelength. **Kalund** relayed a service from the Copenhagen cathedral at that time. **R.S.V.P. (Dublin)**: WQV, Rocky Point (N.Y.) on 20.26 m. **BOUBUTT (Guernsey)**: (2) regret, cannot trace; (1) DEQ, Nauen (29 m.), relays special programmes to United States. **SALOMIKA (Polmont)**: (1) WQV, Rocky Point (N.Y.) on 20.26 m.; (2) no, not so far as we know. **OH MONAH (Plymouth)**: Please number your queries. (1) WQV, Rocky Point (N.Y.); (2) Zeesen, experimental wavelength (19.737 m.). **7.2 MEGACYCLE D.X. (Halifax)**: Cannot confirm, but possibly Döberitz (Berlin). **PALATINE (Manchester)**: Details are too vague; cannot trace, but apparently, from call, a Costa Rica transmitter. **COTANGENT (Bute)**: Yes, GBU, Rugby; relay of a talk to the U.S.A. **MOREOVER (Highgate)**: WQV, Rocky Point, (N.Y.) on 20.26 m. **R. G. O. M. (Nenagh)**: Apparently, a call from station in Argentine Republic or Brazil relayed through WAC, Rocky Point (N.Y.). **A. L. M. (Bristol)**: Possibly GCRX, Rugby. **LORNA DOONE (Rutherglen)**: (1) Zeesen (19.737 m.); (2) too vague; cannot trace. **PRIORY (West Ealing)**: Harmonic of Radio Toulouse. **FIEND (Nottingham)**: We cannot trace on 49.16 m. any relay of W3XAL (on 49.18 m.). **SEARCHER X (Southall)**: (1) Katowice special broadcast; (2) yes, Hilversum. Holland has now adopted Summer time, and therefore the Dutch time is twenty minutes ahead of B.S.T. **TAXED (Dublin)**: (172) no French station on that wavelength; possibly Poznań; (171) WQV, Rocky Point, N.Y. (20.26 m.). **SPARKS (Westport)**: Admiralty list of Wireless signals (H.M. Stationery Office). **EARLY BIRD (W.12)**: Hilversum testing new 20 kW. transmitter on 296.1 m. **SEARCHER (Redhill)**: British amateur transmitters; write to Radio Society of Great Britain, 53, Victoria St. S.W.1. **VOLUME CONTROL (?)**: (1) Hilversum relaying a special broadcast by Jack Payne and his band from a London studio; not broadcast by the B.B.C. stations; (2) probably relayed by Hilversum; (3) not advertised, but may have been a relay by Stockholm; heard through Motala; (4) Heilsberg relaying dance music from Berlin. **QUESTIONNAIRE (Durham City)**: Kalundborg relaying service from a Copenhagen Church. **BROAD ACRES (Barnsley)**: Regret, cannot trace. **E. J. W. (Cosham)**: Poznań. **4 SCREEN GRID (Aberdeen)**: Wavelength appears to be incorrect; CT1AA, Lisbon, testing on 31.25 m. **WINE GUMS (Reading)**: M. V. *Salurnia* (Italian liner). **SEARCHER (Heaton Road)**: Too vague; regret, cannot trace. **A. N. S. (Leicester)**: (1) Poste Colonial (Paris); (2) apparently Rome (2RO) testing on 42.8 m. (3) yes, Bandoeng; (5) O.S. (G); I.S. (G.B.); I.P. (H.T.); O.P. (A or plate). **GIULIO CESARE (Turin)**: Would tally with WTAM, Cleveland, on 280 m., or WTIC, Hartford, on 283 m., both relaying the N.B.C.'s (America) programme. **EGGS**

(Norwich): French amateur transmitter; you cannot identify station without hearing call-letters. **FIBRE BILL (Penge)**: new Poste Parisien (Paris). **TO AWAIT ARRIVAL (Alexandria)**: (1) too vague; regret, cannot trace, but the names of cities apparently represent call-letters; (2) probably PCK, Kootwijk, on 16.3 m.; (3) CT1AA, Lisbon, reported to be testing on 31.25 m.

**Free Query Service**

Each query should be numbered and the questions on the coupon carefully answered. Letters must be addressed to the Editor, *World-Radio*, Broadcasting House, London, W.1.

**The Alternative Postal Service**

In addition to the free service of "Which Station was That?" printed in these columns, replies to queries can be obtained within forty-eight hours of receipt of details, on payment of 6d. per query, in stamps or P.O., accompanied by stamped addressed envelope (marked in left hand top corner "Postal Query Service"), and coupon as per conditions for "Free Queries."

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2. Approximate frequency in kilocycles per sec. (or wavelength in metres).
3. Nearest known stations, above and below.
4. Call or interval signal, if heard.
5. Language.
6. Type of receiver in use and strength of signal.
7. Details of programme or signal received.
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# Stations in Order of Frequencies and Wavelengths

Corrected in accordance with the latest official information available at the time of going to press

The figures in black type represent the power according to the Copenhagen Power-Rating, but carrier-wave power only is shown

Kc/s	M.	kW.	Station	Dial Readings	Kc/s	M.	kW.	Station	Dial Readings
155	1935	7	Kaunas (Lithuania)		680	441	50	Rome (IRO) (Italy)	
160	1875	8.5	Huizen (Holland)		689	436	0.25	Malmberget (relays Boden) (Sweden)	
167	1796	54	Lahti (Finland) (relays Helsinki)		697	430.4	55	Stockholm (Sweden)	
174	1725	13.5	Radio Paris (CFR)				2.5	Belgrade (Yugoslavia)	
183.5	1635	75					2	Madrid (Union Radio)(EAJ7) (Spain)	
193	1554.4	60	Königs Wusterhausen (Zeesen) (Germany) Relays Berlin		707	424.3		7-8.30 p.m. and (except Monday) 10 p.m. to 12 midnight	
195	1538	30	Davenport National (Great Britain)					Madrid (Radio España) (Spain) 5-7 p.m. (Mon. 5 p.m. to 12 midnight)	
202.6	1481	7	Ankara (Turkey)		715	419.5	100	Moscow-Stalin (Russia)	
207.5	1445.7	100	Moscow (Old Komintern) (RV1) (Russia)		721.1	416	1.5	Berlin (Witzleben)	
212.5	1411	13	Eiffel Tower (FLE) Paris (France)		725	413	6	Rabat (Morocco)	
222.2	1350	120	Warsaw No. 1 (Poland)		734	408	1.2	Dublin (Ireland)	
222.5	1348	0.5	Kasbah (Tunis)		743	403	16	Katowice (Poland)	
230.1	1304	30	Motala (Sweden) (relays Stockholm)				25	Radio Suisse Romande (Sottens) (Switzerland)	
236.1	1260	100	Moscow (Trades Union)		752	398.9	25	Midland Regional (Great Britain)	
242.5	1237	4	Novosibirsk (Russia)		761	394	12	Bucharest (Romania)	
244	1229.5	0.6	Vienna Experimental (Austria)		770	390	10	Archangel (Russia)	
250	1200	5	Boden (Sweden)		779	385	1.5	Frankfurt-a-M. (Germany)	
256	1171.5	21	Istanbul (Turkey)		788	381	8	Toulouse (Radio) (France)	
260	1153	7.5	Reykjavik (Iceland)		792.5	378.6	16	Lwów (Poland)	
268.5	1116	40	Tashkent (Russia)		797	376.4	1	Moscow (Russia)	
277	1083	60	Kalundborg (Denmark) (relays Copenhagen)		806	372	50	Glasgow (Great Britain)	
280	1071	10	Moscow, Popoff		810	370.4	1.5	Scottish Regional (Gt. Britain) (testing)	
290	1034	36	Oslo (Norway)				0.5	Hamburg (Germany)	
300	1000	100	Tiflis (Russia)		815	368.1	13.2	Radio LL, Paris (France)	
320	937.5	20	Kiev (Russia)				1.5	Bolzano (Italy) (IBZ)	
353.5	848.7	4	Leningrad (Russia)		816	367.6	0.7	Helsinki (Finland)	
385	778	2	Kharkov (Russia) RV20		824	364	1	Seville (Union Radio) (EAJ5) (Spain)	
389	770	0.6	Rostov-Don (Russia)		825.3	363.3	13	Fredriksstad (Norway) (relays Oslo)	
394	761.4	1.8	Petrozavodsk (Russia)		832	360.5	60	Bergen (Norway)	
395	760	1.5	Östersund (Sweden) (relays Sundsvall)		842	356.3	60	Algiers (N. Africa)	
416.7	720	20	Nijni Novgorod (Russia)		843	356	50	Stuttgart (Mühlacker) (Germany)	
428.6	700	4	Geneva (Switzerland)		852	352.1	7	Tiraspol (Russia)	
442	680	0.6	Moscow (Experimental)		855.5	351	1.2	London Regional (Great Britain)	
522	574.7	2.5	Minsk (Russia)		860	349	8	Graz (Austria) (usually relays Vienna)	
527	570	0.25	Lausanne AB2 (Switzerland)		869	345	11.5	Leningrad (Russia)	
530	566	2	Ljubljana (Yugoslavia)		878	342	35	Barcelona (Radio Barcelona) (EAJ1) (Spain)	
531	565	0.25	Freiburg-im-Breisgau (Germany) (relays Stuttgart)		887	338.2	15	Strasbourg (Brumath) (France)	
533	563	16	Grenoble (PTT) (France)				5.5	Brno (Czechoslovakia)	
536	560	0.25	Hanover (Germany) (relays Hamburg)		896	335	1.9	Brussels No. 2 (Belgium) (Flemish programme)	
545	550	18.5	Smolensk (Russia)				7	Cadiz (Spain)	
554	542	3	Wilno (Poland)		905	331.5	7	Poznań (Poland)	
563	533	1.5	Augsburg (Germany) (relays Munich)		914	328.2	60	Milan (Italy)	
572	525	15	Kaiserslautern (Germany) (relays Munich)		923	325	1.5	Poste Parisien (Paris)	
581	517	15	Hamar (Norway) (relays Oslo)		932	322	10	Breslau (Germany)	
590	509	15	Budapest No. 1 (Hungary)				0.25	Göteborg (Sweden) (relays Stockholm)	
599	500.8	20	Palermo (Italy)		941	319	1.5	Dresden (Germany) (relays Leipzig)	
603.6	497	1.2	Sundsvall (Sweden)				1	Naples (INA) (Italy)	
608	493.4	1.2	Munich (Germany)		950	315	1.6	Sofia (Rodno-Radio) (Bulgaria)	
614	488.6	120	Riga (Latvia)				1.5	Marseilles (PTT) (France)	
625	480	50	Vienna (Rosenhügel) (Austria)		959	312.8	10	Cracow (Poland)	
630.2	476	1.2	Brussels No. 1 (Belgium)				10	Genoa (IGE) (Italy)	
635	473	60	Florence (IFI) (Italy)		968	309.9	1	Radio-Vitus, Paris (France)	
644	465.8	1.5	Nijni Novgorod (Russia)		977	307	0.5	Cardiff (Great Britain)	
646	465.8	0.5	Moscow (Russia)				0.75	Falun (Sweden)	
653	459	60	Trondheim (Norway)		986	304	13	Zagreb (Yugoslavia)	
662	453.2	0.5	Prague (Czechoslovakia)		995	301.5	50	Bordeaux-Lafayette (PTT) (France)	
666	450.4	0.7	North Regional (Manchester) (Great Britain)				11	North National (Manchester) (Great Britain)	
671	447.1	0.35	Sebastopol (Russia)		1004	298.8	11	Tallinn (Estonia)	
		0.08	Langenberg (Germany)				20	Hilversum (Holland)	
		0.7	Lyons (La Doua) (France) (relays PTT)		1013	296.1	7*	Kosice (Czechoslovakia)	
		0.15	Tartu (Estonia)				2.5	Limoges (PTT) (France)	
		0.15	Schweizerischer Landessender (Bermünster) (Switzerland)		1022	293	0.7	Pietarsaari (Jacobstad) (Finland) (relays Helsinki)	
		0.15	Bodo (Norway)				0.25	Tampere (Finland) (relays Helsinki)	
		0.15	Danzig (Free City) (relays Königsberg)		1031	291	13.2	Viipuri (Viborg) (Finland) (relays Helsinki)	
		0.15	Klagenfurt (Austria) (relays Vienna)					<b>British Relay Stations</b>	
		0.15	Porsgrund (Norway) (relays Oslo)					1	Aberdeen
		0.15	Salamanca (Spain) (EAJ22)					1	Bournemouth
		0.15	San Sebastian EAJ8 (Spain) (Mon., Wed., Fri. 7.30-9 p.m., other days 10 p.m. to midnight)					0.12	Dundee
		0.15	Tromsø (Norway)					0.3	Edinburgh
		0.15	Uppsala (Sweden) (relays Stockholm)					1	Newcastle
		0.15	Odessa (Russia)					0.12	Plymouth
		0.15	Aalesund (Norway)					0.12	Swansea
		0.15	Notodden (Norway)					0.7	Lyons (Radio) (France)
		0.15	Paris (PTT) (Ecole Supérieure) (France)					0.8	Montpellier (France)
		0.15	Rjukan (relays Oslo) (Norway)					0.5	Berlin Relay (Germany)
		0.15						0.5	Magdeburg (Germany)
		0.15						0.5	Stettin (Germany) (relays Berlin)
		0.15						0.5	Innsbruck (Austria) (relays Vienna)

\* Until 4.40 p.m.



STATIONS IN ORDER OF FREQUENCIES AND WAVELENGTHS (Continued)

Kc/s	M.	kW.	Station	Dial Readings
1063	282.2	2	Lisbon (Portugal)	
1067	281	0.75	Copenhagen (Denmark)	
1071	280		Radio Liège (Belgium)	
1076	279	14	Bratislava (Czechoslovakia)	
1085	276.5	60	Heilsberg (Germany) (rel. Königsberg)	
1096	273.7	7	Turin (Italy)	
1103	272	1.3	Rennes (France)	
1112	270	0.25	Bremen (Germany) (relays Hamburg)	
1121	267.6	0.7	Oviedo (Spain)	
		1.5	Radio Valencia (Spain)	
1130	265.4	1.3	Lille (PTT) (France)	
1137	263.8	11	Moravská-Ostrava (Czechoslovakia)	
1147	261.6	50	London National (Great Britain)	
1157	259	2	Leipzig (Germany)	
1166	257	10	Hörby (Sweden) (relays Stockholm)	
1175	255	0.7	Toulouse (PTT) (France)	
1184	253	5	Gleiwitz (Germany) (relays Breslau)	
		1	Almeria (Spain) (EAJ18)	
1193	252	1	Barcelona (Association National) (EAJ15)	
		0.25	Trollhättan (Sweden)	
1202	249.6	0.3	Varberg (Sweden)	
1205	249	0.8	Juan-les-Pins (Nice) (France)	
1211	247.7	0.2	Kalmar (relays Stockholm)	
		10	Trieste (Italy)	
		0.5	Berne (Switzerland)	
		0.4	Cartagena (Spain)	
		0.25	Cassel (Germany) (relays Frankfurt)	
		0.2	Eskilstuna (Sweden) (relays Stockholm)	
1220	246	0.25	Kiruna (Sweden) (relays Boden)	
		0.5	Linz (Austria) (relays Vienna)	
		0.4	Säffle (Sweden) (relays Stockholm)	
		0.6	Turku (Abo) (Finland) (relays Helsinki)	
1229	244.1	0.5	Basle (Switzerland)	
1236	242.7		Liège Experimental (Belgium)	
1238	242	1	Belfast (Ireland)	
1247	240.6	0.5	Stavanger (Norway)	
1250	240	1.5	Radio Beziers (France)	
1256	239	2	Nürnberg (Germany) (relays Munich)	
		3	Bordeaux Sud-Ouest (France)	
1265	237.2	1	Radio-Nimes (France)	
		0.2	Örebro (Sweden) (relays Stockholm)	
1274	235.5	0.5	Christiansand (Norway)	

Kc/s	M.	kW.	Station	Dial Readings
1283	235	2	Lodz (Poland) (Experimental)	
1292	232.2	0.25	Kiel (Germany) (relays Hamburg)	
		0.25	Norrköping (Sweden)	
1293	232	10	Fécamp (Radio Normandie) (France)	
		0.2	Hälsingborg (Sweden)	
1301	231	1.25	Malmö (Sweden) (relays Stockholm)	
		0.2	Umeå (Sweden)	
1310	229	0.05	Uddevala (Sweden)	
1328	226	0.15	Hudiksvall (Sweden)	
1337	224.4	1	Cork (Ireland)	
		0.5	Flensburg (Germany) (relays Hamburg)	
1373	218	0.7	Pori (Björneborg) (Finland) (relays Helsinki)	
		0.5	Salzburg (relays Vienna)	
		0.25	Karlstad (Sweden)	
1382	217	0.5	Königsberg (Germany)	
		0.2	Halmstad (Sweden)	
		3	Radio Chatelineau (Belgium)	
1391	216	1.9	Warsaw, No. 2 (Poland) (Experimental)	
1400	214.2		Csepel (Hungary)	
1428	210		Borås (Sweden)	
1450	207	0.15	Ornsköldsvik (Sweden)	
1460	206		Gävle (Sweden) (relays Stockholm)	
1470	204	0.2	Kristinehamn (Sweden)	
1480	203	0.25	Jönköping (Sweden) (relays Stockholm)	
1490	202	0.2	Karlskrona (Sweden) (relays Stockholm)	
1530	196		St. Quentin (France)	
1714	175			

DEVIATIONS

The following are the actual deviations from the official frequencies, as noted during measurements made at the Tatsfield Checking Station. All differences at 1.9 kc/s and over are shown.

570.5	525.9	—	Palermo (Italy)
730	411	—	Madrid (Spain)
790	380.7	—	Seville (Spain)
973	309.1	—	Radio Vitus (France)
1036	289.5	—	Viiipuri (Finland)
1105.2	271.1	—	Rennes (France)
1123	267.1	—	Radio Valencia (Spain)

(For List of Short-Wave Stations see page 1058.)

Schedule of Advance Programmes

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For the benefit of traders who may wish to make arrangements for demonstrating, we are printing each week a schedule of the programmes to be transmitted by the National and Regional stations. It will be noticed that these schedules concern programmes to be transmitted a fortnight hence, and it is felt that they will also be of particular service to those of our readers living abroad who will be able to use them in connexion with the reception of the Experimental Short Wave Station, G5SW, which relays either the National (5XX) or London Regional Programmes from 7 p.m. News Bulletins are transmitted daily (except on Sunday) at 12.30 p.m. (Saturday, 12.45), 6.15 p.m., and midnight.

SUNDAY, JUNE 12

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Organ Recital Commodore Or.	As National As National	As National As National	As National As National
AFTERNOON	Operatic Gram. Records Light Music Military Band	As National As National Violin and Song Recital	As National As National As London Reg.	As National As National As London Reg.
EVENING PROGRAMME	String Orchestra	Hotel Orchestra	Studio Orchestra	Choral & Instrumental Con.

MONDAY, JUNE 13

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Studio Concert	As Midland Reg.	Cinema Orch.	As Midland Reg.
AFTERNOON	Cinema Orch. School Broadcasts Hotel Orchestra	As North Reg. As Midland Reg. As National	As North Reg. Studio Orchestra	Organ Recital As Midland Reg. As National
1ST EVENING PROGRAMME	Talks Vaudeville	As North Reg. Light Orch. Con.	Gram. Records Studio Orchestra	Band Concert Studio Orchestra
2ND EVENING PROGRAMME	Chamber Music Dance Music	A. J. Alan Dance Music	Pianoforte Rec. As London Reg.	As London Reg. As London Reg.

TUESDAY, JUNE 14

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Organ	As North Reg.	As North Reg.	Buxton Orch.
AFTERNOON	Hotel Orchestra Talks Hotel Orchestra	As North Reg. As Midland Reg. As National	As North Reg. Studio Orchestra	Ballad Concert As Midland Reg. Evensong
1ST EVENING PROGRAMME	French Talk Military Band	Light Music Bach Cantata Club	Light Music String Orchestra	Studio Orchestra Scarborough Orchestra
2ND EVENING PROGRAMME	"Going South" Dance Music	Orchestral Con. Dance Music	Military Band As London Reg.	Concert, contd. As London Reg.

WEDNESDAY, JUNE 15

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	As North Reg. Cinema Organ	As Midland Reg.	Studio Orchestra	Heckmondwike Lecture
AFTERNOON	Gram. Records Hotel Orchestra Symphony Con.	As Midland Reg. As North Reg. As National	Organ Recital As North Reg.	As Midland Reg. Studio Orchestra As National
1ST EVENING PROGRAMME	Talks Musical Comedy	Light Music Harp Quintet	Light Music The Leicester Pageant	As London Reg. Concert Party
2ND EVENING PROGRAMME	Orchestral Con. Dance Music	Canterbury Fes. Gram. Records Dance Music	As London Reg. As London Reg. As London Reg.	As London Reg. Studio Orchestra As London Reg.

THURSDAY, JUNE 16

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Scot. Studio Orch.	Cinema Organ	As London Reg.	As London Reg.
AFTERNOON	Cinema Orch. Abbey Evensong Studio Orch.	As North Reg. As North Reg. As National	As North Reg. As North Reg.	Studio Orchestra Whitby Orchestra As National
1ST EVENING PROGRAMME	German Talk Canterbury Fes.	Light Orch. Con. "Going South"	Musical Comedy Programme As London Reg.	Dance Music As London Reg.
2ND EVENING PROGRAMME	Talks Dance Music	Military Band Dance Music	Dance Music As London Reg.	Studio Orchestra As London Reg.

FRIDAY, JUNE 17

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	Cinema Orch.	As Midland Reg.	Cinema Organ	As Midland Reg.
AFTERNOON	Organ Recital Gram. Records Scottish Studio Orch.	As North Reg. As North Reg. As National	As North Reg. As North Reg.	Cinema Orch. Studio Orchestra As National
1ST EVENING PROGRAMME	Talks Freak Programme	Orchestral Con. Chamber Music	Concert Party Band Programme	Organ Recital Manx Folk Song
2ND EVENING PROGRAMME	Orchestral Con. Dance Music	Musical Comedy Dance Music	As London Reg. As London Reg.	As London Reg. As London Reg.

SATURDAY, JUNE 18

	NATIONAL	LONDON REG.	MIDLAND REG.	NORTH REG.
MORNING	As North Reg.	As North Reg.		Studio Orchestra
AFTERNOON	Cinema Organ Cinema Orch. Light Music	As National As National As National	Dance Music	As National As National As National
1ST EVENING PROGRAMME	B.B.C. Dance Or. Play	Light Music Operatic Concert	Military Band Studio Orchestra	Studio Orchestra A one act Play
2ND EVENING PROGRAMME	Orchestral Con. Dance Music	Vaudeville Dance Music	As London Reg. As London Reg.	As London Reg. As London Reg.



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# PROGRAMMES FOR SUNDAY (May 29)

## PRINCIPAL EVENTS

### SERVICES AND SACRED MUSIC

- 9.40 a.m. Huizen: High Mass from Weert.
- 11.30 " Leipzig and all German Stations: Church Cantata (Bach).
- 12 noon Radio-Paris: Sermon by Père Lhande.
- 8.0 p.m. Oslo: "St. Matthew Passion" (Schütz).

### CONCERTS (Vocal and Instrumental)

- 6.15 a.m. Hamburg: Harbour Concert.
- 11.0 " Vienna: Elgar programme.
- 12.15 p.m. Warsaw: Philharmonic Orchestra.
- 2.30 " Brussels No. 1: Conservatoire Centenary Concert.
- 5.0 " Stockholm: Chamber Orchestra.
- 7.55 " Huizen: Dutch programme.
- 8.0 " Hamburg, Langenberg: Bell Suite.
- 8.35 " Copenhagen: Strauss and Lanner.

### OPERAS AND OPERETTAS

- 7.30 p.m. Budapest: "Turandot" (Puccini) from Opera House.
- 8.30 " Italian Stations (N.): "Tannhäuser" (Wagner).
- 8.45 " Rome: "Les Cloches de Corneville" (Planquette).

### CHAMBER MUSIC

- 7.30 p.m. Stuttgart, Frankfurt: Zagreb Quartet.
- 9.25 " Brussels No. 2: Quintet (Brahms).

### PLAY

- 8.5 p.m. Vienna: "Armut" (Poverty) (Anton Wildgans).

### DANCE MUSIC

- 10.45 p.m. Hamburg, Frankfurt, Stuttgart: "The Weintraubs."

### MISCELLANEOUS

- 1.55 p.m. Hilversum: Holland v. Czechoslovakia (football).
- 2.45 " Schweizerischer Landessender: "The Lookerized Air Liner" (from Basle Aerodrome).

### Anton Wildgans

When this evening's broadcast from VIENNA of Anton Wildgans' drama, *Armut* (Poverty), was decided on as the play with which to open Ravag's Summer Season of Drama, the author himself was to take one of the principal parts. But fate decreed otherwise. Anton Wildgans died quite suddenly on May 3,



[Photo: After a painting by Hans Schachtlinger, by courtesy of Radio-Wien]

### Anton Wildgans

at the early age of fifty-one years. To-night's broadcast will thus at the same time be a commemoration. Wildgans had been widely known as artistic director of the Vienna "Burgtheater," an office which he

relinquished only a few months ago. His name will long endure as that of the poet who, in the opinion of many competent critics, wrote the most beautiful verse in post-War Austria; it is counted among the greatest treasures of German poetry of the last few decades. His plays have shown him as a gifted dramatist, and the one which is being broadcast this evening is generally considered his greatest. His philosophy of life is well summed up in one of his poems, *Glücklicher Glaube* (A Happy Faith), as none but a true poet and seer could envisage; the first verse is:—

"Es ist der Tod ein Bad, in das der Herr,  
Uns Kindlein tut, auf dass wir unsere Seele,  
Begütigen von allem Erdenfehle  
Zu neuer Wiederkehr und Unbescher."

### The Speaking Chorus

One of the most popular forms of elocution in Holland to-day is the "speaking chorus," of which the short play, *What we Wish*, to be spoken by Kees Spierings' chorus at Bois-le-Duc this afternoon, offers a good instance; it is to be relayed by HUIZEN. Wherever one turns in Holland, one finds these choruses, some of them consisting of only a few members, others numbering thousands. And in many modern cantatas and oratorios the whole chorus speaks together, or uses a method of expression on the border line between speaking and singing.

### The Brussels Conservatoire Directors

At to-day's centenary concert to be relayed by BRUSSELS No. 1, all the music is by Directors of the Conservatoire, past and present. Fétis, the first, is best remembered now as a historian, and so is his successor, Gévaert. Tinel, known chiefly by his sacred music, was Director for only four years, dying in middle age in 1912. Dubois, the fourth Director, was a former pupil of the School; he, too, devoted himself largely to church music. Josef Jongen, who succeeded Dubois in 1925, is the leading exponent of the French school of Belgian music, one whom the Conservatoire is justly proud to claim as its head.

### NATIONAL

- |           |       |         |     |
|-----------|-------|---------|-----|
|           | kc/s  | m.      | kW. |
| London:   | 1,148 | 261.3   | 50  |
| Daventry: | 193   | 1,554.4 | 30  |
| Northern: | 995   | 301.5   | 50  |

- 10.30—10.45 a.m.—Time Signal (Greenwich). Shipping Forecast.
- 3.0 p.m.—Time Signal (Greenwich).
- 3.0—The Wireless Military Band. Conductor, B. Walton O'Donnell. Joseph Farrington (Baritone). Band: Overture, *The Wasps* (Vaughan Williams, arr. Gerrard Williams). Joseph Farrington and Band: Recit., *I feel the Deity within, Aria, Arm, arm ye Brave* (Judas Maccabaeus) (Handel, arr. Gerrard Williams); *Aria, We know no Thought of Vengeance* (The Magic Flute) (Mozart, arr. Gerrard Williams). Band: *Four Irish Dances* (Stanford, arr. R. J. F. Howgill). Joseph Farrington: *Old English Songs: Come, let's be merry, Ah! Willow, The Beggar's Song* (arr. Lane Wilson); *The Wolf* (Shield). Band: *Slavonic Rhapsody* (Friedemann).
- 4.0—Bible Reading.
- 4.15—Reginald King and his Orchestra. Virginia McLean (Pianoforte).
- 5.30—A Recital by John Coates (Tenor): *Modern English Love Songs*.
- 6.0—6.20—"For the Children."
- 8.0—A Religious Service, relayed from the Brunswick Chapel, Leeds.
- 8.50—"The News." Weather Forecast, General News Bulletin; Shipping Forecast.
- 9.0—Time Signal (Greenwich).
- 9.5—Chamber Music. Herbert Heyner (Baritone). The Brosa String Quartet (Brosa-Wise-Rubens-Mannucci). Quartet in A Minor for Strings (Op. 20) (Schubert). Herbert Heyner: *Heart's Desire* (Ireland); *The Wake Feast, Grace for Light* (Harty); *Youth and Love* (Vaughan Williams); *Dream Song* (Hely-Hutchinson); *The Shepherdess* (Ivor Atkins); *The Chapel on the Hill* (Stanford); *The Stranger's Song* (Balfour Gardiner). Quartet: *Quartet No. 2, in D, for Strings* (Borodin).
- 10.30—Epilogue

### REGIONAL

- |           |      |       |     |
|-----------|------|-------|-----|
|           | kc/s | m.    | kW. |
| London:   | 842  | 356.3 | 50  |
| Midland:  | 752  | 398.9 | 25  |
| Northern: | 626  | 479.2 | 50  |

- 3.0 p.m. (London and Northern)—The Wireless Military Band. Conductor, B. Walton O'Donnell. Joseph Farrington (Baritone).
- 3.0 (Midland)—The Studio Orchestra. Millicent Cooper (Soprano). Charles Woodford (Violoncello).
- 4.0 (London)—String Orchestra Concert. The B.B.C. Orchestra.
- 4.0 (Northern)—The Studio Orchestra. Evelyn Howarth (Contralto).
- 4.30 (Midland)—A Pianoforte Recital by Lilian Niblette.
- 5.0—5.30—"China in the Melting-Pot"—I. Professor P. M. Roxby.
- 7.50 (Midland)—A Religious Service, from St. Mary's Church, Nottingham.
- 8.0 (London)—Roman Catholic Service, from the Studio.
- 8.0 (Northern)—A Religious Service, relayed from St. John's Parish Church, Blackburn.
- 8.45 (London)—The Week's Good Cause. Appeal on behalf of Padcroft, the Boys' Home of the London Police Court Mission, by Mr. Seymour Hicks.
- 8.45 (Midland)—The Week's Good Cause. Appeal on behalf of the Royal Hospital, Wolverhampton, by Mr. W. H. Harper.
- 8.45 (Northern)—The Week's Good Cause. An Appeal on behalf of The Merseyside Hospitals Council, by Lord Cozens Hardy.
- 8.50—"The News."
- 9.5—Tom Jones and the Grand Hotel, Eastbourne, Orchestra. Esther Coleman (Contralto). Orchestra: *Overture, Mignon* (Ambroise Thomas). Esther Coleman: *The dreary Steppe* (Gretchaninov); *Oh, could I but express in Song* (Malashkin). Orchestra: *Suite, Callirhoe* (Chaminade). Tom Jones: *Cavatina* (Raff); *La Plus que lente* (Debussy); *Hejre Kati* (Hubay). Esther Coleman: *The slighted Swain* (Old English Melody) (arr. Lane Wilson); *Thorns* (Robert Chignell); *Caprice* (Felix White). Orchestra: *Fantasy, Madam Butterfly* (Puccini).
- 10.30—Epilogue.

The Frequencies and Wavelengths given in the following programmes are those published by the stations in question. For more accurate measurements, readers are referred to our Table of Frequencies and Wavelengths.

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

#### ALGIERS (N. Africa)

825.3 kc/s (363.3 m.); 13 kW. Transmits at intervals from 11.30 a.m. 7.0 p.m.—Light Music. 7.15—Extracts from "*La Favorita*," Opera (Donizetti), on Gramophone Records, by the Cast of the Scala, Milan. 8.0—Orchestral Concert. Selection from "*The Barber of Seville*" (Rossini). Serenade (Goublier). Selection from "*Isoline*" (Messager). Selection (Lincke). Selection from "*Tosca*" (Puccini). I.e. Canari (Poliakin). Selection from "*La Bohème*" (Puccini). Selection (Saint-Saëns). Waitz, The Skaters (Waldteufel). Selection from "*Martha*" (Flotow). Czardas (Michiels). 10.0 (approx.)—Close Down.

#### BARCELONA (Spain)

Radio-Barcelona (EAJ). 860 kc/s (349 m.); 8 kW. 8.15 a.m.—Physical Culture. 8.30—Topical Review. 9.0—Physical Culture (contd.). 9.15—Topical Review (contd.). 9.45—12 noon—Interval. 12 noon—Chimes and Weather Forecast. 12.15 p.m.—Photographic Weather Chart, followed by Municipal Band Concert, conducted by Juan Lamote de Grignon, relayed from the Palacio de Bellas Artes. 2.0—Gramophone Records of Light Music. 2.30—Sextet Concert. 3.0—Theatre Notes, Popular Music on Gramophone Records and Film Review. 3.20—Sextet Concert (contd.). 4.0—Programme for Hospitals and Benevolent Institutions, with Gramophone Records. 5.0—6.30—Interval. 6.30—Light Music on Gramophone Records. 7.0—Concert by the Station Orchestra. 7.30—Xylophone Recital by Rafael Casanova. 8.0—Talk in Catalan: Canaries and other Birds. 8.10—Concert by the Station Orchestra. Soloist: Concepción Callao (Songs). 9.0—Dance Music from the Excelsior.

10.0—Talk for Women. 10.15—Request Gramophone Records. 11.45—Chess Lesson. 12 midnight (approx.)—Close Down.

#### BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW. Transmits at intervals from 8.25 a.m. 5.0 p.m.—Concert of Choral and Orchestral Music. 6.55—Time and Programme Announcements. 7.0—Orchestral Concert. 8.0—Radio Talk, followed by Football Results. 8.30—Wind Instrument Concert. In the interval at 9.30 (approx.)—News and Sports Notes. 10.30 (approx.)—Concert from the Gradjevinska Kasina Restaurant.

#### BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW. Transmits at intervals from 6.0 a.m. 11.30 a.m.—See Leipzig. 12.15 p.m.—See Hamburg. 1.20 (approx.)—Concert from Heilsberg. 2.0—See Berlin (Witzleben). 2.30—Heinrich Zerkulen reads from his own Works: (a) *Die Welt im Winkel*, (b) *Musik auf dem Rhein*. 2.55 (approx.)—See Berlin (Witzleben). 5.40—Talk: Butterflies and Moths. 6.0—A Discussion by Young People: Man and Machines. 6.45—Talk: The German Landscape. 7.15—See Breslau. 8.15—10.15—See Berlin (Witzleben). 10.10—Talk: "Travel in Germany!" After the Talk: Dance Music from Berlin (Witzleben). 12.30 a.m. (Monday)—Close Down.

#### BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW. Transmits at intervals from 6.0 a.m. 11.30 a.m.—See Leipzig. 12.10 p.m.—Recitations (Theodor Kramer). 12.20 (approx.)—Concert from Heilsberg. 2.0—Talk for Parents: Mother and Doctor. 2.30—Eugen Gürster reads from his own Works. 2.55—Concert by a Children's Orchestra. 3.20—Relay from *Willhelmstrand* in Oberschöneweide of the Jubilee Races on the Fortieth Anniversary of the "Vorwärts" Rowing Club. 3.45—Wind Instrument Concert.

5.40—The "Catacomb" Cabaret. 6.35—Reading: "Der Traum vom Fliesen" (Hermann Rossler).

7.0—Pianoforte Recital by Professor Egon Petri. *Fantasiestücke*, Op. 12 (Schumann): (a) *Des Abends*, (b) *Aufschwung*, (c) *Warum*, (d) *Grillen*, (e) *In der Nacht*, (f) *Fabel*, (g) *Traumeswirren*, (h) *Ende vom Lied*. *Fantasia in F Minor*, Op. 49 (Chopin). 7.35 "Ende und Anfang"—and other Essays read by Hanna Kiel, the Authoress. 8.0—Sports Notes.

8.15—"Fathers and Sons"—a Radio Potpourri, arranged by Cornelius Bronsgeest. The Berlin Wireless Orchestra, conducted by Bruno Seidler-Winkler, the Maximilian Allbrecht Choir, the Hans Schindler Jazz Symphonists, Else Kochmann, Irene Ambrus, Joseph Schmidt, Hermann Bloss and Max Kensing. 9.50—Weather, News and Sports Notes, followed by Dance Music. 12.30 a.m. (Monday)—Close Down.

#### BORDEAUX-LAFAYETTE

(France) (PTT). 986 kc/s (304 m.); 13 kW. 12.0 noon—Programme relayed from Paris (*Ecole Supérieure*), 671 kc/s (447.1 m.). 2.0—Relay from Paris or Relay of a Local Festival. 6.20 (approx.)—Sports Results. 6.30—Radio Journal. 8.0—Review by M. Salomon. 8.10—Concert of Light Music on Gramophone Records. Suite Pastorale (Scassola). *D'une Prison* (Hahn). Berceaux (Fauré). Selection from "Hamlet" (Thomas). Liebesfreud (Kreisler). Liebesleid (Kreisler). 9.0—Concert of Popular Music on Gramophone Records.

#### BRATISLAVA

(Czechoslovakia) 1,076 kc/s (279 m.); 14 kW. Transmits at intervals from 7.0 a.m. 11.0 a.m.—See Prague. 1.5 p.m.—Agricultural Report. 4.0—See Brno. 5.30—"Five Plums"—Humoresque. 5.50—Concert relayed from the Museum Café. 6.30—Popular Music on Gramophone Records. 7.0—See Moravská - Ostrava. 7.45—See



SUNDAY continued

Prague. 8.5—Dramatic Programme. 10.0—See Prague. 10.20—News and Programme Announcements. 10.25—See Prague.

BRESLAU (Germany) 923 kc/s (325 m.); 1.5 kW. Relay by Gleiwitz, 1,184 kc/s (253 m.).

Transmits at intervals from 6.15 a.m. (Hamburg Relay).

11.30 a.m.—See Leipzig. 12 noon—Dedication of the Monument to Soldiers of the Sixth Regiment of Field Artillery killed in Action, relayed from the Matthiasplatz. 12.45 p.m.—Concert from Heilsberg. 2.0—News Bulletin. 2.10—Talk on Dairy-Farmers. 3.20—Talk on Opera, with illustrations. 3.45—See Berlin (Witzleben). 5.40—Reading from a Book by Gustav Freytag. 6.10—Reading: "My Experiences as a Toreador" (Armando Esteban Hareter).

6.40—Cello Recital by Curt Becker. Hungarian Fantasia (Kletzer). Guitar (Moszkovsky). Andante (A. Becker). Minuet (H. Becker). Scherzo (van Goens).

7.5—Weather Forecast and Sports Results. 7.15—A Review of the Cultural Life of the Silesian Evangelists. 8.15—See Berlin (Witzleben). 9.50—Time Signal. Weather Forecast, Press News, Sports Notes and Programme Announcements. 10.20—Dance Music from Berlin (Witzleben). 12 midnight (approx.)—Close Down.

BRNO (Czechoslovakia) 878 kc/s (342 m.); 35 kW. Transmits at intervals from 7.0 a.m.

4.0 p.m.—Orchestral Concert, conducted by B. Bakala. 5.30—Gramophone Concert of Light Music. 5.50—Reading. 6.0—See Prague. 6.45—Talk on Photography. 7.0—See Moravská-Ostrava. 7.45—See Prague. 8.5—See Bratislava. 10.0—See Prague. 10.20—News Bulletin. 10.25—See Prague.

BRUSSELS (Belgium) (No. 1) 1.N.R. 590 kc/s (509 m.); 15 kW. 5.30 a.m. and at hourly intervals throughout the day—Pigeon Flying Report.

12 noon—Trio Concert by P. Leemans (Pianoforte), Fr. Wigy (Violin) and De Nocker ("Cello). 12.30 p.m.—Weather Report.

12.40—Organ Recital by Louis Joos, relayed from the Carmelite Church. Symphonic Piece (Franck). Cantilène (Milly). The Cuckoo (Dupuis). Toccata (Widor).

1.0—Variety Concert on Gramophone Records. 2.30—Concert, relayed from the Royal Conservatoire on the Centenary of its Foundation. The Conservatoire Concert Society Orchestra, conducted by Desiré Defaux. Soloist: Arthur de Greef (Pianoforte). Symphony No. 2 (Fetis). Fantasia on Spanish Motives (Gevaert). Overture, Poly-eucte (Finel). Le Mort (Dubois). Symphonic Piece for Pianoforte and Orchestra (Jonen).

5.0—Dance Music from the St. Sauveur Palais de Danse. 6.15—Light Music on Gramophone Records. 6.30—Programme arranged by Jacques Dalcroze. 7.15—Religious Address by the Reverend Father Hoornaert. 7.30—Le Journal Parlé. 8.0—Orchestral Concert, conducted by Charles Walpot. Soloists: MM. Gason and Grandorge, M. Fischer ("Cello"), M. Misson (Violin), and M. Lombard (Xylophone). 8.45—Gramophone Records of Sketches by Bach and Laverne. 9.0—Concert (continued). 10.0—Le Journal Parlé. 10.10—Concert by the Max Alexis Orchestra, relayed from the "Ancienne Belgique." 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 2) 1.N.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.

12 noon—Organ Recital by Louis Joos relayed from the Carmelite Church. 12.30 p.m.—Weather Report. 12.40—Trio Concert. Franz Wigy (Violin), P. Leemans (Pianoforte), and De Nocker ("Cello"). Spanish Dance (Granados). Serenade (De Boeck). Selection from "Rienzi" (Wagner). March of the Tin Soldiers (Turina).

1.0—Song Recital by J. Van Tricht. R. Van der Spurt at the Pianoforte. 1.20—Gramophone Records of Light Music.

5.0—Orchestral Concert, conducted by Charles Walpot. Marche aux flambeaux (Meyerbeer). Waltz, A Life of Pleasure (Gung'l). Intermesse, Rendez-vous (Aletter). Overture, "Zampa" (Hérold). La Serenata (Braga). Selection from "Nina Rosa" (Romberg-Salabert). Ballet Music from "Coppelia" (Delibes). 6.0—Gramophone Concert. Overture,

"Le Roi d'Ys" (Lalo). Peer Gynt Suite, No. 2 (Grieg). Rondo (Schubert-Friedberg). Fire Dance from "El amor brujo" (Falla). Selection from "Saul" (Handel). Song without Words, Op. 109 (Mendelssohn). Seguedilla (Albéniz). Ballet Music from "La Gioconda" (Ponchielli). Neapolitan Melody (Nutille). Symphonic Poem, Les Préludes (Liszt).

7.15—Religious Address. 7.30—Music Review by Paul Gilson. 8.0—Orchestral Concert, conducted by Charles Walpot. Soloists: M. Gason, M. Grandorge and M. Misson (Violin). March, The Belle of Chicago (Souza). Waltz from "Faust" (Gounod). Overture, "William Tell" (Rossini). Tarantella for Violin (Wieniawsky). Argentine Tango, Era buena la paisana (de Caro). Selection from "No, No, Nanette" (Youmans). 8.45—"The Nylen Murder"—A.P.I.y (Grassin).

9.25—Quintet for Strings and Piano-forte (Brahms). Soloists: Messrs Delvenne, Desclin, Van Schepdau and Roy. Mlle. Gab. Tambuyser at the Pianoforte. 10.0—Le Journal Parlé. 10.10—Concert by Max Alexis and his Orchestra, relayed from the "Ancienne Belgique." 11.0 (approx.)—Close Down.

BUCHAREST (Romania) Radio-Bucarest. 761 kc/s (394 m.); 12 kW.

9.15 a.m.—Programme for Children. 9.30—Religious Reading. 9.45—Choral Recital of Sacred Music. 10.0—Concert by the Station Orchestra. 11.0—Light Music on Gramophone Records. 11.45—News and Time Signal. 12 noon—Popular Music on Gramophone Records. 3.0 p.m.—Programme for Peasants. 4.0—Concert of Light Music and Romanian Music by the Jean Marco Orchestra. 5.0—News and Time Signal. 5.10—Concert (cont'd). 6.0—Talk on Health and Education. 6.40—Variety Music on Gramophone Records. 7.0—"L'Elisir d'amore" (The Love Piltre)—Opera in Three Acts (Donizetti). In the intervals, News Bulletin.

BUDAPEST (Hungary) 545 kc/s (550 m.); 18.5 kW. Programme also relayed on 210 m. from 5.0 p.m. to 12.0 midnight. 9.0 a.m.—News Bulletin and Beauty Hints. 10.0—Catholic Service from the University Church. 11.15—Evangelical Service, followed by Concert by the Orchestra of the Royal Hungarian Opera House conducted by Otto Berg. Soloist: Mme. Alice Fákacs. Overture, "The Violin-Maker of Cremona" (Hubay). Violin Concerto in G Minor (Bruch). Serenade (Jemnitz). Oxford Symphony (Haydn). 2.0 p.m.—Concert of Popular Music on Gramophone Records. 3.0—Agricultural Talk. 3.45—Concert by the Elemér Sáray Cigány Orchestra. 5.0—Concert by an Orchestra of Hungarian Postal Officials, conducted by Wilhelm Roubal (Junior), relayed from the Markus Restaurant. Postal March (Roubal). Selection from "The Gipsy Baron" (Johann Strauss). Intermesse from "Háry János" (Kodály). Hungarian Dances (Brahms). Selection from "The Queen of Sheba" (Goldmark).

6.0—An Entertainment in the Studio. 7.30—"Turandot"—Opera (Puccini); relayed from the Royal Hungarian Opera House. In the intervals, News Bulletin and Time Signal. After the Opera, Concert by the Jancsi Rigo Cigány Orchestra, relayed from the Café Emke.

COPENHAGEN (Denmark) 1,067 kc/s (281 m.); 0.75 kW. Relay by Kalundborg, 260 kc/s (1,153 m.). 8.30 a.m.—Gymnastics. 10.0—Divine Service from the Cathedral. 11.30—Weather Report. 11.45—News Bulletin. 12 noon—Town Hall Chimes. 12.2 p.m.—Wind Instrument Concert. Triumphant March from "Thrymskviden" (J. P. E. Hartmann). Waltz, Die Hydropathen (Gung'l). Overture, "Peter the Shipwright" (Lortzing). Selection from "Giselle" (Adam). Selection from "Carmen" (Bizet). Introduction and Aria from "Romeo and Juliet" (Gounod). Ballet Music from "Erlenhugel" (Kuhlau). Aarhus-Tattoo (Möller). March, The Stars and Stripes (Souza). 1.0—Talk in English: British Statesmen of Yesterday and To-day, XIX. Lloyd George. 1.20—Talk in German: Anzengruber and Rosegger. 1.40—Reading in French. 2.0—Divine Service Relay. 3.30—Talk

SUNDAY continued

for Children. 4.0—Orchestral Concert conducted by Launy Gröndahl. Soloist: Lilly Lamprecht (Songs). 6.20—Talk. 6.50—Weather Report. 7.0—News Bulletin. 7.15—Time and Sports Notes. 7.30—Talk by Th. Stauning. 8.0—Town Hall Chimes. 8.2—"Naverspind"—a Play (v. Gross and Kai Holm). 8.35—Strauss-Lanner Concert by the Station Orchestra conducted by Emil Reesen. March from "The Gipsy Baron" (Johann Strauss). Waltz, Evening Star (Lanner). Polka Mazurka, On the Volga (Joh. Strauss). Quadrille from "The Queen's Kerchief" (Joh. Strauss). Waltz, Telegrammen (Joh. Strauss). Styrian Dance (Lanner). Galop, Frisch durch's Leben (Joh. Strauss). 9.25—"The Danish Countryside"—Kolding—Programme of Talks, Songs and Orchestral Selections. 10.25—News. 10.35—Johann Christian Bach Music by the Station Symphony Orchestra conducted by Emil Reesen. Overture, "Lucio Silla" Symphony in E Flat for Double Orchestra. 11.0—Modern Dance Music from the Wivex Restaurant. 12 midnight (in an interval)—Town Hall Chimes. 12.30 a.m. (Monday)—Close Down.

DUBLIN (Ireland) (2RN). 725 kc/s (413 m.); 1.2 kW. Relay by Cork, 1,337 kc/s (224.4 m.). 8.30 p.m.—Time Signal. 8.31—Instrumental and Vocal Concert. 10.0—Pianoforte Solos by Sydney Green. 10.15—Amrhan Gaedhilig. 10.30—Orchestral Concert. 11.0—Time Signal, News, Weather Report and Close Down.

FÉCAMP (France) Radio Normandie. 1,293 kc/s (232 m.); 10 kW. 12 noon—News Bulletin. 12.30 p.m.—Press News. 12.45—Concert of Light Music. 6.0—Variety Concert. 8.0—Concert of Sound Film Theme Songs. 9.0—Concert of Variety Music. 12.30 a.m. (Monday)—Dance Music. 3.0 (approx.)—Close Down.

FLORENCE (Italy) Ente Italiano Audizioni Radiofoniche. 599 kc/s (500.8 m.); 20 kW. See Turin.

FRANKFURT-am-MAIN (Germany) 770 kc/s (390 m.); 1.5 kW. Relay by Cassel, 1,220 kc/s (246 m.). Transmits at intervals from 6.15 a.m. (Hamburg Relay).

10.0 a.m.—Choral Concert. 11.0—Hans Nüchtern reads from his Volume of Poems, "Song of the Sea." 11.30—See Leipzig. 12 noon—See Munich. 1.0 p.m.—Programme to be announced. 1.50—Talks arranged by the Wiesbaden Board of Agriculture. 2.0—Rural Programme—Two Talks. 3.0—Programme for Children. 3.10—Military Band Concert, relayed from the Schlosspark-Theater, Marburg. Conductor: H. Schmidt of Bern.

6.0—Relay from Kevelaer of the Pilgrimage to the Miracle-Working Virgin. 7.0—Talk: Frankfurt and Darmstadt—the Landscape. 7.20—Weather and Sports Notes. 7.30—10.20—See Stuttgart. 10.20—Time, Weather, News and Sports Notes. 10.45—Concert from Hamburg.

HAMBURG (Germany) Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relay by Bremen, 1,112 kc/s (270 m.); Flensburg, 1,373 kc/s (218 m.); Hanover, 530 kc/s (566 m.) and Kiel, 1,292 kc/s (232.2 m.). Transmits at intervals from 6.15 a.m. (Bremen Harbour Concert).

11.15 a.m.—See Leipzig. 12.10 p.m.—Time and Weather. 12.15—Public Demonstration by the War-Blinded on the occasion of the National Assembly of the Blind Ex-Servicemen's Association. Addresses and Concert by the Philharmonic Orchestra conducted by Richard Richter. 1.15—Concert conducted by Rosenberger. 2.15—Relay from Wilster on the Six Hundred and Fiftieth Anniversary of the Town of Wilster. 3.0—"The City speaks to us"—a Radio Sequence (Adolf Johannsson). 3.45—Orchestral Concert conducted by Adolf Secker. Overture, "Fahrend Volk" (Leuschner). Ballet Music from "La Source" (Delibes). Indian Suite (Lilling). Serenata diabolica (Cerrri). Persian March (Johann Strauss). Selection from "La Vie parisienne" (Offenbach). 4.45—Report on a Preliminary Round

of the German Football Championship. 5.35—New Fairy Tales (Gert von Halle-Albert). 6.30—Concert by the Hamburg Chamber Orchestra conducted by Fritz Stein. 7.30—Radio Report from a Meeting of Young Sports Enthusiasts. 7.40—Sports Notes. 7.55—Weather Report. 8.0—"The Bells Suite"—(Words by Eberhard Brahm, Music by Gerhard Gregor) for Vocalists, Harp, Violin, Trumpet and Organ. I. Westminster. II. The Marienkirche at Lübeck. III. Salzburg Cathedral. IV. Cologne Cathedral. 9.0—See Langenberg. 10.0—News Bulletin. 10.20—Topical Talk. 10.30—Dance Music by the Weintraubs.

HEILSBERG (Germany) 1,085 kc/s (276.5 m.); 60 kW. Relay by Danzig, 662 kc/s (453.2 m.). Transmits at intervals from 6.15 a.m. (Concert from Danzig).

11.30 a.m.—See Leipzig. 12.10 p.m.—Concert by the Königsberg Opera House Orchestra, conducted by Erich Seidler. Overture, "Benvenuto Cellini" (Berlioz). Swedish Rhapsody, Middsommarvaka (Allvén). Symphonic Poem, The Midday Witch (Dvorak). Waltz from "Der Rosenkavalier" (Richard Strauss). Slavonic March (Tchaikovsky). Scènes napolitaines (Massenet). Romanian Rhapsody (Enesco). Offenbach Ballet Music (Rudolf Senger).

2.0—Talk on Chess. 2.30—Talk for Young People. 3.0—Talk: The Food of Insects. 3.30—Part Relay of the East Prussian Tournament from the Carolinshof. 4.0—Concert of Light Orchestral Music, conducted by Felix Prawiczak. Sports Notes in the interval. 6.0—Arthur Silbergleit reads from his Autobiographical Narrative "Mein Freund Nuri." 6.30—Dialect Programme by Max Weber and Emil Schadereit. 7.0—Mexican Songs—Talk with Gramophone Illustrations. 7.30—Talk: Liberators of Two Nations—Ferdinand von Schill and Giuseppe Garibaldi. 8.0—Sports Notes.

8.15—Müllcker Concert on the Ninetieth Anniversary of the Composer's Birth. The Königsberg Opera House Orchestra, conducted by Karl Hrubetz. Soloists: Margarethe Albrecht and Fritzkurt Wenner. 10.15—News and Sports Notes. 10.30—See Hamburg. 12 midnight (approx.)—Close Down.

HILVERSUM (Holland) 1,013 kc/s (296.1 m.); 20 kW. (7 kW. up to 4.40 p.m.). 7.55—10.10 a.m.—Programme of the Workers' Radio Society (V.A.R.A.). 7.55—Physical Culture Lesson. 8.40—Time Signal. 8.41—Pigeon Notes and Football Report. 8.45—Talk on Gardening. 9.10—Organ Recital by Johan Jong. 9.40—Divine Service Relay.

10.10—11.40—Divine Service by the Liberal Protestant Radio Society (V.P.R.O.). 11.40—4.40 p.m.—Programme of the Algemeene Vereniging Radio Omroep (A.V.R.O.). 11.40—Time Signal. 11.41—Orchestral Concert, conducted by Nico Treep, with Gramophone Interludes. 1.25—Weekly Book Talk. 1.55—Running Commentary on the International Football Match Holland v. Czechoslovakia. 3.55—Variety Music on Gramophone Records and Sports Notes. 4.40—7.40—V.A.R.A. Programme. 4.40—Time and Programme for Children. 5.30—Special Programme, relayed by America. Concert by the Philharmonic Orchestra, conducted by Hugo de Groot. Address by E. Kupers, Vice-President of the Labour Conference at Geneva. Ballet Music from "The Birds" (Diepenbrock). Old Dutch Dances Op. 46 (Röntgen). 6.0—Concert by the Philharmonic Orchestra, conducted by Hugo de Groot. In a Summer Garden (Delius). Petite Suite (Debussy). 6.25—Talk: Friedrich Schiller. 6.55—Concert (continued). Overture, "Mignon" (Thomas). Waltz, Wiener Blut (Johann Strauss). Selection from "The Jewels of the Madonna" (Wolf-Ferrari). Bacchanale from "Samson and Delilah" (Saint-Saëns). Suite No. 1, from "L'Arlésienne" (Bizet).

7.40 till Close Down—A.V.R.O. Programme. 7.40—Time Signal. 7.41—News Bulletin. 7.55—Concert by the Wireless Orchestra, conducted by Nico Treep. Soloist: Margarete Burkard-Rohr (Soprano). Overture, "A Midsummer Night's Dream" (Mendelssohn). Recitative and Aria

from "Idomeneus" (Mozart). Aria, Nehmt meinen Dank (Mozart). Lyric Suite (Grieg). Concert Aria, Unglück sel'ge, er ist auf immer mir entflohn, Op. 94 (Mendelssohn). Adagio from the First Suite of "L'Arlésienne" (Bizet). Norwegian Rhapsody, No. 3 (Svendens). 8.55—Talk by W. Vogt, Director of the A.V.R.O. 9.10—Concert by Kovacs Lajos and his Orchestra. Soloist: Bob Scholte (Songs). 9.25—Recitations. 9.45—Concert (continued). 10.0—Selections by "The Hawaiian Three." 10.20—Concert (continued). 10.50—"The Comedian Harmonists" on Gramophone Records. 11.5—Gramophone Records of Variety Music. 11.40 (approx.)—Close Down.

HUIZEN (Holland) 160 kc/s (1,875 m.); 8.5 kW. 8.10 a.m.—Religious Programme by the Christian Radio Society (N.C.R.V.). 9.10 a.m.—4.40 p.m.—Programme of the Catholic Radio Society (K.R.O.). 9.10—Concert. 9.40—Mass, relayed from Weert. 11.10—Gramophone Records of Variety Music. 11.25—Recitations. 11.40—Sextet Concert. Selection (Mackeben). The Neapolitan Flower-Girl (Lander). Schatzwälder (Strauss). Aubade printanière (Lacombe). Potpourri, An Excursion into the Land of Popular Songs (Grey). "Erinnerung an Mona Lisa" (Schebek). Fantasia on Rossini's "William Tell" (Rhode). Ballet Music from "Czar and Carpenter" (Lortzing). Waltz, Traumdeale (Fucik). Man kann sein Herz nur einmal verschenken (Buden). Berliner Jung's Marschlied (Wilczynsky).

1.10 p.m.—Talk. 1.40—Relay of the Admittance of New Members to the "Young Workers" Association. 2.40—Gramophone Records of Light Music. 3.55—Choral Concert. 4.40—7.25—N.C.R.V. Programme. 4.40—Organ Recital. 5.30—Divine Service from Velp, followed by Organ Recital. 7.25 till Close Down—K.R.O. Programme. 7.25—Talk: "The Barbarous Tribes of Southern Morocco." 7.50—Football Results. 7.55—Choral and Orchestral Concert of Dutch Music. Soloist: Theo van der Pas (Pianoforte). Introductory Talk by Willy d'Ablaing. Orchestral Selections: Old Dutch Dances (Röntgen). Choral Selections (Valerius): (a) Merck toch hoe tserk, (b) O Heer, die daar des Hemels tenten spreidt, (c) Laet sangh en spel. Variations for Orchestra (van Gilse). Pianoforte Solos: Music by Sweelinck, Sigtenhorst Meyer, Theo van der Pas and Alex Voormolen. Choral Selections: (a) Slaet op ten trommele (Valerius), (b) Psalm, No. 118 (Sweelinck). Orchestral Selections: (a) Nocturne (Landré), (b) Rhapsody, Piet Hein (van Anrooy). 10.20—Epilogue by the Choir. 10.40 (approx.)—Close Down.

KALUNDBORG (Denmark) Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW. See Copenhagen.

KATOWICE (Poland) 734 kc/s (408 m.); 16 kW. Transmits at intervals from 10.0 a.m. 8.15 p.m.—Concert of Popular Music. 10.10—Viola and Pianoforte Recital by Jeanne Konopasek-Szaleska (Pianoforte) and Mécislas Szaleski (Viola). 10.40—Weather Forecast. 11.0—Dance Music.

LAHTI (Finland) 167 kc/s (1,796 m.); 54 kW. Relay by Helsinki, 815 kc/s (368.1 m.). Transmits at intervals from 7.45 a.m. 6.35 p.m.—Pianoforte Recital. 7.45—Talk. 7.25—Song Recital. 7.45—Talk. 8.5—Orchestral Concert. 8.45—News in Finnish and Swedish. 9.15—Military Music from the Kapelli Restaurant. 10.0 (approx.)—Close Down.

LANGENBERG (Germany) Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Transmits at intervals from 7.0 a.m. (Hamburg Relay). 11.30 a.m.—See Leipzig. 12.10 p.m.—Talk: The Music of the Week. 12.20—The World on Gramophone Records—Midsummer Eve in Dalarne (Sweden). 12.45—Recital of Poems. 1.0—Concert, conducted by Eysoldt. Overture, "Die vier Menschenalter" (Lachner). First Suite from "Peer Gynt" (Grieg). Selections from "The Merry Wives of Windsor" (Nicolai). Two Songs



SUNDAY continued

(a) Red Roses (Gemünd), (b) For you alone (Geel). Waltz, Die Hydropathen (Gungl). Overture, "Das Modell" (Suppe). Gavotte, Der Weg zum Herzen (Lincke). Selections from "Die Puppenfee" (Bayer). In an interval at 1.45—Relay of the Final of the Motor-Cycle Races from the Nürnberg Track. 2.30—Shorthand Dictation. 2.50—Talk: Music for Workers. 3.15—Talk: Men and their Callings—the Confectioner. 3.35—Agricultural Talk. 3.55—Talk: The West German Landscape—the Lower Rhine. 4.30—Operetta Concert, conducted by Wolf. 5.0—"The Virgin in May"—A Visit to Kevelaer—a Place of Pilgrimage. 6.0—Water Polo Match. German Olympia Team v. West Germany, relayed from Bocholt. 6.20—Talk: German Handicrafts in Brazil. 6.40—Talk: The Value of History. 7.35—Radio Report on the Final of the Eifel Automobile Races from the Nürnberg Track (on Gramophone Records). 7.50—Sports Notes. 8.0—See Hamburg. 9.0—"Die Bergknappen" (The Miners)—Musical Play in One Act (Ignaz Umlauf). 10.20—News, Sports Notes and Miscellaneous Announcements, followed by Concert and Dance Music. 12 midnight (approx.)—Close Down.

LEIPZIG (Germany) 1,157 kc/s (259 m.); 2 kW. Relayed by Dresden, 941 kc/s (319 m.). Transmits at intervals from 6.0 a.m. 11.15 a.m.—Talk on the following Transmission. 11.30—"Brich dem Hungrigen dein Brot"—Cantata for the First Sunday after Trinity (Bach), by the Municipal and Gewandhaus Orchestra, the Choir of St. Thomas' and Soloists. 12.15 p.m.—2.0—See Hamburg. 2.0 Weather and Time, followed by Programme Summary of the Week. 2.20—Agricultural Notes. 2.30—Esperanto Lesson. 3.0—Concert by a School Orchestra, conducted by Conrad Freyse. 3.30—"Richard II"—Play (Shakespeare), arranged as a Dramatic Radio Ballad by Hans Rothe. 4.45—Talk: With Amundsen at the North Pole. 5.15—Radio Report from the Dresden-Reick Racecourse. 5.40

—Choral Concert conducted by Arno Piltzing. 6.10—Alice Fliegel reads from her own Works. 6.40—Sports Report on Gramophone Records—Part Relay of the Saxon Bowls Championship from Bautzen. 7.15—See Breslau. 8.15—"L'Impresario in angustie" (The Impresario in a Dilemma)—Opera in Two Acts (Cimarosa) (arranged by Dr. Ernst Latzko). 10.15—News, followed by Dance Music from Berlin (Witzleben). 12 midnight (approx.)—Close Down.

LYONS (France) La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW. 8.0 a.m.—Review of the Parisian Morning Press, relayed from Paris (Ecole Supérieure), 671 kc/s (447.1 m.). 12 noon—Relay from Paris (Ecole Supérieure). 7.15 p.m.—Sports Notes. 8.0—Concert relayed from Paris (Ecole Supérieure).

MADRID (Spain) Union Radio. (EAJ7). 707 kc/s (424.3 m.); 2 kW. 9.0 a.m.—10.30—Topical Review. 12.30 p.m.—Municipal Band Concert from the Retiro. 3.0—4.30—Chimes, Time, Theatre Notes and Concert. 8.0—Chimes and Request Gramophone Records. 9.30—10.30—Interval. 10.30—Chimes, Time and Guitar Recital, followed by Song Recital by Aurelio Zori and Violin Recital by Trude Ambruster-Blecher. 1.0 a.m. (Monday)—Chimes and Close Down.

MILAN (Italy) Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW. See Turin.

MORAVSKÁ-OSTRAVA (Czechoslovakia) 1,137 kc/s (263.8 m.); 11 kW. Transmits at intervals from 7.0 a.m. 6.0 p.m.—See Prague. 7.0—Brass Band Concert of Popular Czech Music. 7.45—See Prague. 8.5—See Bratislava. 10.0—See Prague. 10.20—Programme Announcements and Theatre Notes. 10.25—See Prague.

MOSCOW (Russia) Trades Union. 230.1 kc/s (1,304 m.); 100 kW.

Transmits at intervals from 5.0 a.m. 6.30 p.m.—Proletarian Radio Journal. 7.15—Programme for Young Communists. 8.0—Talk in German and English: The Foreign Policy of the Soviet Union. 9.55—Time Signal. 10.0—Weather Forecast.

MUNICH (Germany) 563 kc/s (533 m.); 1.5 kW. Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.), and Nürnberg, 1,256 kc/s (239 m.). 10.0 a.m.—Catholic Service. 10.45—Chimes from Our Lady's Church. 11.0—Open Air Concert of Religious and Folk Music, relayed from Ansbach. The Bavarian Evangelical Trombone Choir (One Thousand Players), conducted by Martin Schlee. 12 noon (approx.)—Orchestral Concert, conducted by Erich Kloss. 1.5 p.m.—Time Signal, Weather Forecast and Programme Announcements. 1.15 (from Nürnberg)—Agricultural Talk. 1.35—Gramophone Concert of Classical Music. 2.30—Chess for Beginners. 3.15—Programme for Children. 3.35—A Sketch (Dr. Stenzel). 4.0—See Frankfurt. 5.30—"The Magistrate of Tegernsee"—Upper Bavarian Peasant Play in Four Acts with Music (Goetfler). 7.0—Weather Report and Sports Notes. 7.10—Bavarian Literature. Gertrud le Fort and Catarina Godwin read from their own Works. Reading of Poems by Ruth Schumann and Introductory Talk by Leo Weismantel. 7.55—Concert by the Station Orchestra, conducted by Karl List. Soloists: Käte Lange-Schubert (Soprano), and Adolf Bruno Winkler (Violin). Overture, "Fidelio" (Beethoven). Symphonic Poem, Viola (Sandberger). Concerto in E for Violin and Orchestra (Vieuxtemps). Ballad for Soprano and Orchestra: Die junge Nonne (Schubert-Weingartner). Allegretto grazioso from Symphony No. 6 (Tchaikovsky). Ballet Intermezzo from "The Birds" (Braunfels). Three Songs for Soprano and Orchestra (Marx): (a) Erinnerung, (b) Maienblüten, (c) Sommerlied. Procession from "Die Glücks-

ritter" (Schmidt). Rakoczy March (Berlioz). 9.30—"Greatness—Strength—Renewal"—a Radio Sequence about Goethe (Fbblinghaus). 10.20—Time Signal, Weather Forecast, News Bulletin and Sports Notes. 10.45—Dance Music from Berlin (Witzleben). 12 midnight (approx.)—Close Down.

OSLO (Norway) Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by Fredrikstad, 316 kc/s (367.6 m.); Hamar, 536 kc/s (560 m.); Norddalen, 671 kc/s (447.1 m.); Porsgrund, 662 kc/s (453.2 m.), and Rykjan, 671 kc/s (447.1 m.). 10.50 a.m.—Chimes and Service from the Garrison Church. 1.0 p.m.—Concert arranged by the Fredrikstad Musical Society. 5.0—Orchestral Concert from the Cecil Restaurant. 6.0—Talk: Jaeren and the Jaeren Railway. 6.30—Violin Recital. Variations on a Theme for Violin and Pianoforte (Schubert). Die Biene (Schubert). 7.0—Parliamentary Review. 7.15—Weather and News. 7.30—Reading. 8.0—Time Signal. 8.2—"The St. Matthew Passion" (Schütz), relayed from Stord. 9.15—Talk by M. Christensen. 9.40—Weather and News. 10.0—Topical Talk. 10.15—Orchestral Concert, conducted by Hugo Kramm. Invitation to the Dance ("Weber-Berlioz"). Selection from "A Waltz Dream" (Oscar Straus). Legend (Melartin). Crescendo (Per Lasson). Potpourri of Marches (Morena). 11.0—Dance Music. 12 midnight (approx.)—Close Down.

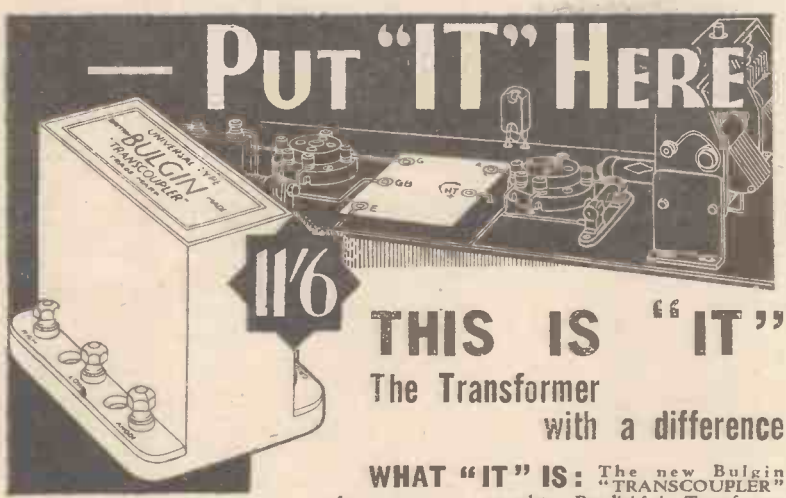
PALERMO (Italy) Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW. 10.40 a.m.—Sacred Music. 11.5—Agricultural Notes. 12.45 p.m.—Giornale Radio. 1.0—2.0—Concert of Light Music. In the interval at 1.30—Time Signal, Announcements and Weather Forecast. 5.30—6.30—Concert of Light Music and Dance Music. In the intervals, Sports Notes. 8.0—Announcements and Giornale Radio. 8.20—Sports Notes. 8.25—8.45—Light Music on Gramophone Records. In the interval at 8.30—Time Signal and Announcements.

8.45—Symphony Concert, conducted by Armando La Rosa Parodi. First Symphony in C (Beethoven). Talk on Art. Omaggio a Vivaldi (La Rosa Parodi). Iberia (Debussy). Overture, Easter (Rimsky-Korsakov). Theatre Notes. After the Concert, Programme of Songs. 10.55—News Bulletin and Close Down.

PARIS (France) Eiffel Tower. (FLE). 207.5 kc/s (1,445.7 m.); 13 kW. Time Signals (on 2,650 metres) at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals). 1.0 p.m.—News Bulletin. 1.10—Weather Report.

1.20—Symphony Concert, conducted by Edouard Flament. Soloist: M. Charon (Violin). Petite Suite (Coleridge-Taylor). L'Elfe dans la plaine (Brusselmanns). Sur la Montagne (Goublier). Liebeslied (Liszt-Salabert). Le gai postillon (Flament). Violin Solo. Paysages flamands (Taeye-Delsaux). Mazurka, La Zingara (Ganne). Waltz, Love Nest (Waldteufel). 6.45—Programme for Children. 7.15—Le Journal Parlé. 8.20—Weather Report. 8.30—Gramophone Concert of Variety Music. 10.0 (approx.)—Close Down.

PARIS (France) Poste Parisien. 914 kc/s (328.2 m.); 60 kW. 12 noon—Gramophone Records, News and Announcements. 12.15 p.m.—Concert of Popular Music on Gramophone Records. 1.45—News and Announcements. 2.0—7.0—Interval. 7.0—Popular Music on Gramophone Records, News and Announcements. 7.30—Sponsored Gramophone Concert. 8.30—Gramophone Records, Talk and News. 8.45—Vocal and Orchestral Concert. Prelude to "Lohengrin" (Wagner). Hungarian Dance, No. 4 (Brahms). Peer Gynt Suite No. 2 (Grieg). Orchestral Suite from "The Fair Maid of Perth" (Bizet). Ballet Music from "Sylvia" (Delibes). Nocturne from the First Orchestral Suite (Massenet). Waltz, Donauweibchen (Johann Strauss). Tournoi (Boëllmann). Selections from the Ballet Music from "Henry VIII" (Saint-Saëns). 10.45—News Bulletin. 10.50 (approx.)—Close Down.



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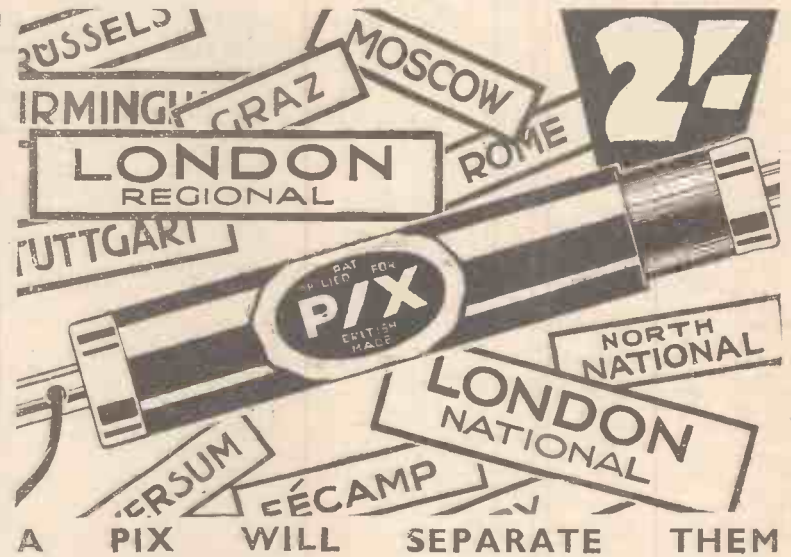
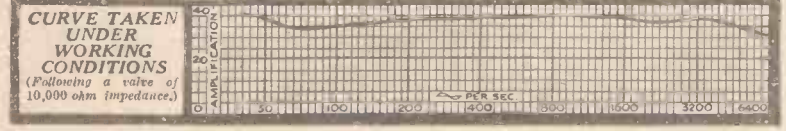
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SUNDAY continued

**PARIS (France)**  
Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.

7.45 a.m.—Gramophone Records of Light Music. 8.0—News, Weather and Press Review. 8.30—Physical Culture Lesson. 10.20—Book-keeping Lesson. 10.40—Spanish Lesson. 12 noon—Religious Address by the Reverend Father Lhande. 12.20 p.m.—Sacred Music for Choir. 12.30—Bilboquet. 12.45—Weather, News and Press Review. 1.0—Gramophone Concert. Selections from "Cavalleria rusticana" (Mascagni). Popular Russian Songs (Liadov). C'est l'amour from "Les Saltimbanques" (Ganne). Waltz (Lehar). Menina e Moça (Frazao). Tango. Te cambiaron la Pinta (Tabanillo). 1.30—Variety Concert on Gramophone Records. 2.0—Concert of Decca Records. 5.45—Gramophone Concert of Variety Music. 6.45—Concert by the Paris Alhambra Orchestra. 7.45—Radio Paris Circus. 8.15—News, Sports Notes, Press Review and Weather. 8.45—Programme of Parisian Poems, with the Collaboration of M. Duard, Marie Cazaux, M. Seigneur and M. Girard. Le marche aux fleurs (Loving). Déménagement (Gill). Le p'tit mitron (Boukay). Les quarante chaises (Ponchon). Le Chef de St. Denis (Fort). La pêche à la ligne (Richepin). Le quatorze juillet (Donnay). Foire aux Pains d'épice (Ponchon). Du mourron pour les petits oiseaux (Richepin). Les courses (Loving). L'infaisible (Nadaud). Sainte Bohème (Frémine). C'est une chambre dans Paris (Fort). Qui ne travaille du chapeau (Duard). Têtes et Chapeaux (Loving). Ode à Montmartre (Masson). Les Halles (Monny). 9.15—Press Review and News. 9.30—Concert of Light Music.

**PITTSBURGH (U.S.A.)**  
Westinghouse Electric (KDKA). 980 kc/s (306 m.); 25 kW.

Transmits at intervals from 7.55 p.m. 9.0 p.m.—Songs of Home, from *New York*. 9.30—Programme to be announced. 10.0—Shady-side Presbyterian Church Services. 11.0—Time Signal. 11.1—Temperature Report, Electric League. 11.2—Weather Report. 11.5—Teaberry Sports Review. 11.10—Press News Reeler. 11.15—Westinghouse Concert. 11.45—Programme to be announced. 11.50—Time Signal. 12 midnight—KDKA Players. 12.15 a.m. (Monday)—Pictures on the Pianoforte by Don Lucas. 12.30—3.45—*New York Relay*. 12.30—Three Bakers. 1.0—McCravy Brothers. 1.15—S.R.O. 2.0—Enna Jettick Melodies. 2.15—Buyuk Stag Party. 2.45—Making the Movies. 3.15—The Old Singing Master. 3.45—War Stories by Walter Myers. 4.0—Time Signal. 4.1—Teaberry Sport Review. 4.11—Temperature Report, Electric League. 4.12—Weather Report. 4.15—Press Last Minute News. 4.20—Alexander Roy (Tenor). 4.30—Ted Cook and his Orchestra, from *New York*. 5.0—Time and Goodnight.

**PRAGUE (Czechoslovakia)**

614 kc/s (488.6 m.); 120 kW. Transmits at intervals from 6.15 a.m. 11.0 a.m.—Quartet Concert of Czech Music. 12 noon—Time and Chimes. 12.5 p.m.—Monthly Review. 1.0—Gramophone Records of Light Music. 1.30—Agricultural Report and Talk. 2.15—Talk on Foreign Affairs. 4.0—Programme to be announced. 6.0—German Transmission: Orchestral Concert, conducted by Dr. Svoboda. News in the interval. 7.0—See *Movavská-Ostrava*. 7.45—Talk. 8.0—Sports Notes. 8.5—See *Bratislava*. 9.0 (in the interval)—Time Signal. 10.0—Time, News and Sports Notes. 10.20—Announcements. 10.25—Concert by a Jazz Orchestra.

**RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)**

743 kc/s (403 m.); 25 kW; Lausanne, 442 kc/s (680 m.); and Geneva, 395 kc/s (760 m.). 9.45 a.m. (from Lausanne)—Protestant Service. 11.0 (from Geneva)—Light Music on Gramophone Records. 12.30 p.m.—Weather and News Bulletin. 12.40—Orchestral Concert. 2.0—6.0—Interval. 6.0 (from Geneva)—Popular Music on Gramophone Records. 7.0 (from Geneva)—Catholic Address. 7.30 (from Lausanne)—Variety Music on Gramophone Records. 8.0 (from Lausanne)—Concert of Music for Hawaiian Guitar and Spanish Guitar. 8.15—Concert by

the Station Orchestra. 9.0 (from Geneva)—Humorous Anecdotes told by M. Mosse. 9.20—Concert of Light Music by the Station Orchestra. 10.0—Weather Forecast and News Bulletin. 10.15 (approx.)—Close Down.

**ROME (Italy)**

Ente Italiano Audizioni Radiofoniche (IRO). 680 kc/s (441 m.); 50 kW. Relayed by Naples, 941 kc/s (319 m.) and 2RO, 6,976 kc/s (43 m.). 9.40 a.m.—News Bulletin. 9.45—Agricultural Notes. 10.0—Religious Programme. 10.15—Sacred Music. 10.45—11.0—Sports Notes and Amusement Guide. 12.30—2.0 p.m.—Concert of Light Music. 1.30 (in an interval)—Time and Announcements. 4.15 (Naples)—Programme for Children, followed by Weather and Sports Notes. 4.45—Sports Notes. 5.0—6.15—Vocal and Instrumental Concert. Sports Notes in the intervals. 7.10 (Naples)—Shipping and Sports Notes. 7.15—Football Notes, Announcements and News. 8.0—Time, Announcements and Gramophone Records of Variety Music. 8.30—Sports Notes. 8.45—"Les Cloches de Corneville"—Opérta in Three Acts (Planquette). In the intervals: Talk and Topical Review. News after the Programme.

**SCHENECTADY (U.S.A.)**

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 1.0 p.m. 9.0 p.m.—5.30 a.m. (Monday)—*New York Relay*. 9.0 p.m.—Ident Programme. 9.15—Musical Programme. 10.0—Pastels. 10.30—General Electric Circle. 11.0—Catholic Hour. 11.30—Our American Schools. 12 midnight—Slow River. 12.30 a.m. (Monday)—Orchestral Gems. 1.0—Chase and Sanborn Programme. 2.0—Our Government. 2.15—American Album of Familiar Music. 2.45—Musical Programme. 3.0—Musings. 3.15—Schaeffer Lifetime Revue. 3.30—L'Heure Exquise. 3.45—Sunday at Seth Parker's. 4.15—Russ Columbo (Baritone). 4.30—Jesse Crawford (Organist). 5.0—Larry Funk's Orchestra. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

**SCHWEIZERISCHER LANDESENDER (BEROMÜNSTER) (Switzerland)**

653 kc/s (459 m.); 60 kW; Basle, 1,229 kc/s (244.1 m.); and Berne, 1,220 kc/s (246 m.). 10.0 a.m. (from Zürich)—Catholic Service. 10.45 (from Zürich)—Concert of Chamber Music. 12 noon—Concert by the Station Orchestra. 12.28 p.m.—Time-Signal and Weather Report. 12.30—News Bulletin. 12.40—Orchestral Concert (contd.). 1.30 (from Zürich)—Round the World in Poetry and Song—Recitations by Herbert Grünbaum, interspersed with Gramophone Records. 2.15—2.45—Interval. 2.45 (from Basle)—Talk on the Flight of the Lockheed Speedplane, piloted by Walter Mittelholzer. Talk given from the Basle Aerodrome by Werner Hausmann. (In the case of unfavourable Weather Conditions, the flight will be postponed till June 5.) 5.0 (from Zürich)—Swiss Authors' Programme. 5.30—Light Music on Gramophone Records. 7.0—Time Signal, Weather Report, Sports Notes and Popular Music on Gramophone Records. 7.30 (from Zürich)—Talk on Mandoline Music by Just Baumgartner, with Japanese Mandoline Selections on Gramophone Records. 8.0 (from Zürich)—Recital of Fessin Songs and Mandoline Music, by the Ticino Choir and Part of the Carmen Mandoline Orchestra, conducted by Oskar Werenbold. 8.50—Concert by the Station Orchestra, conducted by E. Gilbert. 9.30—Weather Forecast and News Bulletin. 9.45—Concert of Light Music by the Station Orchestra, conducted by Erwin Gilbert. 10.15—Sports Notes, and Close Down.

**STOCKHOLM (Sweden)**

Radiotjänst. (SASA). 689 kc/s (436 m.); 55 kW. Relayed by Boden, 244 kc/s (1,229.5 m.); Göteborg, 932 kc/s (322 m.); Hörby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Östersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). 10.0 a.m.—Programme for Young People. 10.30—Workers' Programme. 11.0 (from Göteborg)—Divine Service.

12.45 p.m.—Weather Report. 12.55—Time Signal.

1.15—Running Commentary on the Relay Races, arranged by the Svenska Dagbladet. 2.30—Interval. 3.0—Choral Concert, relayed from Östersund. 3.30—Report of the Horse Races at Ulriksdal. 4.30—Programme for Children. 5.0 (from Göteborg)—Concert of Chamber Music, conducted by Tor Mann. 6.0—Evening Service. 7.15—Weather Forecast, News Bulletin and Sports Notes. 7.35 (from Sundsvall)—Talk on Fashions. 8.0—Concert by the Station Orchestra. Suite miniature (Cui). Serenade (Glazounov). Selection from "Scheherazade" (Rimsky-Korsakov). Slavonic March (Tchaikovsky). 8.45—Irish Programme "The Ringing of the Moon"—Play (Lady Gregory). Irish Rhapsody No. 1 (Stanford). Irish Airs (Larchet). "The Workhouse Ward"—Play (Lady Gregory). 9.45—Weather and News. 10.0—Concert of Light Music by a String Orchestra, with Soloists. 11.0 (approx.)—Close Down.

**STRASBOURG (France)**

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW. 10.45 a.m.—Protestant Service from Metz. 11.30—Catholic Service. 12 noon—Gramophone Records of Popular Music. 12.45 p.m.—News in French and German. 1.0—Time Signal. 1.2—Gramophone Concert of Light Music. 2.0—Talk in French: The Mothers' Festival. 2.15—Dance Music on Gramophone Records. 3.15—3.45—Interval. 3.45—Dance Music (continued). 4.45—Dialogue on Rationalisation. 5.0—Orchestral Concert. 6.0—Medical Talk in French. 6.15—Sports Results. 6.20—Sports Talk in French. 6.30—Orchestral Concert. Overture, "William Tell" (Rossini). Suite, Bouton d'or (Pierne). Selection from "The Flying Dutchman" (Wagner). Zorahayde (Svendson). Fête Polonoise (Chabrier). 7.30—Time Signal. 7.32—News in French and German. 7.45—Orchestral Concert. Marche russe (Ganne). Kaiserwalzer (Joh. Strauss). Overture, "Les Dragons de Villars" (Maillart). Humoresque (Dvorak). Selection from "A Masked Ball" (Verdi). March from "Casanova" (Lincke). 8.30—Alsation Evening—Literary and Musical Selections, with One-Act Comedy. 10.30—Dance Music from the Savoy. 12 midnight (approx.)—Close Down.

**STUTTGART (MÜHLACKER) (Germany)**

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by Freiburg, 527 kc/s (570 m.). Transmits at intervals from 6.15 a.m. (Hamburg Relay). 10.40 a.m.—Evangelical Service. 11.30—See Leipzig. 12 noon (from Karlsruhe)—Gala Programme on the occasion of the Fortieth Anniversary of the Baden Branch of the German Workers' Choral Society. The Orchestra of the Baden Landestheater, Choirs and Soloists. Fourth and Fifth Parts from the Cantata "Befreiung". Op. 80 (R. Kahn), for Tenor Solo, Mixed Choir, Orchestra and Organ. Selections from "The Mastersingers" (Wagner). 1.0 p.m.—Radio Report from the Hockenheim Race Track on the Club Championship of the South-West German Branch of the German Motor-Cyclists' Association. 1.20—Dajos Bela and his Orchestra, on Gramophone Records. 2.0 (from Karlsruhe)—Agricultural Talk. 2.30—Choral Concert. 3.0—Programme for Children. 4.0—See Frankfurt. 6.0 (from Mannheim)—Authors' Programme—Walter Friedemann. 6.25—Old-Fashioned Songs—Recital by Eberhard Schrempf. 6.50—Sports Notes. 7.10—Reading (Otto Boyer). 7.30—Concert by the Zagreb String Quartet. Quartet in D Minor, Op. 10, No. 2 (Boccherini). String Quartet, Op. 17 (Josef Stolz-Slavensky). Quartet in A (Giere). 8.20—"Happy End"—a Variety Programme. 9.40—Concert by the Stuttgart Philharmonic Orchestra, relayed from the Kursaal, Cannstatt. Conductor: Gustav Görlich. Waltz, Frühlingskinder (Waldeufel). Lehar Opérta Potpourri (Hrubby). Waltz from "The Rose of Stamboul" (Fall). March from "The Girl in the Taxi" (Gilbert). 10.20—Time, Weather; News and Sports Notes. 10.45—Dance Music from Hamburg.

**TOULOUSE (France)**

Radiophonie du Midi. 779 kc/s (385 m.); 8 kW. 12.30 p.m.—Musical Selections and Catholic Address. 1.0—Solo Selections. 1.15—Opera Music. 1.30—Agricultural Report. 1.45—Musical Selections and Protestant Address. 5.0—Esperanto Lesson. 5.15—Military Music. 5.30—News Bulletin. 5.45—Redemption, for Orchestra (C. Franck). 6.0—Songs from (a) "The Pearl Fishers" (Bizet), (b) "La Basoche" (Messager), (c) "Romeo and Juliet" (Gounod) and (d) "Lakmé" (Debiles). 6.15—Accordion Solos. 6.30—News Bulletin. 6.35 (approx.)—Orchestral Selections from (a) "L'Enfant prodigue" (Debussy), (b) "Carmen" (Bizet), and (c) "I Pagliacci" (Leoncavallo). 7.0—Concert. Minuet from the Fourth Quartet (Schubert). Finale from a Quartet (Haydn). Variations on a Theme for Two Pianofortes (Beethoven). Sound Film Music. 7.30—News and Horse Racing Results. 7.45—Orchestral Selections. 8.15—Songs from "Carmen" (Bizet), and Orchestral Concert. 10.15—Dance Music. 10.30—News Bulletin. 10.45—Orchestral Selections from (a) "The Marriage of Figaro" (Mozart), (b) "The Damnation of Faust" (Berlioz). 11.0—Chansonnettes. 11.15—North African News. 11.30—Orchestral Selections. 11.45—Songs from (a) "The Magic Flute" (Mozart), (b) "Il Trovatore" (Verdi), and (c) "Lohengrin" (Wagner). 12 midnight—Weather, Announcements and Close Down.

**TRIESTE (Italy)**

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW. 9.40 a.m.—12.20 p.m.—See Turin. 12.20—German Lesson on Gramophone Records. 12.30—7.5—See Turin. 7.5—Quintet Concert. Selection (Winter). Bib and Bob (Demaret). Scugnizzo (Allegria). Lolita (Buzzi-Peccia). Selection from "Il vassallo" (Smareglia). Two hearts in One (Richter). Parigi, mia Parigi (Serra). 8.0 till Close Down—See Turin.

**TURIN (Italy)**

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by Milan, 905 kc/s (331.5 m.), and Genoa, 959 kc/s (312.8 m.), and Florence, 599 kc/s (500.8 m.). 9.40 a.m.—Giornale Radio. 9.55—Chimes and Missa cantata from the Cathedral of San Giusto. 11.0—Religious Programme. 11.20—Agricultural Talk. 12.30 p.m.—Variety Concert. In the interval at 1.0—Time and Announcements. 4.0—Sports Notes and Football Report. 4.10—Sports Notes and Notes on Art. 6.15—Giornale Radio, Sports Notes, and Football Report. 6.25—Topical Review. 7.0—Football Report. 7.5—Announcements. 7.10—Selections of Light Music. 7.30—Time and Announcements, followed by Gramophone Records of Variety Music. 8.0—Giornale Radio, and Weather. 8.15—Gramophone Records of Variety Music. 8.30—"Tannhäuser"—Opera in Three Acts (Wagner). In the interval: Talk—Merezkovsky—Theatre Notes and Giornale Radio. News after the Programme.

**VIENNA (Austria)**

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by Graz, 852 kc/s (352.1 m.); Innsbruck, 1,058 kc/s (283 m.); Klagenfurt, 662 kc/s (453.2 m.); Linz, 1,220 kc/s (246 m.); and Salzburg, 1,373 kc/s (218 m.). 10.0 a.m.—Pianoforte and Organ Recital by Franz Schütz. 10.30—Talk: The Fourth Dimension. 11.0—Elgar Concert by the Vienna Symphony Orchestra, on the Composer's Seventy-fifth Birthday. Overture, Cockaigne. Enigma Variations. March, Pomp and Circumstance. 11.55—Concert by the Vienna Symphony Orchestra conducted by Max Schönherr. 1.30 p.m.—Concert by the Mandoline Orchestra of the Austrian Workers' Musical Society. Conductor: Dr. Leopold Bracharz. Overture, "Poet and Peasant" (Suppé). Spring Song (Mendelssohn). Serenata Lombarda (Grazioli-Walter). Im Zigeunerlager (Sperber). Symphonische Suite (Skocic). Waltz, Frühlingsstimmen (Johann Strauss).

3.0 p.m.—Time and Announcements. 3.5—Documents of the Age: The Theatre—Readings from the Works of Max Grube, Helene Richter, H. Herald and Friedrich Rosenthal. 3.30—Trio in D Minor for Pianoforte, Violin and Saxophone (Röhring). 4.0—Song Recital by Hanna Schwarz. 4.30—Higher Grade English. 4.50—Orchestral Concert with Cornet Solos by Gentile Colarocco. March, Allzeit bereit! (Blon). Overture "Die erste Falte" (Leschetitzky). Potpourri, Musikalische Neckereien (Hermann Worch). Waltz, Concordia (Lehar). Five O'Clock Tea with Robert Stolz (Dostal). Spiegellied (Lehar). Cornet Solos: (a) Aria from "Rigoletto" (Verdi), (b) Rondo from "Lucia di Lammermoor" (Donizetti), (c) Romance (Colarocco). Overture, "Flotte Bursche" (Suppé). Tales from Strauss (Korngold). 6.30—Talk: Primeval Forests. 7.0—Lenz Grabner reads from his own Works. 7.30—Pianoforte Recital by Dr. Paul Weingarten. Phantasia-Sonate in G Major, Op. 78 (Schubert). 7.55—Time and Announcements. 8.5—"Poverty"—a Play (Anton Wildgans). 10.15—Announcements. 10.30—Concert by the "Prado" Orchestra conducted by Georges Gladivinsky, relayed from the Café Westminster.

**WARSAW (Poland)**

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW. 10.0 a.m.—Divine Service relayed from Lubow. 11.35—Religious Talk. 11.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, Cracow. 12.5 p.m.—Programme Announcements. 12.10—Weather Report. 12.15—Symphony Concert by the Warsaw Philharmonic Orchestra conducted by J. Oziminsky. Soloist: J. Dvorakovsky (Violin). Karlovicz Programme. Introduction and Intermezzo from "The White Pigeon" Violin Concerto. Three Secular Songs. 2.0—Agricultural Talk. 2.20—Gramophone Records of Dance Music. 2.40—Talk on Bee-keeping. 3.0—Springtime in Songs—Programme by the Village Youth Movement. 3.15—Military Programme. 3.55—Programme for Children. 4.20—Light Music on Gramophone Records. 4.40—Reading, relayed from Lubow. 4.55—Topical Talk. 5.5—Popular Music on Gramophone Records. 5.15—Talk on Astronomy. 5.30—Useful Hints. 5.45—Concert by a Wind Instrument Orchestra, conducted by A. Bromke Soloist: T. Luczaj (Bass). Overture, "Poet and Peasant" (Suppé). Waltz, Heurescous Routes (Waldeufel). Ballet Scene (Baudoveck). Gavotte (Czibulka). Songs: (a) The Midnight Review (Glinka), (b) Flies (Greve-Sobolevska). Selection from "Carmen" (Bizet). Romantic Overture (Kéler-Béla). Songs: (a) Air (Keneman), (b) Ballad (Rubinstein). Confetti (Cymerman). Obertus (Osmansky). March, The Star-spangled Banner (Souza). News in the interval. 7.0—Miscellaneous Items. 7.25—Popular Music on Gramophone Records. 7.40—Programme Announcements. 7.45—Reading: "The Proposal" (Tchekov). 8.15—Concert by the Station Orchestra, conducted by Josef Oziminsky. Soloist: Mme. Dvornar-Zapolska (Soprano). Overture, "Raymond" (Thomas). Waltz from "Faust" (Gounod). The Musical Box (Mikolaievsky). Introduction and Persian Dance from "Khovantchina" (Moussorgsky). Soprano Solos: (a) Chant hindu from "Sadko" (Rimsky-Korsakov). (b) Nightingale's Song (Massé). Selection from the Suite, Grandmother's Album (Rogovsky). Minuet (Paderevsky). Soprano Solos: (a) Peaceful Night (Maszynsky), (b) Harcarolle (Szopsky). Hungarian Rhapsody No. 2 (Liszt). Soprano Solo: Czardas from "Die Fledermaus" (Johann Strauss). Waltz from "Arabian Nights" (Johann Strauss). Procession of the Gnomes (Blon). Rocco (Schutt). March from "The Bartered Bride" (Smctana-Pétras). 9.55—Reading: "The Boar Hunt" (Weyssenhoff). 10.10—Viola and Pianoforte Recital by M. Szalesky and Mme. Konopasek-Szaleska. Arioso (Handel). Romance (Mozart). Adagio and Allegro, Op. 70 (Schumann). Réverie (Hubay). Esquisse (de Bock). Allegretto (Honegger). Intermezzo (Bax). 10.40—Weather and Police Notes. 10.45—Sports Notes. 10.55—Interval. 11.0—Dance Music. 12 midnight (approx.)—Close Down.



# MONDAY (May 30)

## PRINCIPAL EVENTS

### SYMPHONY CONCERTS

8.0 p.m. Brussels No. 1: Symphony No. 1 (Beethoven), etc.  
9.0 " All Italian Stations.

### CONCERTS (Vocal and Instrumental)

12.30 p.m. Radio-Paris: Massenet programme (gramophone).  
7.20 " Hamburg: Grieg programme.  
7.30 " Berlin, Königs Wusterhausen (8.0 p.m.): Operatic.  
7.55 " Munich: Chamber Orchestra.  
8.0 " Budapest: Choral and orchestral.  
8.20 " Breslau: Request Concert.  
8.30 " Copenhagen: Gounod programme.  
9.0 " Langenberg: Walter Braunfels (Pianoforte) and Orchestra.  
9.10 " Berlin (Witzleben): Relay from Berlin Castle.

### OPERAS AND OPERETTAS

7.30 p.m. Vienna: "Der Freischütz" (Weber) from State Opera House.  
8.0 " Frankfurt, Stuttgart: Chamber operas from Darmstadt Theatre.  
8.0 " Schweizerischer Landessender: "The Departure" (D'Albert).  
8.25 " Warsaw: "La Sonnambula" (Bellini).

### CHAMBER MUSIC

7.0 p.m. Bucharest: String Quartets.  
8.20 " Heilsberg: Old Italian Music.

### RECITALS

9.30 p.m. Prague: Erwin Schulhoff.  
10.0 " Stockholm: Organ and Cello.  
10.15 " Oslo: Cello, Song, Pianoforte.

### PLAY

8.0 p.m. Radio-Paris: "La Bonne Mère" (Florian).

### DANCE MUSIC

10.30 p.m. Berlin, Königs Wusterhausen.

### The Speed of the Times

The chamber-opera of that name, with text by David Weber, and music by Eisler, two foremost representatives of young Germany's art, is to be broadcast from Frankfurt station this evening. Composed specially for wireless performance, it requires only a modest orchestra and a small team of singers—solo and chorus—with the station announcer



Photo: Rosenbauer, Frankfurt

Ernst Schoen

take a big part. He begins by inviting listeners to hear what the artists have to say on the subject, and then calls on them in turn to air their views, warning them that they must have something new and striking to tell the unseen audience. The burden of the chorus's part is that the speed of the times is a costly business, from which only the wealthiest wrest any pleasure. The moral is pointed out at the end by the announcer, though he adds that it should be plain enough—"nor rhyme nor reason can we see in all this speed we have invented, when we have no time to use it." Two other short works make up the programme, both of the order which lends itself well to broadcasting. It has long been clear that the possibilities of collaboration between the stage and the wireless studio are limited by the extent to which the music alone of ballet or opera makes good listening, apart from its context. Plots must be simple, *dramatis personae* few, and the piece itself not too long. With all that in view, the Frankfurt station has been collaborating with the Hessische Landestheater at Darmstadt, and it is from its small stage that the three pieces are to be relayed this

evening: Purcell's *Dido and Aeneas*, an opera in which there is but little action, lends itself well to such treatment, and the third is a *Kleine Tagesserenade*, as he calls it, a lively radio cantata in jazz style, by Ernst Schoen. As Dramatic Director of the Frankfurt studio, he has charge of the whole production, and has invited listeners in the theatrical and wireless worlds to give him their criticisms of what is so far only in its experimental stages.

### A Sleep-walking Heroine

A prime favourite in the palmy days of Italian opera last century, *La Sonnambula* is but seldom given now. The principal part demands florid singing of a style which is but little cultivated in these days, and it is usually only on behalf of a distinguished *prima donna* that the work is revived, as it has recently been by more than one Continental theatre. This evening it is to be relayed by WARSAW. The story is a very slight one, and the characters are simple country people, whose lives would have run a placid course had it not been for the heroine's habit of walking in her sleep. In the First Act, she makes her way unexpectedly, while sound asleep, into a room in the village inn which is already occupied. Its rightful owner tactfully withdraws, but the incident is noised abroad and rouses the fierce jealousy of the lady's betrothed. Doubts are



Bellini

eventually set at rest by her appearance in the Second Act, once more in her sleep, and by her walking safely over a narrow plank bridge above a stream. As goes without saying in an opera of that era, her being asleep does not prevent her indulging in the most brilliant singing; the whole opera, indeed, is full of melody of the order of which those old masters apparently had an inexhaustible fund.

### NATIONAL

	kc/s	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 a.m.—The Daily Service.  
10.30—Time Signal (Greenwich), Shipping Forecast.  
10.45—11.0—"Off the Shelf"—V.  
12 noon—Daphne Bettger (Soprano). The New Harmonic Trio.  
12.45 p.m.—The Commodore Grand Orchestra.  
2.0—Gramophone Records.  
2.30—3.0—World History. Mr. J. A. White: "Empires, Movements and Nations—VI, United States of America."  
3.25—French Dialogue. Mademoiselle Camille Viere and Monsieur E. M. Stephan.  
3.45—A Sonata Recital. David Wise (Violin), Mabel Nutland (Pianoforte).  
4.15—Moscetto and his Orchestra.  
5.15 (Daventry)—The Children's Hour.  
5.15 (London and Northern)—The B.B.C. Dance Orchestra.  
6.0—"The First News."  
6.30—Time Signal (Greenwich).  
6.30—The Foundations of Music. Schumann's Songs, sung by Anne Thursfield (Soprano).  
6.50—"New Books." Miss V. Sackville-West.  
7.10—7.25—Topical Talk.  
7.30—"Music, Old and New"—VII. Mr. Victor Hely-Hutchinson.  
8.0—The Royal Command Performance. Sherman Fisher's Sixteen Palladium Girls: A Combined Speciality Ensemble: Billy Danvers, Comedian; Cicely Courtneidge; Bud Flanagan and Chesney Allen, cross-talk Comedians; Eugene's Magyar String Orchestra; Jack Buchanan; Will Fyffe.  
9.0—Time Signal (Greenwich).  
9.20—"The Rungs of the Ladder"—IV. The Rt. Hon. Sir Eric Geddes.  
9.45—Royal Command Performance (continued). G. S. Melvin; Jasper Maskelyne, Illusionist; George Clarke and Madge Aubrey; Naughton and Gold; Jack Hylton and his Band; Grand Finale. Leonard Henry sees it through.  
10.45—"The Second News."  
11.5—12 midnight—Dance Music.

### REGIONAL

	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 (London and Northern)—The Daily Service.  
10.30—11.0 (London and Northern)—Daventry National Programme.  
11.30—12 noon (London)—Experimental Television Transmission (Baird Process).  
12 noon—Ernest Parsons and his Orchestra.  
1.0 p.m.—Reginald Dixon at the Organ.  
1.45—3.0—The Midland Studio Orchestra. Gladys Jones (Contralto).  
3.45 (London and Northern)—A Sonata Recital. David Wise (Violin), Mabel Nutland (Pianoforte).  
4.15 (London and Northern)—(Daventry National Programme).  
5.15—The Children's Hour.  
6.0—"The First News."  
6.30 (Northern and London)—A Brass Band Concert. Douglas Kirke (Bass). The Bentley Colliery Band.  
6.30 (Midland)—The Studio Orchestra. Maurice Milbourne (Tenor).  
7.45—Violin Recital by Melsa.  
8.15 (London and Midland)—A Recital of American Dance Records, by Christopher Stone.  
8.15 (Northern)—Pursall and Stansbury (Composer Entertainers).  
8.30 (Northern)—Mr. R. Stephen Williams: "Holidaying with our Ancestors."  
9.0—"The Second News."  
9.20 (Northern and London)—An Orchestral Concert. Henry Holst (Violin). The Northern Studio Orchestra (Augmented) (Leader, John Bridge), conducted by T. H. Morrison: Overture, The Bartered Bride (Smetana). Henry Holst and Orchestra: Concerto in D (Tchaikovsky). Orchestra: Ballet d'Ascanio (Saint-Saens).  
9.20 (Midland)—A Military Band Programme. The Band of 1st Bn. The South Staffordshire Regiment.  
10.35—11.0 (Midland)—As London.  
10.35—12 midnight (London and Northern)—Dance Music.

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

**ALGIERS (N. Africa)**  
825.3 kc/s (363.3 m.); 13 kW.  
Transmits at intervals from 12.30 p.m. 7.15 p.m.—Film Review. 7.25—Songs from Sound Films. 7.45—Review by M. Salomon. 7.55—News and Time. 8.0—Song Evening arranged by A. Koubitzky.  
9.15—Songs from Opera. Selections from "Hamlet" (Thomas), "La Juive" (Halévy) and "The Magic Flute" (Mozart).  
9.30—Dance Music from the Municipal Casino.  
**BARCELONA (Spain)**  
Radio-Barcelona (EAJI). 860 kc/s (349 m.); 8 kW. Transmits at intervals from 12 noon.  
8.0 p.m.—Trio Concert, followed by Talk in Catalan, Exchange Quotations, Request Gramophone Records, Sports Notes and News. 10.0—Chimes and Weather. 10.5—Concert of Sardanias. 10.45—Talk: Volcanic Eruptions.  
11.0—Programme of Music and Poetry by the Poet Angel Pons y Guitart and Juan Gibert Camins (Pianoforte). Rondo from Sonata, Op. 13—"The Pathetic" (Beethoven). Impromptu with variations (Schubert). Barcarolle, Mallorca (Albeniz). Selection (Mompou).  
11.30—Concert by the Station Orchestra, with Maria Teresa Gonzalez (Soprano), and Enrique Alabert (Tenor). Duet from *La Sonnambula* (Bellini). Persian Dances (Moussofsky). Duet from "Lucia di Lammermoor" (Donizetti). Nocturne (d'Ambrosio). Duet from "La Bohème" (Puccini).  
12.30 a.m. (Tuesday)—Dance Music from the Excelsior. 1.0 a.m. (approx.)—Close Down.  
**BELGRADE (Yugoslavia)**  
697 kc/s (430.4 m.); 2.5 kW.  
Transmits at intervals from 11.0 a.m. 6.55 p.m.—Time and Programme Announcements. 7.0—French Lesson. 7.30—Operatic Song Recital. 8.0—A Comedy. 8.40—Violin and Pianoforte Recital. 9.30—Song Recital by Drag Petrovici. 10.0—News Bulletin. 10.20—Orchestral

Concert. 11.0—Concert from the "Ruski Car" Restaurant.  
**BERLIN (Germany)**  
Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.  
Transmits at intervals from 5.45 a.m. 12.5 p.m.—English Talk for Schools: Some more Typical English Customs, followed by Gramophone Concert of Modern Music. 12.55—Nauen Time Signal. 1.30—News Bulletin. 2.0—Gramophone Concert from Berlin (Witzleben). 2.45—The Children's Radio Journal. 3.30—Weather and Exchange. 3.40—Talk for Young People: The Young Generation and the Old. 4.0—Educational Talk. 4.30—5.30—See Berlin (Witzleben). 5.30—Talk on Dreams. 6.0—Making Music with Invisible Partners. 6.30—Elementary Spanish Lesson. 6.55—Weather for Farmers. 7.0—Topical Talk. 7.20—Agricultural Talk. 7.35—Talk: Great Discoveries in Hygiene and Bacteriology; followed by Weather for Farmers. 8.0—Part Relay of an Operatic Concert from Berlin (Witzleben). 9.0—News from Berlin (Witzleben). 9.10—See Leipzig. 10.15—See Berlin (Witzleben). 12.30 a.m. (Tuesday)—Close Down.  
**BERLIN (Germany)**  
Witzleben. 715 kc/s (419.5 m.); 1.5 kW.  
Transmits at intervals from 6.0 a.m. 4.30 p.m.—Pianoforte Recital by Artur Balsam. Variations on the theme, Lisson dormait (Mozart). Romance op. 118, No. 5 (Brahms). Nocturne in B (Chopin). Minuet (Debussy).  
4.50—Hugo Wolf Songs by Georg Höllger (Baritone). From the Italian "Liederbuch": (a) Gesegnet sei, durch den die Welt entstand, (b) Der Mond hat eine schwere, Klag' erhoben, (c) Und willst du deinen Liebsten sterben sehen, (d) Heb' auf dein blondes Haupt. Anakreons Grab. Fussreise. Heimweh.  
5.10—Organ Recital by Joseph Messner. Orgelschrei von der Festung Hohensalzburg (Paul Hofhaymer). Passacaglia in G Minor (Georg Muffat). Improvisations on a Theme by Bruckner op. 19 (Joseph Messner).  
5.30—Tales by Dr. Ueberall. 5.50—Dialogue: The Stop-Watch and Factory Output. 6.20—Technical

Talk by Professor Koeniger. 6.50—Labour Market Report. 6.55—The Witzleben Station informs its Listeners... 7.0—Topical Talk. 7.10—Kurt Kersten reads from his own Works.  
7.30—Operatic Concert by the Berlin Wireless Orchestra conducted by Bruno Seidler-Winkler. Overtures: (a) "The Black Domino," (Auber), (b) "Raymond" (Thomas), (c) "The Italian Girl in Algiers." Selections from: (a) "Die toten Augen" (d'Albert), (b) "La Bohème" (Puccini), and (c) "Eugen Onegin" (Tchaikovsky). Marches from: (a) "Die Falkunger" (Kretschmar), (b) "Faust" (Gounod), and (c) "The Queen of Sheba" (Goldmark).  
9.0—News and Sports Notes.  
9.10—Concert from Berlin Castle, on the occasion of Berlin Art Week. The Berlin Municipal Orchestra conducted by Robert Denzler. Symphony in G No. 88 (Haydn). Divertissement (Graener). Ballet Music (Gluck). 10.15—Second News.  
10.30 (approx.)—Concert of Light Music and Dance Music 12.30 a.m. (Tuesday)—Close Down.  
**BORDEAUX-LAFAYETTE (France)**  
(PTT). 986 kc/s (304 m.); 13 kW.  
12.45 p.m.—Concert of Popular Music. News Bulletin in the intervals. 1.50—Exchange Quotations. 2.0—Light Music on Gramophone Records. 6.0—Talk: Preparing European Women for Colonial Life. 7.30—News Bulletin and Market Prices. 7.40—Sports Talk. 7.55—Lottery Results. 8.0—Talk on the Care of Children. 8.15—Charades. 8.20—News Bulletin and Weather Forecast. 8.30—Concert of Classical and Modern Music.  
**BRATISLAVA (Czechoslovakia)**  
1,076 kc/s (279 m.); 14 kW.  
Transmits at intervals from 11.0 a.m. 6.0 p.m.—Pianoforte, Violin and Cello Recital. Trio in G, Op. 15 (Smetana). Serenade (Tansmann). 7.0—Talk: Military Education. 7.20—See Brno. 8.45—Concert conducted by Koriansky. 9.0—Slovak Folklore. 10.15—Announcements. 10.20—Concert from the Café Baross.



## MONDAY

continued

**BRESLAU (Germany)**  
923 kc/s (325 m.); 1.5 kW.  
Relayed by *Gleiwitz*, 1,184 kc/s (253 m.).  
Transmits at intervals from 6.0 a.m. 5.50 p.m.—Talk on Contemporary Problems dealing with Music. 6.5—This will interest you—Surprise Programme. 6.35—French Lesson. 6.50—Talk on Everyday Legal Problems. 7.10—Weather Forecast. 7.15—Gramophone Records of the Comedian Harmonists. 8.0—Weather Forecast. 8.5—Talk: The Silesian Teutons. 8.30—Request Concert by the Station Orchestra, conducted by Franz Marszalek. 10.0—Time Signal, Weather Forecast, Sports Notes, New Bulletin and Programme Announcements. 10.30—Answers to Correspondents on Technical Wireless Problems. 10.45—Talk: Germany prepares for the Olympic Games. 11.0 (approx.)—Close Down.

**BRNO (Czechoslovakia)**  
878 kc/s (342 m.); 35 kW.  
Transmits at intervals from 11.0 a.m. 7.0 p.m.—See *Prague*. 7.20—Talk relayed from a Brewery. 8.45—Talk: Socialism and the Home. 9.0—See *Prague*. 9.30—Song Recital by S. Tauber. Four Songs to Words by Tagore (Vignati). Three Moravian Military Songs (Konvalinka).

**BRUSSELS (Belgium) (No. 1)**  
1.N.R. 590 kc/s (509 m.); 15 kW.  
12 noon—Trio Concert by Frans Wigy (Violin), P. Leemans (Pianoforte) and De Nocker (Cello). *Retraite croate* (Marie). Melody (Rubinstein). Nocturne for Violin (Chopin-Sarasate). Cello Solo: Neapolitan Song (Casella). Pianoforte Solo: Mouvements perpétuels (Poulenc). Styrian Dance (Michiels). 12.30 p.m.—Weather Report.

12.40—Recital by M. Gertler. Sonata in F (Handel). Adagio (Bach). Libellules (Isolt). Sonatines (Bartok-Gertler).  
1.0—Variety Music on Gramophone Records. 2.0—Educational Programme. Talk: The Protection of Animals. 2.15—Talk by Charles Vandenborren, Chief Librarian at the Royal Conservatoire: The Centenary of the Royal Conservatoire. 5.0—Orchestral Concert conducted by Arthur Meulemans. Overture, "The Thieving Magpie" (Rossini). Selection from "The Mastersingers" (Wagner). Gavotte in D Minor (Bach-Gevaert). Bourrée in A Minor (Bach-Gevaert). Waltz Boston (Lauweryns). Ballet égyptien (Luigini). Flirtation (Steele). Midnight on Maudy Thursday (Turina). Selection from "Déjanire" (Saint-Saëns).

6.0—Gramophone Records. Overture, "Le Maschere" (Mascagni). Selection (De Mesquita). Waltz, Frühlingskinder (Waldeuteufel). 6.15—Talk by Marius Renard: Decorative Art in Belgium. 6.30—Cello and Pianoforte Recital by M. Pitsch (Cello) and M. Scharrès (Pianoforte). Polonaise for Cello and Pianoforte (Chopin). Sonata No. 2 in D (Mendelssohn). 7.15—Talk by Gaston Huysmans. 7.30—Theatre Notes. 8.0—Symphony Concert conducted by Jean Kumps. Symphony No. 2 (Beethoven). Concerto for Clarinet and Orchestra (Weber). Two Basque Airs (Kumps). 8.45—Walloon Programme. Gramophone Sketches. 9.0—Concert (continued). Brandenburg Concerto in G for Strings (Bach). Concerto in E Flat for Wind Instruments and Pianoforte (Mozart). 9.30—Gramophone Extractions from "Gringoire" (de Banville).

9.40—Concert (continued). Ballet Music from "Rosamunde" (Schubert). Hungarian Dances (Brahms). 10.0—Le Journal Parlé. 10.10—Concert by the Tea-room Orchestra. 11.0 (approx.)—Close Down.

**BRUSSELS (Belgium) (No. 2)**  
N.I.R. 887 kc/s (338.2 m.); 15 kW.  
Programme in Flemish. 12 noon—Concert by Max Alexys and his Orchestra. 12.30 p.m.—Weather. 12.40—Concert (continued). 2.0—Educational Programme. Talk and Reading from the Works of Vermeulen. 2.30—Gramophone Record. 2.35—"The Telephone"—Sketch (Grassin) interpreted by the Author. 5.0—Concert relayed from the Hotel Atlanta. 6.15—Talk on Books.

6.30—Gramophone Concert of Folk Music. Russia: (a) The Song of the Volga Boatmen, (b) Monotonous is the Sound of the little Bell. Spain: Sevillanas. Catalonia: (a) Maria Lluïsa (Paulis), (b)

Recort (Barnosell). Poland: (a) Polka, Ulanow Pilsudskiego, (b) Szeroka Woda na Wisle. Hungary: (a) Huszar Mulatsag, (b) Betyar Mulatsag. Jewish: (a) Yehudis Bas-Zion (Ruminsky), (b) The Morning Star (Ruminsky). Armenia: (a) Chopan, (b) Cheh Ghashang. Ast. France: Old March, Fanfan la Tulipe. 7.15—Variety Items. 7.30—Sports Talk.

8.0—Orchestral Concert, conducted by Franz André. Overture, "Les Dragons de Villars" (Maillart). Rustic Revels (Fletcher). Sound Film Music (Salabert). Accordion Duets by the Bignarré Brothers. March (Krier). 8.45—Selections for Verse-Speaking Choir by the Flemish National Dramatic Society.

9.0—Concert (continued). Polka for Sousaphone (Cairane). Seguidilla for Double Bass. Polka for Flute and Cornets, Triplette (Maquet). Oboe Solo: Alpine Melody. Violin Solo: Hot, Crazy Bow (Tower). Viola Solo: Improvisation for Orchestra. Request Items. 10.0—Le Journal Parlé. 10.10—Concert by the Tea-Room Orchestra. Turkish March (Mousorgsky). Suite, Nuits algériennes (Grieg). Fleurs et femmes (Razigade). Toréador et Andalouse (Rubinstein). Gondoles vénitiennes (Leemans). Ballet Music from "Faust" (Gounod). The Whistler and his Dog (Pryor). Waltz, Poème (Fibich). Foxtrot, Speakeasy (Gensler). Hungary (Doucet). 11.0 (approx.)—Close Down.

**BUCHAREST (Romania)**  
Radio-Bucarest, 761 kc/s (394 m.); 12 kW.

Transmits at intervals from 11.0 a.m. 4.0 p.m.—Concert by the Station Orchestra. March from "Athalie" (Mendelssohn). Overture, "Norma" (Bellini). Suite of Modern Dances (Walter Niemann). Waltz, Myositis (Czibulka). Idyll (MacDowell). 5.0—News and Time Signal.

5.10—Concert (cont.). Selection from "Fedora" (Giordano). Waltz from "Gipsy Love" (Lehár). Andante from a Pianoforte Sonata (Beethoven). Two Marches from "Alceste" (Gluck). 6.0—Scientific Talk. 6.30—Popular Music on Gramophone Records. 7.0—Recital of Chamber Music by the Sarvas Quartet. Quartet in G Minor for Pianoforte and Strings (Brahms). 7.30—Talk (to be announced). 7.45—Song Recital by Mlle. Karen Marie Nielsen.

8.5—Novellette for String Quartet (Glazounov), by the Sarvas Quartet. 8.45—News and Close Down.

**BUDAPEST (Hungary)**  
545 kc/s (550 m.); 18.5 kW.  
Transmits at intervals from 9.15 a.m. Programme also relayed on 210 metres from 6.45 p.m. till Close Down.

5.30 p.m.—Hungarian Folk Melodies on Two Pianofortes by L. Borzsényi and Stefan Villax. 6.15—German Lesson. 6.45—Concert by the Eugen Farkas Cigány Orchestra. 8.0—Concert by the Budapest Choral and Orchestral Association, and Soloists, conducted by Emil Lichtenberg, relayed from the Hochschule für Musik. Prelude and Fugue (Bach). Solo Cantata (Bach). Hymn to the Sun (Koranyi). Miriam's Triumph Song (Schubert). After the Concert, Time Signal, Weather Forecast and News Bulletin, followed by Concert by Jazz and Cigány Orchestras from the Café Ostende, with Hungarian Songs by Gyula Szanthe.

**COPENHAGEN (Denmark)**  
1,067 kc/s (281 m.); 0.75 kW.  
Relayed by *Kalundborg*, 260 kc/s (1,153 m.).  
Transmits at intervals from 7.30 a.m. (Gymnastics). 12 noon—2.0 p.m.—Concert by a String Ensemble relayed from the Wivex Restaurant. 2.50—Gramophone Concert. Lotte Schöne: Aria from "Madame Butterfly" (Puccini). Tancredi Pasero: Selection from "La Bohème" (Puccini). Maria Olszewska: Die Mainacht (Brahms). Heinrich Schlusnus: Der Wanderer an den Mond (Schubert). Lucienne Boyer: Dans la fumée (Jane Bos). Erik Kallquist: Källviksväsen (Ahde). Marta Egerth: Two Selections from "Es war einmal ein Walzer" (Lehár). 3.20—Talk for Housewives.

3.30—Concert by Mogens Hansen's Instrumental Ensemble. Overture, "Der Schauspielerektor" (Mozart). Gavotte from "Orpheus and Eurydice" (Gluck). Suite No. 2 from "L'Arlesienne" (Bizet). Inter-

mezzo and Cradle Song (Brahms). Overture, "The Nuremberg Doll" (Adam). 4.15 (approx.)—Readings. 4.30 (approx.)—Concert (continued). Overture, "The Daughter of the Regiment" (Donizetti). Selections from "Peer Gynt" (Grieg). Selection from "Rigoletto" (Verdi). Minuet (Bocherini). Florentine March (Fucik).

5.40—Exchange Quotations and Fish Market Prices. 5.50—Talk in German. 6.20—Elementary English Lesson. 6.50—Weather Report. 7.0—News and Report of the Workers' Radio Society. 7.15—Time Signal. 7.30—Dialogue: Opera and the People.

8.30—Scenes from Gounod's "Faust."—Concert by the Station Orchestra conducted by Emil Reesen. Soloists: Frederiksen Kraft, Ingeborg Steffensen, Holger Bruusgaard, Marius Jacobsen and Einar Nørby. Prelude. Duet from Act I. Valentine's Recitative and Aria. Mephistopheles' Rondo. Faust's Cavatina. Jewel Aria. Quartet from Act III. Mephistopheles' Serenade. Trio from Act IV. Walpurgis Night. Trio and Finale from Act V. 9.45—Reading.

10.30—Concert of Modern Operetta Music conducted by Emil Reesen. March from "Das Puppenmädchen" (Fall). Selection from "The Three Musketeers" (Friml). Waltz from "Der Göttergatte" (Lehár). Shimmy from "Die tolle Lola" (Hirsch). Selection from "Roses from Florida" (Fall). March from "A Waltz Dream" (O. Straus). 11.0 (approx.)—Close Down.

**DUBLIN (Ireland)**  
(2RN). 725 kc/s (413 m.); 1.2 kW.  
Relayed by *Cork*, 1,337 kc/s (224.4 m.).

1.30—2.0 p.m.—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records. 6.0—Popular Music on Gramophone Records. 6.15—Programme for Children. 7.0—Gramophone Records of Variety Music. 7.20—News Bulletin. 7.30—Time Signal. 7.31—Gaedhlig. 7.45—Talk: Hiking in Germany.

8.0—Violin and Pianoforte Duets by Bay Jellett and Fred Stone. 8.30—Impressions and Impersonations by J. O'D. Wade. 8.45—"An Acting Part"—Play, presented by Elizabeth Young and Company. 9.15—Soprano Solos by Mollie Phillips. 9.30—Violin and Song Recital. 10.0—Traditional Trio. 10.30—Time Signal, News, Weather Report and Close Down.

**FÉCAMP (France)**  
Radio Normandie. 1,293 kc/s (232 m.); 10 kW.

12 noon—Gramophone Concert of Light Music. 12.30 p.m.—Press News. 12.45—Concert of Light Music. Potpourri of the Music of Yvain. Nursery Rhymes. Les Vieilles de chez-nous (Levadé). Déjà (Aivaz). Si tu le voulais Tosti). Garde à vous (Diérg). Potpourri of the Music of Christine. Après un rêve (Fauré). Mi Cielito (Chivut). Good-bye (Tosti). The Capricious Musical Box (Fresko). 7.30—Wireless News. 8.0—News Bulletin. 8.30—Wireless Review. 8.45—Concert relayed from *Tripport*. 9.0—Concert of Old French Songs. 10.15—Pianoforte Solo: Rondo Capriccio (Mendelssohn), by Mlle. Rossignol. 10.30—Choral Concert of French Songs. 11.0—Dance Music. 1.0 a.m. (Tuesday)—Close Down.

**FLORENCE (Italy)**  
Ente Italiano Audizioni Radiofoniche. 599 kc/s (500.8 m.); 20 kW.  
See *Turin*.

**FRANKFURT-am-MAIN (Germany)**  
770 kc/s (390 m.); 1.5 kW.  
Relayed by *Cassel*, 1,220 kc/s (246 m.).  
Transmits at intervals from 6.0 a.m. 1.0 p.m.—See *Langenberg*. 2.0—News Bulletin. 2.10—Sponsored Concert. 3.0—Weather Report. 3.10—Time and Economic Notes. 4.55—Economic Notes. 5.0—See *Stuttgart*. 6.15—Economic Notes. 6.25—Talk in connection with the Meeting of the General Purposes Committee of the Kaiser Wilhelm Society. 6.50—English Language Lesson. 7.15—Time, Programme Announcements, Weather and Economic Notes. 7.30—Gramophone Concert. Overture, "Semiramis" (Rossini). Concert Aria, *Béléro* (Rossini). Overture, "Cosi fan tutte" (Mozart).

Champagne Song and Serenade from "Don Giovanni" (Mozart). Aria from "Il Seraglio" (Mozart). 8.0—Three Chamber Operas: (a) "Dido and Aeneas" (Purcell), (b) "Tempo der Zeit" (Eisler), (c) "Kleine Tagesserenade" (Schön); relayed from the Landestheater, Darmstadt. 10.20—Time, Weather, News and Sports Notes. 10.45—Concert from *Munich*. 12 midnight (approx.)—Close Down.

**HAMBURG (Germany)**  
Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by *Bremen*, 1,112 kc/s (270 m.); *Flensburg*, 1,373 kc/s (218 m.); *Hamborn*, 530 kc/s (566 m.) and *Kiel*, 1,292 kc/s (232.2 m.).  
Transmits at intervals from 5.45 a.m. 6.35 p.m.—Talk: Commerce and Employees in Hamburg. 6.55—Exchange and Market Prices. 7.0—Topical Talk. 7.15—Weather Report. 7.20—Grieg Concert by the Philharmonic Orchestra, conducted by José Eibenschütz. Soloists: Wolfgang Hattenbach (Pianoforte) and Herbert Ernst Groh (Vocalist). Peer Gynt Suite No. 2, Op. 55. Suite for String Orchestra, Aus Holbergs Zeit. Concerto for Pianoforte and Orchestra. Songs: (a) The Swan, (b) A Dream. Peer Gynt Suite, No. 1, Op. 46. Symphonic Dances.

8.45—"De Zeickmühl"—Dialect Comedy in Three Acts (Heinrich Behnken). 10.0—News Bulletin. 10.20—Concert from the Café Wallhof.

**HEILSBERG (Germany)**  
1,085 kc/s (276.5 m.); 60 kW.  
Relayed by *Danzig*, 662 kc/s (453.2 m.).

Transmits at intervals from 6.0 a.m. Weather, Gymnastics and Concert from *Breslau*. 11.30 a.m.—Concert from *Hamburg*. 1.5—2.30 p.m.—Gramophone Concert. Peer Gynt Suite (Grieg). Cello Solos: (a) Melody (Rubinstein), (b) Eshanson villageoise (Popper). Pianoforte Solos (Chopin): (a) Waltz, Op. 42, (b) Waltz, Op. 70. Spring Serenade (Lacombe). Was Blumen träumen (Translater). The Waltzes of the World (Röbren). Rosa, reizende Rosa (Salter). Leuchtkefärfchens Stelldichein (Siede). Elfengestühter (Rhode). Overture, "Orpheus in the Underworld" (Offenbach). Durch Nacht zum Licht (Teike). Wir haben noch nicht genug (Croe). Ein bisschen Verrücktspiel'n (Rathke). Erzherzog-Albrecht-Marsch (Komzak).

4.0—Programme for Children—a Visit to Danzig. 4.30—Concert from *Breslau*. 5.30—Talk: The Horse. 5.55—Gramophone Records of *Edith Lorand and her Orchestra*. Donausagen (Fucik). Der alte Stefans-turm (Brandt-Kreisler). Künstlerleben (Strauss). Luxembourg Waltz (Lehár). Wien, du Stadt meiner Träume (Sieczynsky).

6.15—Market Prices. 6.25 (from *Danzig*)—Talk: Old Danzig Ships. 6.50—Talk: Memorable Days of the Week. 7.0—Concert by the *Königsberg Opera House Orchestra*, conducted by Werner Richter-Reichhelm. Soloist: August Hewers (Violin). Overture, "Medea" (Cherubini). Concerto in B Minor for Violin and Orchestra (Vieuxtemps). Scherzo a capriccio (Mendelssohn). Roma Suite (Bizet).

8.0—Weather Report. 8.5—Talk on Dante Alighieri, on the Six Hundred and Sixty-Seventh Anniversary of his Birth. 8.20—Recital of Old Italian Music. Soloists: Leopold Premyslav (Violin), Eugenie Premyslav (Cello) and Margarete Giedat (Pianoforte). Passacaglia for Violin (Porpora). Sonata in D for Cello (Locatelli). Largo—Variations for Violin (Corcell).

9.0—Announcements. 9.10—The Quiet Hour. 10.10 (approx.)—News, Weather and Sports Notes. **HILVERSUM (Holland)**  
1,013 kc/s (296.1 m.); 20 kW. (7 kW. up to 4.40 p.m.). 6.25—9.40 a.m.—Programme of the Workers' Radio Society (V.A.R.A.). 6.25—6.40 and 7.10—7.25—Physical Culture Lesson. 7.40—Gramophone Concert of Variety Music. 9.40—Religious Programme by the Liberal Protestant Radio Society (V.P.R.O.). 9.55 till Close Down—V.A.R.A. Programme. 9.55—Recitations. 10.10—Mandoline Concert. 10.20—Gramophone Records of Light Music. 10.40—Recitations. 10.55—Mandoline Concert (continued). 11.15—Gramophone Records (continued). 11.25—Recitations. 11.40—Quintet

Concert with Gramophone Records of Popular Music. 1.25 p.m.—Interval. 1.55—Recitations. 2.40—Instrumental Concert. Concerto No. 1 in E Flat (Mozart). Concerto No. 3 in E Flat (Mozart). First Quartet (Beethoven). 3.40—Programme for Children.

4.10—Quintet Concert. March, Wien bleibt Wien (Schrammel). Waltz, Dorfschwalben in Oesterreich (Strauss). Heinzelmännchens Wachtparade (Noack). Waltz, Wiener Praterleben (Translater). Japanese Lantern Dance (Yoshitomo). Der Rose Hochzeitszug (Jessel). Waltz, Dynamiden (Strauss). Gramophone Records of Light Music. Ein Garten mit blühendem Weine (Stolz). In der Hauptallee (Benatzky). Love's Anguish (Stolz). Potpourri, Five O'Clock Tea with Robert Stolz. Gramophone Records of Light Music. Selections (Stolz): (a) Wenn die kleinen Veilchen blühen, (b) Du, du, du schliesst deine Augen zu. Potpourri, Lasst Schläger sprechen (Dostal). Gramophone Records of Light Music. Pasodoble, Willst du die Frau meiner Träume sein (Strauss-Korngold). Tango, Ist dein Herz noch Jedig (Gränich-staedten). Waltz, Dass muss ein Stück vom Himmel sein (Heymann). Tango, Parle-moi (Lenoir). Pasodoble, Schön war es.

6.20—Talk. 6.40—Instructive Concert. 7.40—Recitations. 8.0—Vocal, Choral and Orchestral Concert from a Church in *Zaandam*. In the interval—Recitations. 10.25 (approx.)—News Bulletin. 10.40—Gramophone Concert of Variety Music. 11.40 (approx.)—Close Down.

**HUIZEN (Holland)**  
160 kc/s (1,875 m.); 8.5 kW.  
Programme of the Christian Radio Society (N.C.R.V.). 7.40 a.m.—Bible Reading. 7.55—9.10—Gramophone Records of Light Music. 10.10—Programme for Invalids. 10.40—Reading. 11.10—Gramophone Records of Light Music. 11.40—Police Announcements. 11.55—Gramophone Records of Popular Music. 12.10 p.m.—Organ Recital. 1.40—Gramophone Records of Variety Music. 2.15—Talk on Horticulture. 2.55—Lesson in Dressmaking. 3.40—Programme for Invalids. 4.40—Violin, Cello and Pianoforte Recital. Overture, "Ascanio in Alba" (Mozart). Waltz, Künstlerleben (Strauss). Mondnacht (Schumann). Der Neugierige (Schubert). Arlequin (Popper). Selections (Friml): (a) Crépuscule, (b) Pantomime, (c) Papillon. Selection from "The Daughter of the Regiment" (Donizetti). Von Bühne zu Bühne (Fetras).

6.10—The Letter Box. 7.10—Police Notes. 7.25—Religious News. 7.40—Orchestral Concert. Military March (Schubert). Cor anglais Solo: The Swan of Tuonela (Sibelius). Five Novellettes for Strings (Glazounov): (a) Alla Spagnola, (b) Orientale, (c) Inter-ludium in modo antico, (d) Allegretto, (e) All' ungherese. Scandinavian Folk Music (Hartmann). Overture, "The Flying Dutchman" (Wagner). 8.40—Talk: The Zuider Zee. 9.10—Concert (continued). Pastorale d'été (Honegger). Concerto for Small Orchestra (Roussel). Fantasia on Two French Melodies (Lekeu). Psalms 43, 123 and 62 (Goudimel-Schuurman). In the interval at 9.40—News Bulletin.

10.10—Gramophone Concert of Popular Music. 11.10 (approx.)—Close Down.

**KALUNDBORG (Denmark)**  
Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.  
See *Copenhagen*.

**KATOWICE (Poland)**  
734 kc/s (408 m.); 16 kW.  
Transmits at intervals from 11.58 a.m. 7.5 p.m.—Dialogue: How is a Film Made? 7.20—Talk: Silesian History. 8.25—See *Warsaw*. 10.40—Talk in Modern Greek. 11.5—Dance Music.

**LAHTI (Finland)**  
167 kc/s (1,796 m.); 54 kW.  
Relayed by *Helsinki*, 815 kc/s (368.1 m.).  
Transmits at intervals from 7.10 a.m. 6.25 p.m.—Violin Recital. 6.45—Talk. 7.5—Choral Concert. 7.35—Talk. 8.0—A Play (Music by Offenbach). 8.45—News in Finnish and Swedish. 9.15—Military Music from the Kappeli Restaurant. 10.0 (approx.)—Close Down.

**LANGENBERG (Germany)**  
Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW.  
Transmits at intervals from 6.45 a.m.



(Exercises, Weather, Time and Gramophone Concert).  
 12 noon—See Stuttgart. 12.50 p.m.—Weather, News and Time Signal.  
 1.0—Concert, conducted by Eysoldt.  
 Overture, "The Water-Carrier" (Cherubini). Fantasia, Godard-Cycle (Urbach). Miniature Suite (Coates). In meiner Heimat (Hildach). Serenade (Schubert). Waltz, Weaner Madln (Ziehler). Overture, "Der Göttergatte" (Lehár). The Bells of Locarno (Murzili). The Phantom Brigade (Myddleton). Selection from "A Waltz Dream" (O. Straus).  
 2.30—Meat Market Prices. 3.30—Economic Notes and Time Signal.  
 3.50—Programme for Children. 4.20—Programme for Young People.  
 5.0—Vocal and Instrumental Concert. Anna Maria Lenzberg (Soprano), Bernhard de Haas (Violin), Hans Haass (Pianoforte) and Egbert Grape (Accompanist). Three Songs for Soprano (v. Westerman): (a) Die Harfe war besaitet, (b) Schwill an mein Ström, (c) In jener Zeit. Sonata in A for Pianoforte and Violin (Haass). Four Songs Op. 40, for Soprano (Pfitzner): (a) Leuchtende Tage, (b) Wenn sich Liebes, (c) Sehnsucht, (d) Herbstgefühl. Violin and Pianoforte Duets: (a) Singende Fontäne (Niemann), (b) Le Jet d'eau (Debussy), (c) Jeux d'eau (Ravel). Soprano Solos: Kinderlieder (Gross).  
 6.15—Talk: Haydn as a Dramatist. 6.40—Talk: Shadows of the Age—Children from Needy Families.  
 7.0—Weather, Time, Economic and Sports Notes. 7.15—Talk: The Stars in June. 7.35—Talk: The State's Fight against Unemployment. 7.55—First General News.  
 8.0—Orchestral Concert, conducted by Eysoldt. Overture, "Euryanthe" (Weber). Wedding Music (Jensen). Selections from "Carmen" (Bizet). Russian Songs and Dance Melodies, Wolgaklänge (Lindemann). Waltz, Wiener Blut (Strauss).  
 9.0—Concert by the Station Orchestra, conducted by Eugen Szenkar, and Wilhelm Buschkötter. Soloists: Walter Braunfels (Pianoforte) and Rose Walter (Soprano). Pianoforte Concerto in F (Mozart). Soprano Solos: (a) Nun steh

ich auf dem Gipfel, (b) Man kann sagen, was man wolle, and (c) Amors Pfeil (Haydn), (d) Four Love Songs (Grosz).  
 10.5—News, Sports Notes and Miscellaneous Announcements. 10.25—Concert and Dance Music. 12 midnight (approx.)—Close Down.  
**LEIPZIG (Germany)**  
 1,157 kc/s (259 m.); 2 kW. Relayed by Dresden, 941 kc/s (319 m.).  
 Transmits at intervals from 6.0 a.m.  
 4.0 p.m.—Concert by the Leipzig Symphony Orchestra, conducted by Hilmar Weber. Overture, "The Water Carrier" (Cherubini). Divertimento in D, Op. 251, No. 11 (Mozart). Berceuse (Järnefelt). Kiss Waltz from "Der lustige Krieg" (Joh. Strauss). Selections from "Das Nachtlager in Granada" (Kreutzer). Overture, "Isabella" (Suppé). Selections from "The Vagabond" (Zeller). Waltz Fantasia (Glinka).  
 5.0—Relay from the Wartburg. 6.0—Book Review. 6.30—Talk: World Literature—Anatole France (Franz Schoenberner). 6.50—Wireless Notes. 7.0—Hans Heyck reads from his own works. 7.30—Oscar Besemfelder sings Old Folk Songs to the Lute (arr. Heinrich Scherrer).  
 8.0—Concert of Music by Kurt Striegler. The Leipzig Symphony Orchestra, conducted by Theodor Blumer. Soloist: Francis Koehne (Violin). Concerto in D Minor, Op. 15, for Violin and Orchestra. Chamber Symphony, Op. 14.  
 9.10—"Aristadt"—a Radio Sketch (Karl Blanck and Wolfram Brockmeier). 10.10—News Bulletin.  
 10.15 (approx.)—Concert by the Endé Orchestra. Overture, "The Crown Diamonds" (Auber). Minuet (Paderewsky). Prelude to Act Three of "Kunihild" (Kistler). Torádor et Andalouse (Rubinstein). Waltz, Lotusblumen (Ollsen). Potpourri, Vindobona (Leopold). March, Schritt für Schritt (Schneider). Overture, "Nakiris Hochzeit" (Lincke). Waltz, Moonlight on the Alster (Fetras). Wanderliedermarsch (Hanmann). Selection from "Der lustige Ehemann" (O. Straus). Brucker Lager-Marsch (Král). 12 midnight (approx.)—Close Down.

**MONDAY**  
continued

**LJUBLJANA (Yugoslavia)**  
 522 kc/s (574.7 m.); 2.5 kW.  
 Transmits at intervals from 12.15 p.m.  
 6.0 p.m.—Quintet Concert. 7.0—Czech Lesson. 7.30—Talk on the History of Art. 8.0—Concert of Chamber Music. 9.0—Quintet Concert. 10.0—Time, News and Light Music.  
**LWÓW (Poland)**  
 788 kc/s (381 m.); 16 kW.  
 Transmits at intervals from 11.45 a.m.  
 7.15—7.35 p.m.—See Warsaw. 7.35—News Bulletin. 7.45—12 midnight—See Warsaw. 12 midnight (approx.)—Close Down.  
**LYONS (France)**  
 La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW.  
 Transmits at intervals from 8.0 a.m.  
 7.0 p.m.—Popular Music on Gramophone Records. 7.30—Radio Gazette for Lyons and the South-East. 8.20—Reading for Children. 8.30—Orchestral Concert, conducted by Charles Strony. Soloist: Gaspar Cassado (Cello).  
**MADRID (Spain)**  
 Union Radio (EAT)7. 707 kc/s (424.3 m.); 2 kW.  
 Transmits at intervals from 12.45 p.m.  
 8.0 p.m.—Chimes, Exchange, Market Prices and Request Gramophone Concert. 9.15—News Bulletin. 9.30 (approx.)—Close Down.  
**MILAN (Italy)**  
 Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW.  
 See Turin.  
**MORAVSKÁ-OSTRAVA (Czechoslovakia)**  
 1,137 kc/s (263.8 m.); 11 kW.  
 Transmits at intervals from 11.0 a.m.  
 7.0 p.m.—Accordion Recital. 7.20—See Brno. 8.45—Talk on Economics. 9.0—See Prague. 9.30—Quartet in E Minor (Verdi). 10.0—See Prague. 10.15—Programme Announcements and Theatre Notes. 10.20—See Prague.  
**MOSCOW (Russia)**  
 Trades Union. 230.1 kc/s (1,304 m.); 100 kW.

Transmits at intervals from 5.0 a.m.  
 6.30 p.m.—Proletariat Radio Journal. 7.15—Programme for Young Communists. 8.0—Talk in German and English: Youth Organisations. 9.55—Time Signal. 10.0—Weather Forecast.  
**MUNICH (Germany)**  
 563 kc/s (533 m.); 1.5 kW.  
 Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.), and Nürnberg, 1,256 kc/s (239 m.).  
 Transmits at intervals from 6.45 a.m.  
 5.0 p.m.—Concert by the Munich Professional Musicians Orchestra, conducted by Ernst Hagel. Symphonic Overture, Ekkehard (Schrecker). Selection from "The Black Orchid" (d'Albert). Two Waltzes (Dvorak). Mascherata (Pedrollo). Ein Abend bei den Deutschmeistern (Ertl). Little March (Poldini).  
 6.15—Time Signal, Weather Report and Agricultural Notes. 6.25—Talk: The Problems of the Red Cross. 6.45—Talk: Bavarians in Greece. 7.5—Review of Books for Workers. 7.25 (from Nürnberg). Concert by the Nürnberg Folk Choir, conducted by Julius Maurer.  
 7.55—Chamber Orchestra Music. Soloists: Anton Huber (Violin), Willy Stuhlfauth (Violin), Ad. Winkler (Violin), Konrad Feigl (Violin), Ernst Brunbauer (Flute) and Johannes Hobohm (Cembalo). Conductor: Christian Döbereiner. Concerto in B Minor for Four Violins and String Orchestra (Vivaldi). Brandenburg Concerto No. 5, for Cembalo, Violin, Flute and String Orchestra (Bach).  
 8.30 (from Nürnberg)—Variety Programme. 9.15—"The Puppet-Play of Don Juan" (arranged by Werner Egk). 10.0—Dialogue: German Students throughout the World. 10.20—Time Signal, Weather Report, News Bulletin and Sports Notes. 10.45—Concert conducted by Eric Kloss. 12 midnight (approx.)—Close Down.  
**OSLO (Norway)**  
 Kringkastingsselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by Frederikstad, 816 kc/s (367.6 m.); Havnar, 536 kc/s (560 m.); Norddalen, 671 kc/s (447.1 m.); Porsgrumd, 662 kc/s (453.2 m.), and Rjukan, 671 kc/s (447.1 m.).

Transmits at intervals from 11.10 a.m.  
 5.0 p.m.—Concert by the Radio Ensemble conducted by O. Gustavson. 6.0—German Lesson.  
 6.30—Octet Concert. Marche Bosniacque (Wagnes). Popular Norwegian Melody (Hagemann). Intermezzo (Harris). Rheinländer (Sørensen).  
 7.0—Weather and News. 7.30—Agricultural Talk. 8.0—Time Signal. 8.2—Organ Recital from a Church. 9.10—Political Review. 9.40—Weather and News. 10.0—Topical Talk.  
 10.15—Vocal and Instrumental Concert. Soloists: Arne Melsom (Cello), Morten Vatn (Baritone) and Sigvart Fotland (Pianoforte). Nocturne, Op. 72, No. 1 (Chopin). Song without Words, Op. 109 (Mendelssohn). Veslemøy (Halvorsen). Chanson villageoise (Popper).  
**PALERMO (Italy)**  
 Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW.  
 Transmits at intervals from 12.45 p.m.  
 5.30—6.30 p.m.—Concert of Light Music and Dance Music. 8.0—Announcements, Giornale dell'Enit, Agricultural Notes, Report of the Geographical Society and Giornale Radio. 8.20—Popular Music on Gramophone Records. In the interval at 8.30—Time Signal and Announcements.  
 8.45—"Fedora"—Opera (Giordano) on Gramophone Records. In the intervals, Fashion and Art Notes. 10.55—News Bulletin and Close Down.  
**PARIS (France)**  
 Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW.  
 Time Signals (on 2,650 metres) at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals).  
 Transmits at intervals from 1.0 p.m.  
 6.45 p.m.—Cinema Notes. 7.0—Le Journal Parlé. 8.20—Weather Report. 8.30—10.5—Variety Programme arranged by Henry Beaulieu, with the collaboration of Esther Lékain, Georges Saillard and Odette Alonzo. 8.30—"Le Bonhomme Jadis"—One-Act Comedy (Murger). 9.35—Concert of Variety Music. 10.5 (approx.)—Close Down.

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# MONDAY continued

## PARIS (France)

Poste Parisien. 914 kc/s (328.2 m.); 60 kW.  
Transmits at intervals from 12 noon.  
7.0 p.m.—Gramophone Records of Popular Music, News and Announcements. 7.30—Talk by Jean Camp: The Week's Thought; followed by Concert of Light Music on Gramophone Records. 8.30—Gramophone Records of Popular Music, Talk and Announcements. 8.45—Concert.

## PARIS (France)

Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.  
6.45 a.m.—Physical Culture. 7.30—Weather and Physical Culture (continued).  
7.45—Gramophone Records. Selection from "The Merry Wives of Windsor" (Nicolaï). Selection from "Romeo and Juliet" (Gounod).  
8.0—News, Weather and Press Review.  
12.30 p.m.—Massenet Concert on Gramophone Records, for the Ninetieth Anniversary of his Birth. Selection from "Ariane." Selection from "Le Cid." Selection from "Esclarmonde." Selection from "Grisélidis." Aria from "Le Jongleur de Notre Dame." Nocturne from "La Navarraise." Aria from "Manon." Aria from "Marie-Magdeleine." Noël joyeux. Aria from "Panurge." Selection from "Don Quichotte." Meditation from "Thais." Ce que disent les Cloches. Pensée d'automne. Sérénade du Passant. Aria from "Sappho." Selection from "Thérèse." Clair de Lune from "Hérodiade." In the intervals at 1.0—Exchange, News and Weather and at 1.30 and 2.0—Exchange Quotations.

3.45—Exchange and Market Prices. 6.30—Market Prices, Weather, Agricultural Report, Agricultural Talk and Racing Results. 7.0—Film Review. 7.10—Review of New Books. 7.30—Elementary English Lesson. 7.45—Commercial Prices and News.

8.0—"La Bonne Mère"—Play (Florian). 8.30—News, Sports Notes, Weather and Review by Mauricet. 8.45—Fables (Florian), recited by Mme. Jeanne Faber and M. Dorival. 9.30—Gramophone Concert. Gavotte (Bach). Symphony (J. C. Bach). Concerto in D Major for "Cello and Piano" (Vivaldi). Maman, dites-moi (Weckerlin). Bergère légère (Weckerlin). O ma tendre musette. La Précieuse (Couperin-Kreisler). Le Tambourin (Leclair). Adagio and Allegro for "Cello" (Boccherini). Selection from "The Marriage of Figaro" (Mozart). Trio in B Flat (Mozart).

10.15—Programme to be announced. 10.30—"The Singing Lady," from New York. 10.45—Little Orphan Annie. 11.0—Time Signal. 11.15—Temperature Report. 11.30—Who's News To-day. 11.45—Teaberry Sport Review. 11.55—Press News-Reeler. 12.15—Westinghouse Parade. 12.45—Literary Digest Topics, from New York. 11.50—Time Signal. 12 midnight—3.15 a.m. (Tuesday)—New York Relay. 12 midnight—Pepodent Amos 'n' Andy. 12.15 a.m. (Tuesday)—Tastyest Jesters. 12.30—Stebbins Boys. 12.45—Billy Jones and Ernie Hare. 1.0—Carnation Contented Programme. 1.30—Death Valley Days. 2.0—Sinclair Minstrels. 2.30—George Olson's Orchestra. 3.0—Bob Nolan's San Felicians. 3.15—Programme to be announced. 3.30—Love Songs and Waltzes, from New York. 3.45—Contract Bridge, by E. Hall Downs. 4.0—Time Signal. 4.1—Teaberry Sport Review. 4.11—Temperature Report. 4.12—Weather Report. 4.15—Press Last Minute News Flashes. 4.20—Stanley-Warner Theatre of the Air. 5.0—Hotel William Penn Orchestra. 5.30—Time Signal and Good Night.

6.14 kc/s (488.6 m.); 120 kW.  
Transmits at intervals from 6.15 a.m. 5.50 p.m.—Talk: The Economic Crisis. 6.0—Talk: The History of Weapons. 6.10—Agricultural Report. 6.15—Talk for Workers. 6.25—

German Transmission: Announcements and Talk: Benzoïr and Alcohol. 7.0—Czech Songs by Marie Vojtkova. 7.20—Sec. Brno. 8.45—Talk: Tenebrific. 9.0—Time and News. 9.10 (approx.)—Wind Instrument Concert of Music by Mozart, conducted by Nikolai Malko. Quintet in E Flat for Oboe, Clarinet, Bassoon, Bugle and Piano. Adagio for Wind Instrument Quintet.

9.30—Pianoforte Recital by Erwin Schulhoff: Contemporary Czechoslovakian Music. 10.0—Time, News and Announcements. 10.20—Gramophone Records of Popular Music.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland) 743 kc/s (403 m.); 25 kW.; Lausanne, 442 kc/s (680 m.); and Geneva, 395 kc/s (760 m.). 12.30 p.m.—Time Signal from Neuchâtel Observatory. 12.32—Weather Forecast and News Bulletin. 12.40 (from Geneva)—Gramophone Concert of Light Music. In the interval at 1.0—Exchange Quotations. 1.45—5.0—Interval. 5.0—Time Signal from Neuchâtel Observatory. 5.1 (from Lausanne)—Programme for Children. 5.30—Concert by a String Orchestra, conducted by Robert Echenard. 7.0—Weather Forecast. 7.1 from Lausanne—Light Music on Gramophone Records. 7.35 (from Geneva)—Talk by M. Sandoz. 7.55—News Bulletin. 8.0 (from Geneva)—Tales of Big Game Hunting in the Congo, by Pierre Mark. 8.20—Concert of Spanish Music by the Station Orchestra. 9.0 (from Lausanne)—Baritone Song Recital by Romano Rasponi. Stornellata sull'Arno (Billi). Cavatina from "The Barber of Seville" (Rossini). Io son l'amore (Tosti). Amapola (Lacalle). Romance from "Don Pasquale" (Donizetti). Fior di Campo (Brogi). Tango. Adoracion (Bianco). 9.20—Concert by the Station Orchestra. 10.0—Weather Forecast and News Bulletin. 10.10 (from Lausanne)—Answers to Correspondents. 10.30 (approx.)—Close Down.

ROME (Italy) Ente Italiano Audizioni Radiofoniche (IRO). 680 kc/s (441 m.); 50 kW. Relayed by Naples, 941 kc/s (319 m.) and 2RO, 6,976 kc/s (43 m.). 8.15—8.30 a.m.—Giornale Radio and Announcements. 12 noon—2.0 p.m.—Gramophone Concert of Variety Music. In the intervals at 12.45—Weather. 1.15—Giornale Radio and Exchange and at 1.30—Time and Announcements. 5.0—Exchange, Children's Radio Review, Giornale Radio and Announcements. 5.30—Vocal and Instrumental Concert. Soloists: L. Chiarappa ("Cello"), E. Petacci (Pianoforte) and Vera Nadia Poggioli (Soprano). Sonata Op. 6 for "Cello and Piano" (Richard Strauss). Soprano Solos: (a) "The Princess (Grieg), (b) Nebbie (Respighi), (c) Two Popular Russian Songs. "Cello Solos: (a) Chanson triste (Tchaikovsky), (b) Tarantella Op. 35 (Popper). 6.15—Giornale dell'Enit. 6.55 (Naples)—Shipping and Sports Notes. 7.0—Agricultural Notes, Weather, Announcements, Giornale Radio and Press Review. 8.0—Time, Announcements and Gramophone Records of Variety Music. 8.45—Sports Notes and Announcements. 9.0—See Turin. 10.0—Fashion Review.

10.10—Concert of Light Music. Gente del mar (Padilla). Tenor Solo: Katti (Gragnani). Soprano Solo: Milonguita (Valdes). Tenor Solo: Mary (di Fernando). J'ai deux amours (Scott). Tenor Solo: Paga Giovannino (Mascheroni). Soprano Solo: Marcellina (Lanzetta). Dance Potpourri. Hallo 1930! (Borchert). Tenor Solo: Brigata studentesca (Nardella). Tenor Solo: Bells (Caslar). Soprano Solo: Mezzanotte (Stafelli). The Peanut Vendor (Simons). Tenor Solo: Piccolo nomade (di Ferdinando). Why? (Davis). 10.15—News Bulletin.

SCHENECTADY (U.S.A.) General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.43 m.) and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 11.45 a.m. 9.0 p.m.—Book Chat. 9.15—William Stevens (Baritone). 9.30—Bridg Lesson from New York. 9.45—Musical Ad. Men. 9.50—News Items. 10.0—Musical Ad. Men. 10.15—11.0—New York Relay. 10.15—Skippy. 12.30—Swane Serenaders. 10.45—The Sonsters. 11.0—The De Witt

Clinton Orchestra. 11.30—Music Weavers. 11.55—Baseball Scores. 12 midnight—Musical Programme from New York. 12.15 a.m. (Tuesday)—Weather Report. 12.16—New Kenmore Orchestra. 12.45—4.0—New York Relay. 12.45—Trials of the Goldbergs. 1.0—Soconyland Sketch. 1.30—Voice of the Firestone. 2.0—A and P Gipsies. 2.30—Parade of the States. 3.0—National Radio Forum. 3.30—Do you Remember. 4.0—Arm Chair Chats. 4.15—Johnny Albricht (Crooner). 4.30—De Witt Clinton and his Orchestra. 5.0—Ralph Kirbery (Dream Singer) from New York. 5.5—Cuddy Roger and his California Cavaliers, from New York. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BEROMÜNSTER) (Switzerland) 653 kc/s (459 m.); 60 kW.; Basle, 1,229 kc/s (244.1 m.); and Berne, 1,220 kc/s (246 m.). 12.28 p.m.—Time Signal from Neuchâtel Observatory. 12.30—Weather and News Bulletin. 12.40—Something to suit all tastes—Gramophone Concert. 1.35—Weather Report and Exchange Quotations. 1.45—3.30—Interval. 3.30—Concert by the Station Orchestra. 4.0—Concert of Light Music on Gramophone Records. 5.0—Interval. 6.30 (from Basle)—"The Lindbergh Flight"—Play for Children. 7.0—Time Signal and Weather Forecast, followed by Gramophone Records. 7.30 (from Basle)—Talk on the History of Music. 8.0 (from Zürich)—"Die Abreise"—(The Departure) Opera in One Act (d'Albert) relayed from the Studio. 8.50 (approx.)—Author's Programme: Albert Ehrenstein reads from his own Works. 9.30—Weather Forecast and News Bulletin. 9.45—Programme of Marches and Waltzes by the Station Orchestra, conducted by Hermann Hofmann. 10.30 (approx.)—Close Down.

STOCKHOLM (Sweden) Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by Boden, 244 kc/s (1,229.5 m.); Göteborg, 932 kc/s (322 m.); Hölby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Östersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.45 p.m.—Concert of Light Music on Gramophone Records. 6.45—Agricultural Programme. 7.15—Weather Report and News Bulletin. 7.30—Cabaret Concert. 8.30—Parliamentary Review. 8.50—Sonata No. 2 in F Sharp Minor, for Violin and Piano, Op. 11 (Weiner), by Carl Garaguly and W. Witkovsky. 9.15—Talk (to be announced). 9.45—Weather Report and News Bulletin. 10.0 (from Göteborg)—Organ and "Cello Recital by Herman Aspöf (Organ) and Tor Mann ("Cello). Pieces en style libre (Vierne). "Cello Solo: Prelude, Minuet and Plainte from the Suite in D (Hervelois). Prelude, (Dallier). Pavane pour une infante défunte (Ravel). "Cello Solo: Barcarolle Nocturne (Bachelet). Fantasia for Organ (Saint-Saëns). 11.0 (approx.)—Close Down.

STASBOURG (France) Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW. 11.30 a.m.—Gramophone Records of Opera and Light Music. 12.45 p.m.—News in French and German. 1.0—Time Signal. 1.2—Gramophone Records (continued). 2.0—4.45—Interval. 4.45—Scientific Talk in French. 5.0—Dance Music. 6.0—Literary Talk in French: Stello. 6.15—Topical Talk in German. 6.30—Orchestral Concert conducted by Maurice de Villers. Wedding March (Mendelssohn). Overture "Le Roi d'Ys" (Lalo). Selection from "La Bohème" (Puccini). Chant sans paroles (Tchaikovsky). Serenade (Moszkovsky). Suite algérienne (Saint-Saëns). 7.30—News in French and German. 7.45—Orchestral Concert. Marche exotique (Heinecke). Carnevals-böten (Fetras). Overture, "Les Cent Vierges" (Lecocq). Verdi Potpourri (Weninger). Chant Birman (Messager). Ballet Scene, Harlequin in Love (Meyer-Helmund). March, Crona (Mielme). 8.30—See Paris (Eiffel Tower). 9.0 (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany) Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by Freiburg, 527 kc/s (570 m.). Transmits at intervals from 6.0 a.m. 10.0 a.m.—Cinema Organ Recital from the Ufa-Palast. 10.30—Organ Recital by Fritz Heitmann, on Gramophone Records. 11.0—Time, Weather and News. 12 noon—Concert by Maria Salini and her Orchestra, relayed from the Café Wilhelmsbau. Song, Du sollst der Kaiser meiner Seele sein (Stolz). Selections from "The White Horse Inn" (Benatzky-Stolz). Waltz, Dorfschwalben aus Oesterreich (Joh. Strauss). Volga Song from "The Czarevitch" (Lehar). Selection from "Die Fledermaus" (Joh. Strauss). March Our Navy (Thiele). 12.50 p.m.—Time, Weather, News and Programme Announcements. 1.0—Concert from Langenberg. 1.55—News Bulletin. 2.0—Sponsored Concert. 2.30—Elementary Spanish Lesson. 3.0—Elementary English Lesson. 4.0—Orchestral Concert relayed from Freudenstadt. Conductor: Albrecht Krämer. Overture, "The Gipsy Baron" (Joh. Strauss). Waltz Wiener Bürger (Ziehrer). Crescendo (Lasson). Menuett miniature (Schebeck). Selection from "Pagani" (Lehar). Neapolitan Song (Bonincontro). 5.0—Orchestral Concert conducted by Gustav Gölich. Soloist: Bruno Müller (Baritone). Overture, "The Italian Girl in Algiers" (Rossini). Little Suite (Micheli): (a) Prelude, (b) Scherzando, (c) Nostalgia, (d) Finale. Baritone Solos. Wald-idyllen (MacDowell). Wojewodens-Marsch (Morena). Waltz, Dorf-kinder (Kálmán). Overture, "Flotte Bursche" (Suppé). 6.15—Time and Weather. 6.25 (from Freiburg)—Talk: Cyprus. 6.50—See Frankfurt. 7.15—Time and Agricultural Notes. 7.30—See Frankfurt. 8.0—See Frankfurt. 10.20—Time, Weather, News and Programme Announcements. 10.35—Talk on Chess. 11.0—Concert from Munich. 12 midnight (approx.)—Close Down.

TOULOUSE (France) Radiophonie du Midi. 779 kc/s (385 m.); 8 kW. Transmits at intervals from 12.30 p.m. 5.0 p.m.—Transmission of Pictures. 5.15—Exchange Quotations. 5.20—Chansonnettes. 5.30—News Bulletin. 5.45—Orchestral Selections from: (a) "The Huguenots" (Meyerbeer) and (b) "Lohengrin" (Wagner). 6.0—Orchestral Selections. 6.15—Report for Tourists. 6.30—Exchange and Racing Results. 6.45—Songs from (a) "The Master-singers" (Wagner), and (b) "Don Quichotte" (Massenet). 7.0—Accordion Solos. 7.15—News Bulletin. 7.30—Gramophone Records of Variety Music. 8.30—Five Minutes' English. 8.35—Sound Film Music. 8.45—Orchestral Selections. Parade of the Tin Soldiers (Jessel). Selection from "Gipsy Love" (Lehar). Roses (Metra). Tes yeux (Bonincontro). Selection (Gelsi). Parade of the Linden Trees (Felix). Parade of the Black Dolls (Wetzel). 9.15—Light Music. 9.30—Chansonnettes. 9.45—Leon Raiter Concert. Soloists: Léon Raiter (Vocalist) and Albert Hsuat (Accordion). Pasodoble, La Baraquetta. Waltz, Les Hiron-delles. Java pour Suzon. La Léon de Tango. Accordion Duet: Foxtro, Monte Carlo. Song: Est-ce que tu te maries, Marie? Kimûli. Viens à l'Exposition. Accordion Duet: Tango, Moko. Accordion Waltz: Grisante folie. Rosalie est partie. Soir de Florence. Salade de Chansons. Si grand-père voyait ça. Sur le derrière de l'Opéra. In the interval at 10.0—North African News. 10.45—Orchestral Selections. 11.0—Concert. Berceuse (Fauré). Wienerblut (Strauss). Sous les toits de Paris. Marche des Forgerons. The Cuckoo (Jonasson). Tout est permis quand on rêve (Heymann). Les Gaités de la radio. Rien qu'une nuit (Cazes). Selections from: (a) "Werther" (Massenet) and (b) "The Tales of Hoffmann" (Offenbach). Ce n'est que votre main. Le plus joli rêve. La Tour Eiffel s.v.p. Selections from: (a) "I Pagliacci" (Leon-cavallo), and (b) "Cavalleria rusticana" (Mascagni). 12 midnight—Weather and Announcements. 12.5 a.m. (Tuesday)—Concert of English Music. 12.30 a.m. (approx.)—Close Down.

TRIESTE (Italy) Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW. Transmits at intervals from 8.15 a.m. 7.10 p.m.—Quintet Concert. The Nightingale (Weiss). Mandolinata dispettosa (Ricci). Mon rêve (Waldeufel). Minuet (Solazzi). Selection from "Bacco in Toscana" (Brogi). Blue Eyes (Stolz). Selection (Winston). 8.0 till Close Down—See Turin.

TURIN (Italy) Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by Milan, 905 kc/s (331.5 m.), and Genoa, 959 kc/s (312.8 m.) and Florence 599 kc/s (500.8 m.). Transmits at intervals from 8.15 a.m. 6.45 p.m.—Agricultural Notes and Report of the Royal Geographical Society. 7.5—Announcements. 7.10—Gramophone Records of Variety Music. 7.30 (in an interval)—Time and Announcements. 8.0—Giornale Radio and Weather. 8.25—Musical Selections. Selection from "La princesse jaune" (Saint-Saëns). Vienna, City of my Dreams (Siczynsky). Prelude, Il voto (Giordano). 8.45—Literary Notes. 9.0—Sponsored Concert. 10.0—A Comedy in One Act. 11.0 (approx.)—Close Down.

VIENNA (Austria) Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by Graz, 852 kc/s (352.1 m.); Innsbruck, 1,058 kc/s (283 m.); Klagenfurt, 662 kc/s (453.2 m.); Linz, 1,220 kc/s (246 m.); and Salzburg, 1,373 kc/s (218 m.). Transmits at intervals from 9.20 a.m. 4.40 p.m.—Concert of Music by Austrian Women Composers, by the Vienna Women's Symphony Orchestra, conducted by Julius Lehnert. Passacaglia (Elsa Wellner). Adagio from the Symphony in F (Mathilde Kralik). Two Movements from the Pianoforte Concerto in B Flat (Emma Fischer). Two Songs for Soprano and Orchestra from the Cycle, "Bilder" (Johanna Müller-Herrmann). Gottesnacht (Lise Maria Mayer). Theme with Variations (Frieda Kern). Oriental Dances from "Maria von Magdala" (Lio Hans). 6.0—Talk: The Upkeep of Monuments. 6.25—Talk: The Minorities Problem. 6.45—Talk: Books in connexion with the Programmes of the Week. 6.50—Notes on the Broadcasts for Schools. 6.55—English Language Lesson. 7.20—Time, Weather and Programme Announcements. 7.30—"Der Freischütz" (The Marksmen)—Opera in Three Acts (Weber), relayed from the State Opera House. 9.30 (in an interval)—News and Weather. 10.5—Orchestral Concert.

WARSAW (Poland) Polskie Radio, 212.5 kc/s (1,411 m.); 120 kW. 11.20 a.m.—Aviation Weather Report. 11.25—Interval. 11.45—Press Review. 11.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, Cracow. 12.5 p.m.—Programme Announcements. 12.10—Light Music on Gramophone Records. 1.20—Weather Report. 1.25—Interval. 1.35—Popular Music on Gramophone Records. 1.55—Interval. 2.45—Variety Music on Gramophone Records. 3.5—Economic Report and Exchange Quotations. 3.15—Traffic Report. 3.25—Talk: The Olympiad. 3.45—Hydrographic Report. 3.50—Light Music on Gramophone Records. 4.20—Elementary French Lesson. 4.40—Popular Music on Gramophone Records. 5.10—Talk: The First Polish Citizen in Northern Arabia. 5.35—Concert of Light Music from the Cafe Gastronomica. Conductors: Zuck and Pevzner. March, The Faithful Hussar (Frantzen). Waltz, I Misteri dell'Adige (Carena). Lehar. Potpourri (Morena). Burlesque-intermezzo (Cullota). Tango, Cordoba (Pevzner). Foxtro (Cullota). Tango, Cigarette Smoke (Zuck). Waltz, Tales from the Vienna Woods (Johann Strauss). Oriental Fantasia—Salome's Dream (Lampe). Mazurka (Levandovsky). 6.50—Miscellaneous Items. 7.15—Agricultural Correspondence. 7.25—Programme Announcements. 7.30—Sports Notes. 7.35—Light Music on Gramophone Records. 7.45—Radio Journal. 8.0—A Lecture Recital on Polish Music from Cracow. 8.15—Introductory Talk to the following Transmission. 8.25—"La Sonnambula"—Opera (Bellini). Radio Journal in the Interval. 10.40—Feuilleton. 10.55—Weather and Police Notes. 11.0—Dance Music. 12 midnight (approx.)—Close Down.



# TUESDAY (May 31)

## PRINCIPAL EVENTS

### SYMPHONY CONCERTS

- 8.0 p.m. Schweizerischer Landessender.
- 8.35 " Heilsberg: Beethoven programme.
- CONCERTS (Vocal and Instrumental)**
- 5.35 p.m. Warsaw: The Philharmonic Orchestra.
- 6.35 " Vienna: A cappella music (State Opera Chorus).
- 7.50 " Stockholm: The Station Orchestra.
- 8.0 " Berlin and most German Stations: Cherubini's Cantata on Haydn's death.
- 8.0 " Prague: Teachers' Choral Society.
- 8.30 " Hamburg: Relay from the Landestheater, Brunswick.
- 8.35 " Copenhagen: The Station Orchestra, Egon Petri (pianoforte).
- 9.45 " Schweizerischer Landessender: Modern Composers.

### OPERAS AND OPERETTAS

- 6.55 p.m. British Regional Stations: "Die Meistersinger" (Wagner). Prelude and Act I.
- 7.35 " Munich: "Der Wildschütz" (Lortzing).
- 8.30 " Strasbourg: "La Poupée" (Audran).
- 9.50 " Königs Wusterhausen, Frankfurt, Heilsberg, Leipzig, Stuttgart: "Die Meistersinger" (Wagner), Act III, relayed from Covent Garden, London.

### RECITALS

- 9.35 p.m. Copenhagen: Egon Petri (Pianoforte).
- 10.5 " Warsaw: E. Horodysky (Pianoforte).

### PLAYS AND TALK

- 9.0 p.m. Langenberg: "The Eternal Wanderer" (Rudolf Rieth).
- 9.10 " Breslau, Berlin (Witzleben): "Siegfried" (Friedrich Hebbel).
- 9.55 " Algiers: F. K. Brennan: Travel Talk in English.

### DANCE MUSIC

- 10.30 p.m. (app.) Berlin (Witzleben), Königs Wusterhausen.

### The Fridays

EIFFEL TOWER is broadcasting this evening one of the string quartets which the world owes to the Russian publisher, Belaiev. Originally a wealthy timber merchant, he was an enthusiastic amateur of music, and it was through his interest that most of the works of the newer Russian school found their way into print and to performance. For many years he held chamber music evenings at his own house on Fridays, and many of the leading lights in

the Russian world of music were accustomed to gather there regularly. At least three string quartets, as well as many other smaller pieces, were specially composed for these private concerts, among them one to which its composers gave the name *The Fridays*. Six people joined forces in its composition, contributing a movement each—Rimsky-Korsakov, Liadov, Borodin, Sokolov, Glatzonov and Kopylov. There are seven movements, Liadov having written two, the second, a saraband, and the fourth, which is a fugue. All seven movements are included in this evening's broadcast, beginning at 9.5.



The Landestheater, Brunswick, from which to-night's Hamburg programme is relayed

(Photo: Staatliche Bildstelle, Braunschweig)

### NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50
10.15 a.m.—The Daily Service.			
10.30—Time Signal (Greenwich), Shipping Forecast.			
10.45—Professor S. J. Cowell: "Sense and Sustenance"—III			
11.0—11.5—Housewives' News.			
12 noon—Reginald Foot. At The Organ.			
1.0 p.m.—Time Signal (Greenwich).			
1.0—Leonardo Kemp and his Piccadilly Hotel Orchestra.			
1.55—Experimental Transmission by the Fultograph Process.			
2.5—For the Schools. Nature Study. Mr. Eric Parker.			
2.25—Interval.			
2.30—Music: Sir Walford Davies.			
3.35—French: Monsieur E. M. Stéphan and Mademoiselle Coustenoble: "Early Stages in French"—VI.			
4.5—"The Claims of Science"—III. Mr. Gerald Heard: "Life—VI. The Control of Life (Genetics)."			
4.30—The Grosvenor House Orchestra. Directed by Joseph Meeus.			
4.45—Time Signal (Greenwich).			
5.15 (Daventry)—The Children's Hour.			
5.15 (London and Northern)—The B.B.C. Dance Orchestra. Directed by Henry Hall.			
6.0—"The First News."			
6.30—Time Signal (Greenwich).			
6.30—"The Foundations of Music. Schumann's Songs. Sung by Anne Thurstfield (Soprano).			
6.50—French Talk. Monsieur E. M. Stéphan.			
7.20—"The Wireless Military Band. Conducted by Charles Leggett. Raie da Costa (Pianoforte).			
8.30—"Life Among Native Tribes"—II. Dr. Audrey Richards.			
9.0—Time Signal (Greenwich).			
9.0—"The Second News."			
9.15—Shipping Forecast; New York Stock Market Report.			
9.20—Symphony Concert. Lauri Kennedy (Violoncello). The B.B.C. Orchestra (Section B). (Leader, Arthur Catterall). Conductor, Adrian Boult.			
10.35 p.m.—12 midnight—Dance Music.			
11.30 p.m.—Time Signal (Greenwich).			

### REGIONAL

	kc/s.	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50
10.15 a.m. (London and Northern)—The Daily Service.			
10.30—11.5 (London and Northern).—Daventry National Programme.			
11.30—12 noon (London)—Experimental Television Transmission (Baird Process).			
12 noon—The Buxton Municipal Orchestra. (Horace Fellowes).			
1.0 p.m.—A Ballad Concert. Gladys Ilay Dillon (Soprano). Edern Jones (Baritone). Gladys Noon (Violin). Adelaide Newman (Pianoforte).			
2.0—3.5—Midland Studio Orchestra.			
4.0 (Northern)—Evensong. Relayed from York Minster, York.			
4.30 (London).—Daventry National.			
5.15—"The Children's Hour."			
6.0—"The First News."			
6.35 (Northern and London)—Reginald Dixon at The Organ.			
6.35 (Midland)—A Recital by Margaret Abethorpe (Pianoforte).			
6.55—Prelude and Act I of Wagner's "Die Meistersinger." ("Die Meistersinger"). From The Royal Opera House, Covent Garden. Cast: Fritz Wolff, Lotte Lehmann, Gladys Parr, Heinrich Tessler, Philip Bertram, Eduard Habich, Friedrich Schorr, Edward Leer, William Anderson, Richard Watson, Leslie Horsman, Frederick Davies, William Michael, Frank Sale, Frederick Woodhouse, Howard Fry. Conductor, Sir Thomas Beecham.			
8.30 (London)—Alfredo and his Vagabond Orchestra.			
8.30 (Midland)—The Music of Arthur Wood.			
8.30 (Northern)—A Sonata Recital. Helen Jackson (Viola) and Denis Brierley (Pianoforte).			
8.55 (Northern)—Mr. J. Manclerk Hollis: "Motor Caravanning and Camping."			
9.15—"The Turn of the Screw." A Version for broadcasting by E. J. King Bull of the famous story by Henry James.			
10.15—"The Second News."			
10.35—11.0 (Midland)—As London.			
10.35—12 midnight (London and Northern)—Dance Music.			

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

#### ALGIERS (N. Africa)

825.3 kc/s (363.3 m.); 13 kW. Transmits at intervals from 12.30 p.m. 7.15 p.m.—Talk on the History of Music—Johann Sebastian Bach. 7.25—Chamber Music Concert. 7.55—News and Time. 8.0—Instrumental Concert. 8.30—Talk: Old Algiers. 8.45—Delibes Concert. 9.0—Oriental Concert. 9.55—Tourist Talk in English, F. K. Brennan, Algeria.

#### BARCELONA (Spain)

Radio-Barcelona (EAJI). 860 kc/s (349 m.); 8 kW. Transmits at intervals from 8.15 a.m. 8.0 p.m.—Trio Concert. Le Coucou (Daquin). Poème d'amour (Faure). Selection from "Martha" (Flotow). Ballet (Pesse). 8.30—Exchange Quotations, Request Gramophone Records and Press Notes. 10.10—Chimes, Exchange Quotations, Weather Forecast and Relay of Foreign Stations. 10.10—Concert of Dance Music by the "Demons' Jazz Band." 11.0—"Los Claveles"—One Act Musical Comedy (Serrano) and "El Guitarrico"—One Act Musical Comedy. 1.0 a.m. (Wednesday) (approx.)—Close Down.

#### BELGRADE (Yugoslavia)

697 kc/s (430.4 m.); 2.5 kW. Transmits at intervals from 11.0 a.m. 6.55 p.m.—Time and Programme Announcements. 7.0—Czech Lesson. 7.30—Talk on Cosmetics. 8.0—Gramophone Records of Variety Music. 8.20—String Quartet in D, Op. 18 (Mozart). 9.0—Talk on the Following Transmission. 9.10—"Aida"—Opera (Verdi) on Gramophone Records. 10.30 (approx.)—News Bulletin.

#### BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW. Transmits at intervals from 5.45 a.m. 12.55 p.m.—Nauen Time Signal. 1.30—News Bulletin. 2.0—Gramophone Concert of Children's Music, relayed from Berlin (Witzleben).

3.0—Fairy Tales for Children. 3.30—Weather and Exchange. 3.45—Talk for Women: Flower Growing. 4.30—See Leipzig. 5.30—Talk: From Daumier to Kokoschka—The History of Lithography. 6.0—Talk: The Theme in Instrumental Music. 6.30—Advanced English Lesson. 6.55—Weather for Farmers. 7.0—Topical Talk. 7.35—Talk: Research and Progress—Raw Material and Technical Progress; followed by Weather for Farmers. 8.0—See Berlin (Witzleben). 8.30—See Stuttgart. 9.40—News and Sports Notes. 9.50—Third Act of "The Mastersingers," (Wagner), relayed from Covent Garden, London. 11.35—Weather, News and Sports Notes.

#### BERLIN (Germany)

Witzleben. 715 kc/s (419.5 m.); 1.5 kW. Transmits at intervals from 6.0 a.m. 6.0 p.m.—Talk for Young People: Young Metal Workers talk about their Work. 6.30—Orchestral Music, conducted by Ludwig Preiss. Overture, "Romeo and Juliet" (Tchaikovsky). Waldesrauschen (Conūs). Suite from "Il Trovatore" (Verdi, arranged for Radio by Bernd Bergel). 6.55—The Witzleben Station informs its Listeners... 7.0—Topical Talk. 7.10—Orchestral Concert. Overture, "The Hermit's Bell" (Maillart). Selection from "The Czarevitch" (Lehar). Hungarian Dances, Nos. 2 and 7 (Brahms). Waltz, Marienklänge (Johann Strauss). 8.0—Cantata on the Death of Haydn (Cherubini), by the Berlin Wireless Orchestra, the Berlin Wireless Choir, Ingrid Brebeck (Soprano), Paul Feher and Heinz Marten (Tenors). Conductor: Maximilian Albrecht. 8.30—Cheap Holidays for Everybody (Hartmuth Merleker). 9.0—News and Sports Notes. 9.10—See Breslau. 10.30—Weather, and Second News.

#### BORDEAUX-LAFAYETTE (France)

(PTT). 986 kc/s (304 m.); 13 kW. Transmits at intervals from 12 noon. 7.30 p.m.—News Bulletin and Ex-

change Quotations. 7.40—Talk: The Gardeners' Association. 7.55—Lottery Results. 8.0—Talk: The World Production of Resinous Substances. 8.15—News Bulletin and Weather Forecast. 8.30—Gala Concert on Gramophone Records: Great Italian Singers.

#### BRATISLAVA

(Czechoslovakia)

1,076 kc/s (279 m.); 14 kW. Transmits at intervals from 11.0 a.m. 7.0—See Prague. 7.25—Puppet Play. 7.30—"La Bohème"—Opera (Puccini) relayed from the Slovak National Theatre. 9.30—Variety Music on Gramophone Records. 10.0—See Prague. 10.15—Announcements. 10.20—Recital of Music for Two Pianofortes.

#### BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by Gleiwitz, 1,184 kc/s (253 m.). Transmits at intervals from 6.0 a.m. 4.30 p.m.—Soprano Song Recital by Aga Goretzki-Svoboda. Two Songs (Haydn): (a) Ein kleines Haus, (b) Two English Canonets. Old German Folk Songs: (a) Treue Liebe, (b) Von der edlen Musika, (c) Ständchen, (d) Der Spielmann. Three Songs (Mahler): (a) Rheinlegendchen, (b) Wer hat dies Liedlein erdacht, (c) Hans und Grete. 5.0—Pianoforte Music on Gramophone Records. Mcphisto Waltz (Liszt). Arabesques on "The Blue Danube" (Johann Strauss). Pastorale variée (Mozart). 5.30—Market Prices and Review of New German Novels. 5.50—Astronomical Talk: "The Division of the Firmament." 6.10—Talk for Women. 6.35—This will interest you!—Surprise Programme. 6.50—Weather Forecast. 6.55—"Well, now what?"—A Humorous Episode from Club Life (Witczynsky), with the collaboration of the Station Orchestra conducted by Franz Marszalek and Carl Brauner (Tenor). 7.35—Weather Forecast. 7.40—Talk: The Most Important Discovery in connection with Silesia's Past. 8.0—See Berlin (Witzleben). 9.0—News Bulletin. 9.10—"Siegfried"—a Tragedy in



TUESDAY continued

Two Parts (Hebbel). 10.30—Time Signal, Weather Forecast, News Bulletin, Sports Notes and Programme Announcements. 10.45—Concert from Hamburg.

BRNO (Czechoslovakia) 4878 kc/s (342 m.); 35 kW. Transmits at intervals from 10.0 a.m. 7.35 p.m.—See Prague.

7.25—“Brno in Songs” (Premysl-Bayer) by F. Kubicek. 8.0—See Prague. 10.15—News Bulletin. 10.20—See Bratislava.

BRUSSELS (Belgium) (No. 1) I.N.R. 590 kc/s (509 m.); 15 kW. 12 noon—Gramophone Concert arranged by the Belgian Catholic Radio Society. In the interval at 12.30 p.m.—Weather.

5.0—Orchestral Concert conducted by Franz André, arranged by the Belgian Catholic Radio Society. Overture, “The Drum-major’s Daughter” (Offenbach). A Day in the Vienna Woods (Keusberger). Mariska Czardas (Michiels). Serenade for Flute and Horn (Titl). Summer Festival (Siede). Sound Film Music. 5.45—Programme for Children arranged by the Belgian Catholic Radio Society. 6.20—Literary Review. 6.30—Gramophone Concert. Overture, “Der Walfischmied” (Lortzing). Pas des Fleurs (Delibes). La Légende des Plots bleus (Christiné). The Butterfly (Bendix-Winter). Wedding March of the Sleeping Beauty (Rhode). Mona (Phillips). Waltz, Der Schatzmeister (Ziehrer). Hearts and Flowers (Czibulka). Waltz, Lustige Wien (Kozák). Amélie (Phillips). Selection (Doria). March, Sylvaner (Rulland). 7.15—Catholic Report. 7.30—Programme for Women. 8.0—Concert arranged by the Belgian Catholic Radio Society. The Station Symphony Orchestra conducted by Arthur Meulemans. Coronation March (Elgar). Four Ways (Coates). Roses of Picardy (Wood). Mareskake (Percy). Gypsy Suite (Coleridge-Taylor).

8.45—Talk. 9.0—Concert (continued). March from “The Prophet” (Meyerbeer). Dance of the Hours from “La Gioconda” (Ponchielli). Waltz Potpourri (Fétras). Humorous Gramophone Records. Selection from “The Count of Luxembourg” (Léhar). Pas des Fleurs (Delibes). 10.0—Le Journal Parlé. 10.10 Gramophone Concert. Part I. Modern Dances. Part II. Old Dances. 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 2)

I.N.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish. 12 noon—Gramophone Concert. Selection from “Czar and Carpenter” (Lortzing). Prelude, Op. 3 (Rachmaninov). Scherzo Waltz (Chabrier). Selection from “Blue Beard” (Offenbach). Selection from “Louise” (Charpentier). Entr’acte gavotte from “Mignon” (Thomas). Réverie du soir, from Suite algérienne (Saint-Saëns). Oriental Suite (Popy). Ballet Suite (Popy). La Cocarde de Mimi Pinson (Goublier-Tavan). Theme and Variations (Proch). Selection from “La Vie parisienne” (Offenbach). Desirs d’amour (Michiels). Dream Song (Friml-Rende). Selection from “Il Trovatore” (Verdi). Selection from “Aida” (Verdi). Tyrolienne Printanière (St. Servan). Ma Bergère. Overture, “Orpheus in the Underworld” (Offenbach). Le Trompette amoureux (Walpot).

5.0—Orchestral Concert conducted by Jean Kumps. Schiller March (Meyerbeer). Waltz, Tales from the Vienna Woods (Johann Strauss). Selection from “Mignon” (Thomas). Timbres et Clochettes (Griegh). Fanciful Etchings (Ketelbey). 5.45—Programme for Children. 6.30—Gramophone Records. Overture, “Sigurd” (Reyer). Selections from “The Mastersingers” (Wagner). Selection from “Madame Butterfly” (Puccini). Selection from “The Barber of Seville” (Rossini). Aria from “Il Trovatore” (Verdi). Aria from “The Force of Destiny” (Verdi). Selection from “L’Africaine” (Meyerbeer). 7.15—Talk: The Problem of Wireless Interference. 7.30—Le Journal Parlé. 8.0—Variety Programme. Albert Remes (Humorist). The Animated Vocal Double Quartet conducted by Mr. Wagendorp. The SAROV Dramatic Company under the direction of Louis Belloy and the Radio Orchestra conducted by Charles Walpot. 10.0—Le Journal Parlé. 10.10—

Variety Music on Gramophone Records. 11.0 (approx.)—Close Down.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW. Transmits at intervals from 11.0 a.m. 4.0 p.m.—Concert of Light Music and Romanian Music by the Motoi Orchestra. 5.0—News and Time Signal. 5.10—Concert (contd.). 6.0—Talk on Literature and Languages. 6.40—Light Music on Gramophone Records. 7.0—Ballet Music from “Hamlet” (Thomas) by the Station Orchestra. 7.30—Talk (to be announced). 7.45—Song Recital by Mlle. Gutiano accompanied by the Station Orchestra, conducted by M. Alessandresco. 8.5—Concert of Light Music by the Station Orchestra. 8.45—News and Close Down.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW. Transmits at intervals from 9.15 a.m. Programme also relayed on 270 metres from 6.30 p.m. till Close Down. 5.0 p.m.—Symphony Concert on Gramophone Records. 6.0—French Lesson. 6.30—Concert by the Budapest Workers’ Choral Society conducted by Géza Krén. Soloist: Elemér Kraudi (Baritone). 7.15—Talk on International Conferences. 7.45—Orchestral Concert. Selection from “The Girl of the Golden West” (Puccini). Potpourri (Kéler-Béla). Song (Saphir). German Folk Song (Ochs). Song, Zigeuner Blut (Szenkár). Toneria (Sjöberg). 8.45—Time Signal, Weather Report and News Bulletin. 9.0—Programme dedicated to Lake Balaton—Talk, Poems and Songs, followed by Concert by the Toll Cigany Orchestra, relayed from the Kovacevics Restaurant.

COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relay by Kalundborg, 260 kc/s (1,153 m.). Transmits at intervals from 7.30 a.m. (Gymnastics). 12 noon—Concert by a String Ensemble, relayed from the Hotel Angleterre. 3.0 p.m.—Orchestral Concert conducted by Emil Reesen. Soloist: Thorvald Andersen (Songs). March, King Christian X (Joachim Andersen). Concert Overture, Nachklänge aus Ossian (Gadé). Waltz, Nordlys (Lumbyé). Three Hebrew Songs (Bruch). Instrumentation by Anton Bloch: (a) Beweinete die geweihte an Abels Strand, (b) In Ihrer Schönheit wandeln sie, (c) Arabiens Kamele am Jordan zieh’n. Minuet from “King and Marshal” (Heise). Six Songs (Heise): (a) Efter Regnen, (b) Til Luna, (c) Blaes, blaes du Vintervind, (d) Serenade, (e) Duggen er falden, (f) Orkenes Søn. March, Flotte Bursche (Christiansen). Pizzicato Gavotte for Strings (Borregaard). Fantasia on Melodies by Hartmann and Gade (Bohlmann). Serenade (Jacob Gade). Ballet Music from “Aladdin” (Horne-man). Overture, “Røverborgen” (Kuhlau).

5.0—Reading for Children. 5.40—Exchange Quotations and Fish Market Prices. 5.50—Talk: Prisons. 6.20—Elementary German Lesson. 6.50—Weather Report. 7.0—News and Report of the Odense Radio Club. 7.15—Time Signal. 7.30 (from the Aarhus Studio)—Talk. 8.0—Town Hall Chimes. 8.2—Danish Vocal Duets by Anna Hagen and Edith Schmidt. 8.20—“The Hansen Family”—Humorous Sketch (Jens Locher). 8.35—Concert by the Radio Orchestra, conducted by Launy Grøndahl. Professor Egon Petri (Pianoforte). Concerto No. 3 in C Minor for Pianoforte and Orchestra, Op. 37 (Beethoven). 9.5—Talk on Topical Questions. 9.35—Pianoforte Recital (Egoh Petri). Fantasia in C, Der Wanderer (Schubert). Schezzo in B Flat Minor (Chopin). 10.0—News Bulletin. 10.15—Accordion Recital. 11.5 (approx.)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relay by Cork, 1,337 kc/s (224.4 m.). 1.30—2.0 p.m.—Time Signal, Weather Report, Stock Report and Light Music on Gramophone Records. 6.0—Popular Music on Gramophone Records. 6.15—Programme for Children. 7.0—Gramophone Records of Variety Music. 7.15—News Bulletin and British Stock Market Report. 7.30—Time Signal. 7.31—Leigheacht Gaedhilge. 7.45—Talk: Trout Fishing.

8.0—The Augmented Station Orchestra. 8.30—Soprano Solos by Elsie Hayes. 8.40—“The Snare”—Play presented by Jack Dwan and Company. 9.10—The Augmented Station Orchestra. 9.30—Tenor Solos by R. Harrison. 9.40—The Augmented Station Orchestra. 10.0—Contralto Solos by Madge Hughes. 10.15—The Augmented Station Orchestra. 10.30—Time Signal, News, Weather Report and Close Down.

FÉCAMP (France)

Radio Normandie. 1,293 kc/s (232 m.); 10 kW. 12 noon—Light Music on Gramophone Records. 12.30 p.m.—News Bulletin. 12.45—Concert of Popular Music. Carnaval de Venise (Genin). Selection from “Mignon” (Thomas). Selection from “Tosca” (Puccini). Selection from “A Waltz Dream” (Oscar Straus). Selection from “Les Petites Michus” (Messager). Selection from “The Pearl Fishers” (Bizet). Selection from “L’Arlesienne” (Bizet). Selection from “Thais” (Massenet). Selection from “Madame Butterfly” (Puccini). Selection from “Si j’étais Roi” (Adam). Selection from “The Tales of Hoffmann” (Offenbach). Selection from “The Huguenots” (Meyerbeer). 7.30—Wireless News. 8.0—News Bulletin. 8.30—Havre News and Concert, relayed from Havre. 11.0—Dance Music. 1.0 a.m. (Wednesday) (approx.)—Close Down.

FLORENCE (Italy)

Ente Italiano Audizioni Radiofoniche. 599 kc/s (500.8 m.); 20 kW. See Turin.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relay by Cassel, 1,220 kc/s (246 m.). Transmits at intervals from 6.0 a.m. 1.0 p.m.—See Langensberg. 2.0—News Bulletin. 2.10—Sponsored Concert. 3.0—Weather Report. 3.10—Time and Economic Notes. 3.20—Programme for Housewives. 4.55—Economic Notes. 5.0—Concert by the Station Orchestra. Part I. Pianoforte Concerto, No. 2 in C Minor, Op. 18 (Rachmaninov). Conductor: Hans Roschudt. Soloist: Sofie Selzmann (Pianoforte). Part II. Old Dance Music—Orchestra, conducted by Walter Caspar. 6.15—Economic Notes. 6.25—Talk: Evariste Galois—In Memoriam. 6.50—See Stuttgart. 7.15—Time, Programme Announcements, Weather and Economic Notes. 7.30—Gorch Fock Memorial Programme (died May 31st, 1916, in the Naval Battle in the Skager Rack). 8.0—See Berlin (Witzleben). 8.30—till Close Down. See Stuttgart.

HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relay by Bremen, 1,112 kc/s (270 m.); Flensburg, 1,373 kc/s (218 m.); Hanover, 530 kc/s (566 m.); and Kiel, 1,292 kc/s (232.2 m.). Transmits at intervals from 5.45 a.m. 5.55 p.m.—Trio in E Flat, Op. 100 (Schubert). 6.30—Talk: The Malayans in Sumatra. 6.55—Exchange and Market Prices. 7.0—Topical Talk. 7.15—Weather Report. 7.20—Otto Alfred Palitzsch reads from his Book “Die Marie”. 8.0—See Berlin (Witzleben). 8.30 (from Hanover)—North German Theatres—The 1931—32 Season of the Brunswick Landestheater, by the Opera Personnel of the Theatre and the Orchestra, conducted by Klaus Nettsträter. Suite for Full Orchestra (Rudolf Hartung). Sextet from “The Bartered Bride” (Smetana). Aria from “Orpheus and Eurydice” (Gluck). The Rose Aria from “The Marriage of Figaro” (Mozart). Adagio from Symphony No. 12 in B Flat (Haydn). The Death of Isolde from “Tristan und Isolde” (Wagner). Aria: O Paradise, from “L’Africaine” (Meyerbeer). Trio from “Der Rosenkavalier” (Richard Strauss). Aria: Divine Aida from “Aida” (Verdi). Selection from “Boris Godounov” (Moussorgsky). Quintet from “The Mastersingers” (Wagner). Overture, “Der Freischütz” (Weber). 10.0—News Bulletin. 10.20—Concert of Light Music by the Philharmonic Orchestra, conducted by Adolf Secker. Suite, Aus aller Herren Länder (Moszkovsky). Overture “Si j’étais roi”

(Adam). Wedding Waltz from “Pierrette’s Veil” (Dohnányi). Selection from “Tosca” (Puccini). Petite Suite (Debussy). Waltz, Die Pesther (Lanner). Selection from “The Rose of Stamboul” (Fall). Toujours ou jamais (Waldteufel). Aufzug der Stadtwahe (Jessel). Semper vivum (Larcher). Waltz from “Wienerblut” (Strauss).

HEILSBURG (Germany)

1,085 kc/s (276.5 m.); 60 kW. Relay by Danzig, 662 kc/s (453.2 m.). Transmits at intervals from 6.0 a.m. 11.30 a.m.—Concert by the Königsberg Opera House Orchestra, conducted by Karl Hrubetz. Military March (Korngold). Overture, Erlkönig (Zois). Waltz, Weltstadt-bilder (Johann Müller). Egyptian Suite (Thiele). Serenade in Four Movements (Rosch). Potpourri Hellmesbergiana (Ischpold). Waltz, Tout Paris (Waldteufel). Deutschmeistermarsch (Bayer). Opera Melodies (Lortzing). Waltz, In a Rowing Boat (Archibald Joyce). 1.20 p.m.—News Bulletin. 1.30—Concert conducted by Ernst Eckhard. 2.30—Sponsored Programme with Gramophone Records. 3.30—Musical Improvisations. 4.0—Talk: The Anniversary of the Battle of the Skager Rack. 4.30—See Leipzig. 5.30—Talk: Baron von Hardenberg as a Statesman. 6.0—Review of Books. 6.15—Agricultural Market Prices. 6.30 (from Danzig)—Talk: Psychotechnics. 7.0—Recital of Songs to the Lute. Der Sänger (Brandt). Erwartung (Hermann Löns). Kom mit (Hermann Löns). Dance Song (Franz Abt). East Prussian Folk Song, Die Erde braucht Regen. Verloren hab ich all mein Geld. Soll ich ihn lieben? (Reissenauer). Das Stelldichein (Erdlen). 7.25—Talk: How can we make our Poets and Thinkers real to us? 7.55—Weather. 8.0—“The Fairy Tale”—A Short Sketch (Curt Goetz). 8.30—Weather Report. 8.35—Beethoven Concert by the Königsberg Opera House Orchestra, conducted by Erich Seidler. Soloist: Joachim Ansgore. Concerto for Pianoforte and Orchestra in E Flat, Op. 73, No. 5. The Second Symphony in D, Op. 36. 9.35—Weather, News and Sports Notes. 9.50—Third Act of “The Mastersingers” (Wagner), relayed from Covent Garden, London. 11.35 (approx.)—News and Sports Notes.

HILVERSUM (Holland)

1,013 kc/s (296.1 m.); 20 kW. (7 kW. up to 4.40 p.m.). Programme of the Algemeene Vereeniging Radio Omroep (A.V.R.O.). 7.40 a.m.—Time Signal. 7.41—Light Music on Gramophone Records. 8.40—Concert by the Station Chamber Orchestra, conducted by Louis Schmidt. Overture, “Samson” (Handel). Concerto grosso in F Minor (Scarlatti). Overture, Heimkehr aus der Fremde (Mendelssohn). Serenade (Grünfeld). Selection from “Adrienne Lecouvreur” (Cilea). Elegy (Rachmaninov). Florentine Intermezzo (Waghalter). Military March (Schubert). 9.40—Daily Service. 9.55—Popular Music on Gramophone Records. 10.10—Recitations. 10.40—Organ and Song Recital by Willem Doortmant and Ric Dijk-oghel. Organ Solo: Prelude in C Minor (Bach). Songs with Organ: (a) Caro mio ben (Giordano), (b) Arioso (Handel), (c) Aria from “Elijah” (Mendelssohn). Two Organ Solos. Songs with Organ (Wolf): (a) Gebet, (b) Schlafendes Jesuskind, (c) Auf ein altes Bild. Organ Solo: Pastorale (Nieland). Songs with Organ: (a) Christ Song (Hildach), (b) Halleluja (Hummel). Organ Solo: Allegro (Gade). 11.40—Time Signal. 11.41—Concert by the Station Orchestra, conducted by G. Hemmes. Overture, “Fra Diavolo” (Auber). Ballet Music from “Hamlet” (Thomas). Sérénade florentine (Godard). Selection from “The Daughter of the Regiment” (Donizetti). Waltz, Wiener Bürger (Ziehrer). Der Rose Hochzeitszug (Jessel). La mia Serenata (Staffelli). Tambourine Dance (Dunhill). Selection from “Sunny” (Kern). Waltz, Du und Du (Johann Strauss). Von Bühne zu Bühne (Fétras). Was die Glocke von Stefanurm erzählt (Wottitz). March, In Seville (Siede). Items by the “Three Syncopators” in the intervals. 1.55 p.m.—Talk (to be announced).

2.25—2.40—Interval. 2.40—Dress-making Lesson. 3.40—Pianoforte Recital by Egbert Veen. Rigoletto Paraphrase (Liszt). Andante from the Sonata in G (Felderhof). Dance from “Calirrhoe” (Chaminade). Sonata in F Minor (Beethoven). 4.10—Programme for Children. 5.10—Concert of Light Music by Kovacs Lajos and his Orchestra, with Songs by Bob Scholte. 5.40—Talk (to be announced). 6.10—Orchestral Concert (contd.). 7.10—Talk (to be announced).

7.55—Concert by the Concertgebouw Orchestra, conducted by Nico Treep relayed from the Concertgebouw, Amsterdam. Soloist: Edith Lorand (Violin). Symphony Op. 4 in D (Svendsen). Violin Concerto, Op. 37 in D Minor (Vieuxtemps). 8.55—Talk by W. Vogt. 9.20—Concert (contd.).—Invitation to the Dance (Weber). Zigeunerweisen, for Violin and Orchestra (Sarasate). Overture, “William Tell” (Rossini). 10.10—Weather and News. 10.25—Concert of Light Music on Gramophone Records. 10.40—Popular Concert by John van Brück and his Boys relayed from the Carlton Hotel, Amsterdam. 11.40 (approx.)—Close Down.

HUIZEN (Holland)

160 kc/s (1,875 m.); 8.5 kW. Programme of the Catholic Radio Society (K.R.O.). 7.40—8.55—Variety Music on Gramophone Records. 9.40—Popular Music on Gramophone Records. 11.10—Religious Programme. 11.40—Time and Police Notes. 11.55—Trio Concert. 1.25—1.40 p.m.—Interval. 1.40—Programme for Women. 2.40—Dressmaking Lesson. 3.40—Orchestral Concert conducted by Johan Gerritsen. Overture, “The Barber of Seville” (Rossini). Selection from “La Traviata” (Verdi). Heinzelmännchens Wachtparade (Noack). The Forge in the Forest (Michaelis). Humorous Potpourri, In the Seventh Heaven (Fétras). Waltz, My Dream (Waldteufel). March, Wiener Schwalben (Schlogel). Selection from “The Dollar Princess” (Fall). Waltz, Freut euch des Lebens (Strauss). San Lorenzo (Silva). 6.40—Variety Music on Gramophone Records. 6.50—Talk by Dr. F. de Boer. 7.10—Police Notes. 7.25—Talk. 7.40—Popular Music on Gramophone Records. 8.10—“The Darling of the Public”—Radio Play in Three Acts (Frank). 9.25—News Bulletin. 9.40—Talk by G. Goossens. 9.55—Concert conducted by Piet Lustenhouwer. Thisledown (Haydn Wood). Baby spielt Soldat (de Michel). Czardas (Kempner). Mein Lieblich Potpourri (de Michel). Delibes Potpourri (Urbach). Negro Cradle Song (Clut-sam). Dubnuschka (Schumann). The Lark (Glinka). Potpourri of Popular Songs (Dostal). Memories of Naples (Bonincontro). 11.40—(approx.)—Close down.

KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW. See Copenhagen.

LANGENSBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW. Transmits at intervals from 6.45 a.m. (Exercises, Weather, Time and Gramophone Concert). 11.20 a.m.—Gramophone Concert. Overture, “Carnaval roman” (Berlioz). Potpourri of Viennese Operetta Music (Hruby). Slavonic Rhapsody (Friedemann). Fantasia on Themes by Johann Strauss (arr. Rosenthal). Selections from “Gitta entdeckt ihr Herz” (Brodsky). 12 noon—See Stuttgart. 1.0 p.m.—Weather, News and Time Signal. 1.5—Orchestral Concert, conducted by Wolf. Overture, “The Hermit’s Bell” (Maillart). Waltz, Am himmelblauen See (Millocker). Scandinavian Lyric (Palmgren). Intermezzo from “Hari Janos” (Kodaly). Eysler Potpourri (Hrubetz). Four Indian Love Lyrics (Woodforde-Finden). Waltz, Intermezzo, Wasserspiele (Rusch). Selections from “The Gipsy Baron” (Strauss). 3.30—Economic Notes and Time Signal. 3.50—Programme for Children. 4.20—Notes on the Broadcasts for Schools. 4.30—Educational Talk: Acquiring a Personal Style. 5.0—See Frankfurt. 6.15—Talk: The Soldier John Davis returns home. 6.40—Talk on Retail Trade. 7.0—Weather, Time, Economic and



**TUESDAY**  
continued

Sports Notes. 7.15—Wireless Notes. 7.30—Talk: The Union of South Africa—Diamonds, Platinum and other Treasures of the Earth. 7.55—First General News. 8.0—See Berlin (Witzleben). 8.30—Concert of German Folk Songs by the Station Chamber Choir, conducted by Zimmermann. 9.0—“The Eternal Wanderer”—A Literary and Musical Programme arranged by Rudolf Rieth. Readings: (a) Urwanderung (August Stramm), (b) Auf der Chaussee (Wilhelm v. Scholz), (c) Man soll in einer Stadt (Klabund), (d) Strassenlied (Borries v. Münchhausen). Musical Interlude. Readings: (a) Im Nebel (Hermann Hesse), (b) Der verspätete Wanderer (Josef von Eichendorff), (c) Die Tulipan (Lulu von Strauss und Torney). Musical Interlude. Readings: (a) Klingsor's letzter Sommer, (b) Vom Baum des Lebens fällt. Musical Interlude. Readings: (a) Ein Abschied (Arno Holz), (b) Der steirische Weinfuhrmann (Rudolf Hans Bartsch). Musical Interlude. Readings: (a) Flüchtlinge (Rudolf Rieth), (b) The Emigrant (Hans Christian Andersen), (c) Das Jenseits (Franz Werfel). 10.5—News, Sports Notes and Miscellaneous Announcements. 10.20—Talk on Sport and Silent Night.

**LEIPZIG (Germany)**  
1.157 kc/s (259 m.); 2 kW. Relayed by Dresden, 941 kc/s (319 m.). Transmits at intervals from 6.0 a.m. 4.30 p.m.—Concert by the Leipzig Symphony Orchestra, conducted by Hilmar Weber. Overture, “King Manfred” (Reinecke). Music to “Mareike von Nymwegen” (d'Albert). Music to “Sleeping Beauty” (Humperdinck). Slavonic Rhapsody in A Flat, Op. 45, No. 3 (Dvorak). Waltz from “Der Rosenkavalier” (Richard Strauss). 5.30—Weather and Time Signal. 5.50—Economic Notes. 6.5—Talk: The Evolution of Male Dress during the Nineteenth and Twentieth Centuries. 6.25—French Lesson. 6.50—Programme to be announced. 7.0—Talk: Shall we have Touring Opera Companies? 7.30—Song Recital by Georg Zottmayr. Songs (Schubert): (a) Grenzen der Menschheit, (b) Die Krähe, (c) Der Wegweiser. Songs (Richard Trunk): (a) Vor Akkon, (b)

Landsknecht, (c) An die Liebe, (d) Suleika. Songs (Hugo Wolf): (a) Gesang Weylas, (b) Heimweh. 8.0—See Berlin (Witzleben). 8.30—Clemens Brentano Programme on the Ninetieth Anniversary of his Birth. “Geschichte vom braven Kaspar und dem schönen Annerl” (Clemens Brentano) (arranged in Dialogue Form by Dr. Martin Krahe). 9.15—Economic Notes. 9.25—Introduction to the following Transmission (on Gramophone Records). 9.50—Third Act of “The Mastersingers” (Wagner), relayed from Covent Garden, London. 11.35—News Bulletin.

**LYONS (France)**  
La Doua (P.T.T.). 644 kc/s (465.8 m.); 1.5 kW. Transmits at intervals from 8.0 a.m. 7.0 p.m.—Light Music on Gramophone Records. 7.30—Radio Gazette for Lyons and the South East. 8.30—See Strasbourg.

**MADRID (Spain)**  
Radio Radio (E.A.7). 707 kc/s (424.3 m.); 2 kW. Transmits at intervals from 9.0 a.m. 8.0 p.m.—Chimes, Exchange, Market Prices and Request Gramophone Concert. In the interval at 8.30—Talk by Joaquin España Cantos. 9.15—9.30—News and Political Review. 10.0—Linguaphone French Lesson. 10.30—Chimes, Time Signal and Political Review. 10.45—“Aida”—Opera (Verdi), on Gramophone Records. 12.45 a.m. (Wednesday)—News Bulletin. 1.0—Chimes and Close Down.

**MILAN (Italy)**  
Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW. See Turin.

**MORAVSKÁ-OSTRAVA (Czechoslovakia)**  
1.137 kc/s (263.8 m.); 11 kW. Transmits at intervals from 10.0 a.m. 7.0 p.m.—Light Music on Gramophone Records. 7.20—Introductory Talk to the following Transmission. 7.30—“Czar and Carpenter”—Comic Opera in Three Acts (Lortzing), relayed from the National Theatre. 10.0—See Prague. 10.15—Programme Announcements and Theatre Notes. 10.20—See Bratislava.

**MOSCOW (Russia)**  
Trades Union. 230.1 kc/s (1,304 m.); 100 kW. Transmits at intervals from 5.0 a.m. 6.30 p.m.—Proletariat Radio Journal. 7.15—Programme for Young Communists. 8.0—Talk in Dutch and French: Youth Organisations. 9.55—Time Signal. 10.0—Weather Forecast.

**MUNICH (Germany)**  
563 kc/s (533 m.); 1.5 kW. Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.) and Nürnberg, 1,256 kc/s (239 m.). Transmits at intervals from 6.45 a.m. 4.45 p.m.—Orchestral Concert, conducted by Erich Kloss. Selection from “L'isola disabitata” (Haydn). Three Songs (Richard Strauss): (a) Morgen, (b) Traum durch die Dämmerung, (c) Allerseelen. Selection from “The Goldsmith of Toledo” (Offenbach). Waltz, Gisela (Pavelkosto-handl). Grieg Fantasia (Urbach). March, Ratisbona (Schlenk). 5.50—A Visit to an Exhibition of Dentistry, relayed from the Noris-halle, Nürnberg. 6.15—Time Signal, Weather Forecast, Agricultural Notes. 6.30—Talk: Pope Pius XI. 7.0—Talk: German History and German Character. 7.25—Introductory Talk to the following Transmission. 7.35—“Der Wildschütz” (The Poacher), Comic Opera in Three Acts (Lortzing), relayed from the National Theatre. 10.30—Time Signal, Weather Forecast, News Bulletin and Sports Notes.

**OSLO (Norway)**  
Kringkastingselskapet, 277 kc/s (1,083 m.); 60 kW. Relayed by Fredrikstad, 816 kc/s (367.5 m.); Hamar, 536 kc/s (560 m.); Notodden, 671 kc/s (447.1 m.); Pors-grund, 662 kc/s (453.2 m.) and Rjukan, 671 kc/s (447.1 m.). Transmits at intervals from 11.10 a.m. 5.0 p.m.—Orchestral Concert from the Cecil Restaurant. Overture, “The Water Carrier” (Cherubini). Waltz, Flora (Leopold). Selection from “Katinka” (Friml). Rocooco Cradle Song (Burmester). Overture, (Paul Fosse). Mariä Wiegen-

lied (Regner). Danse des elfes (Henriques). 6.0—Talk for the Housewife. 6.45—Accordion Recital. 7.0—Weather and News. 7.30—English Language Lesson. 8.0—Time Signal. 8.2—Programme arranged by the Life Saving Society, relayed from Fredrikstad. Addresses and Choral Selections. 9.30—Agricultural Notes. 9.40—Weather and News. 10.0—Topical Talk. 10.15—Choral Concert, conducted by Leif Halvorsen. Til Norge (Holter). Barsull (Johansen). Røtnamsknut (Grieg). In a Harem Garden (Selmer). Norge, Norge (Selmer). Song (Palmgren). Two Selections (Järnefeldt). Na er vi alla (Bellman). 10.45 (approx.)—Close Down.

**PALERMO (Italy)**  
Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW. Transmits at intervals from 12.45 p.m. 5.30 p.m.—Programme for Women. 6.0—6.30—Light Music on Gramophone Records. 8.0—Announcements, Radio Giornale dell'Enit, Agricultural Notes and Giornale radio. 8.20—Light Music on Gramophone Records. In the interval at 8.30—Time Signal and Announcements. 8.45—Concert of Chamber Music. Soloists: V. Mannino (Pianoforte), A. Gonzaga (Soprano) and B. Minori, Op. 58, for Pianoforte (Chopin). Soprano Solos: (a) Elegg (Massenet), (b) Birma, bimbetta (Sibella). First Sonata in D for Violin and Pianoforte (Beethoven). 9.30—“Evening”—Comedy in One Act (Ro' La Lomia). 10.0—Chamber Music (cont'd). Soprano Solos: (a) Fior di Campo (Broggi), (b) Aria from “The Secret Marriage” (Cimarosa). Violin Solos: (a) Berceuse (Manno), (b) Il cuculo (Ranzato). Pianoforte Solos: (a) Lithuanian Song (Chopin), (b) Etude in A Minor (Chopin). 10.55—News Bulletin and Close Down.

**PARIS (France)**  
Eiffel Tower (F.L.E.). 207.5 kc/s (1,445.7 m.); 13 kW. Time Signals (on 2,650 metres) at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals).

Transmits at intervals from 1.0 p.m. 6.45 p.m.—Dramatic Programme. 7.0—Le Journal Parlé. 8.20—Weather Report. 8.30—“French Music from the Seventeenth Century up to the Present Time.” Pianoforte Recital, by Marie-Antoinette Pradier, with Commentary by André Delacour. Prelude and Rigaudon from “Le Tombeau de Couperin” (Ravel). Sonata (Ravel). 9.5—Concert by the Firmin Touche Quartet. Quartet No. 3 in D Major (Beethoven). Allegro (Rimsky-Korsakov). Sarabande (Liadov). Scherzo (Borodin). Fugue (Liadov). Mazurka (Sokolov). Courante (Glazounov). Polka (Kopylov). 10.5 (approx.)—Close Down.

**PARIS (France)**  
Poste Parisien. 914 kc/s (328.2 m.); 60 kW. Transmits at intervals from 12 noon. 7.0 p.m.—Light Music on Gramophone Records, News and Announcements. 7.30—Sponsored Gramophone Concert. 8.30—Gramophone Records, Talk and News. 8.45—Vocal and Orchestral Concert. Introduction and Cortège from “Le Coq d'Or” (Rimsky-Korsakov). Village Dance (Chabrier). International Suite (Tchaikovsky). Rapsodie basque for Pianoforte and Orchestra (Bordes). Danses populaires françaises (Tiersot). Chant des esclaves from the “Suite antique” (Woollett). Ballet égyptien (Luigini). Serenade (Dvorak). March and Strctio (Massenet). 10.45—News Bulletin.

**PARIS (France)**  
Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW. 6.45 a.m.—Physical Culture. 7.30—Weather and Physical Culture (continued). 7.45—Gramophone Records of Light Music. 8.0—News, Weather and Press Review. 12.30 p.m.—Gramophone Concert. Overture, “Mireille” (Gounod). Selection from “Robert le Diable” (Meyerbeer). Aria from “Les Huguenots” (Meyerbeer). Selections from “Mignon” (Thomas) Selections from “The Count of Luxembourg” (Lehár). Selections

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TUESDAY continued

(Bach and Laverne): (a) Chez le Magnétiseur, (b) Le Bandit corse, (c) L'accident, (d) Chez le contrôleur des contributions. La Violettera. J'ai deux amours (Scott). In the intervals at 1.0—Exchange, News and Weather and at 1.30 and 2.0—Exchange. 3.45—Exchange and Market Prices. 6.30—Market Prices, Weather, Agricultural Report, Agricultural Talk and Racing Results. 7.0—Theatre Review. 7.15—Art Review. 7.30—Advanced English Lesson. 7.45—British Press Review, Commercial Prices and News. 8.0—Rustic Cabaret, with the collaboration of Paul Groffe, Jeanne Ares, Suzanne Feyrou and Jean Marsac. 8.30—News and Weather. 8.40—Review by Pierre Scize. 8.45—"The Poets of Lille"—Programme arranged by Albert Acremant. In the interval at 9.15—Press Review and News.

PITTSBURGH (U.S.A.) Westinghouse Electric (KDKA). 980 kc/s (306 m.); 25 kW. Transmits at intervals from 12.30 p.m. 9.0 p.m.—Teaberry Baseball Scores. 9.15—Business News. 9.15—Programme to be announced. 9.30—Pebeco Weather Report. 9.32—Market Reports. 9.45—KDKA Kiddies' Klub. 10.0—Teaberry Baseball Scores. 10.5—David Lawrence Dispatch. 10.10—KDKA Artist Booking Service. 10.12—Programme Announcements. 10.15—Programme to be announced. 10.30—The Singing Lady, from New York. 10.45—Little Orphan Annie. 11.0—Time Signal. 11.1—Temperature Report. 11.2—Who's News To-day. 11.7—Teaberry Sport Review. 11.12—Press News-Reeler. 11.15—KDKA Orchestra. 11.30—Ray Perkins, the Old Topper. 11.45—Literary Digest Topics from New York. 11.50—Time Signal. 12.0—midnight—1.15 a.m. (Wednesday)—New York Relay. 12.0—midnight—Pepodent Amos 'n' Andy. 12.15 a.m. (Wednesday)—Just Willie. 12.40—The Stebbins Boys. 12.45—Billy Jones and Ernie Hare. 1.0—"You and Your Government." 1.15—Seiberling Singers. 1.30—Programme to be announced. 1.45—Sisters of the Skillet, from New York. 2.0—Household Finance Programme, from New York. 2.30—Great Personalities: Frazier Hunt, from New York. 3.0—Quaker State Carefree Programme. 3.15—Westinghouse Pioneers. 3.30—Paris Night Life, from New York. 3.45—Chats between the Acts by Florence Fisher Parry. 4.0—Time Signal. 4.1—Teaberry Sport Review. 4.17—Temperature Report. 4.12—Weather Report. 4.15—Press Last Minute News Flashes. 4.20—Hotel William Penn Orchestra. 5.0—Dancing in Milwaukee, from New York. 5.30—Pennzoil Time and Goodnight.

PRAGUE (Czechoslovakia) 614 kc/s (488.6 m.); 120 kW. Transmits at intervals from 6.15 a.m. 5.50 p.m.—Talk: The Architecture of Towns. 6.0—Talk: The Arts and Housekeeping. 6.10—Agricultural Report. 6.15—Talk for Workers. 6.25—German Transmission: Announcements, followed by Wagner Songs. 7.0—Talk with Illustrations: The Guitar and the Hawaiian Guitar. 7.25—Song Recital. 7.45—Adagio and Allegro from the Concerto for Oboe (Kozeluh). 8.0—Concert by the Prague Teachers' Choir conducted by Dolezil. 9.0—Time. 9.2—Orchestral Concert conducted by J. Scheidler. Soloist: Artur Goffman. 10.0—Time, News and Sports Notes. 10.15—Announcements. 10.20—See Bratislava.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland) 743 kc/s (403 m.); 25 kW.; Lausanne, 442 kc/s (680 m.); and Geneva, 395 kc/s (760 m.). 12.30 p.m.—Time Signal from Neuchâtel Observatory. 12.31—Weather Forecast and News Bulletin. 12.40 (from Geneva)—Gramophone Concert of Light Music. 1.0—Exchange Quotations. 1.45—5.0—Interval. 5.0—Time Signal from Neuchâtel Observatory. 5.1 (from Lausanne)—Programme for Women. 5.30 (from Geneva)—Gramophone Concert of Popular Music. 6.30 (from Lausanne)—Talk: Exploring the Polar Regions by Zeppelin and Submarine. 7.0—Weather Forecast. 7.1 (from Geneva)—Review of New Gramophone Records by R. Aloys Mooser. 7.30 (from Geneva)—Talk: The Work of the Disarmament Conference. 7.55—Announcements. 8.0 (from Geneva)—Variety Programme by J.-M. Pasche and his Orchestra, presented by Ruy Blag.

9.0 (from Lausanne)—Fantasies by J. Peitrequin. 9.15—Dramatic Programme by the "Compagnons du Masque." 10.0—Weather Forecast and News Bulletin. 10.15 (approx.)—Close Down.

ROME (Italy) Ente Italiano Audizioni Radiofoniche (IRO). 680 kc/s (441 m.); 50 kW. Relayed by Naples, 941 kc/s (319 m.), and 2RO, 6,976 kc/s (43 m.). 8.15—8.30 a.m.—Giornale Radio and Announcements. 12 noon—Gramophone Records of Variety Music. 12.35 p.m.—Weather Report. 12.45—2.0—Sextet Concert, with Maria Flory (Violin). Marionette a passeggio (Guzzi). Selection from "Lakmé" (Delibes). Violin Solos: (a) Tango (Albeniz), (b) Scherzo (Sasso). Sardinian Serenade (Cann). Valzer incipriato (Pony). Violin Solos: (a) Madrigale (Simonetti), (b) Playa (Sarastate). Gigaretta (Maccagno). Rustle of Spring (Sinding). In the intervals at 1.15—Giornale Radio and Exchange, and at 1.30—Time and Announcements. 5.0—Exchange, Radio Review for Children, Giornale Radio and Announcements. 5.30—Song Recital by Vela Capuano (Soprano). Aria from "Marco Visconti" (Petrella). Aria from "The Loreley" (Catalani). Singing in the Rain (Brown). 5.45—Variety Concert. March, Moscovita (Licari). Aurora pallida (Cuscina). Selection from "Faust" (Gounod). The Little Brunette (Poussig). March, I Pinguinti (Carly). 6.15—Giornale dell' Enit. 6.25—6.40—Talk: The Seasons. 6.55—(Naples)—Shipping and Sports Notes. 7.0—Atmospheric Signals, Lesson in Morse, Agricultural Notes, Announcements, Giornale Radio and Press Review. 8.0—Time, Announcements and Gramophone Records of Variety Music. 8.30—Sports Notes and Announcements. 8.45—Concert. Soloists: Oscar Zuccherini (First Violin), F. Montelli (Second Violin), A. Perini (Viola), L. Silva (Cello). Tito Rosati (Cello), and Franco Perulli (Tenor). Andante cantabile and Arab Dance for String Quartet (Tchaikovsky). Minuet and Gigue (Grétry). Tenor Solos: (a) Aria from "Luiza Miller" (Verdi), (b) Aria from "Turandot" (Puccini), Aria—Ah non me riderstar from "Werther" (Massenet). 9.30—"La duchessa delle nebbie"—Comedy in One Act (Lucio d'Ambrà). 10.15—Concert (cont'd). Tenor Solos: (a) Harlequin's Serenade from "I Pagliacci" (Leoncavallo), (b) Madonna Fiorentina (Bili), (c) Amapola (Lacelle). Cello Solos: (a) Nostalgia (Dumas), (b) Rustic Dance (Squire). Announcements. Symphony Music on Gramophone Records. 10.55—News Bulletin.

SCHENECTADY (U.S.A.) General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.), and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 11.45 a.m. 9.0 p.m.—Bridge Lesson. 9.30—Studio Ensemble. 9.45—Stock Reports and Police Notices. 10.0—Sonata Programme from New York. 10.15—Skippy from New York. 10.30—The Success Doctor from New York. 10.45—Annette McCullough (Crooner). 11.0—Joe and Eddie. 11.15—New Kenmore Orchestra. 11.20—Weather Report. 11.30—With Gray McClintock in the Canadian North-west. 11.45—Sonata Programme. 12.0—midnight (W2XAF only)—Stock Reports and New Items. 12 (WGY only)—General Electric Programme. 12.15 a.m. (Wednesday)—New Kenmore Orchestra. 12.30—4.0—New York Relay. 12.30—Barbasol Programme. 12.45—Trials of the Goldbergs. 1.0—Blackstone Plantation. 11.30—True Story Hour. 2.0—Gay Vienna. 2.30—Ed Wynn and the Fire Chief Band. 3.0—Lucky Strike Dance Hour. 4.0—Freddy Ensel's Orchestra. 4.30—De Witt Clinton Orchestra. 5.0—Ralph Kirby (Dream Singer) from New York. 5.5—Hotel New Yorker Orchestra from New York. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESENDER (BEROMÜNSTER) (Switzerland) 653 kc/s (459 m.); 60 kW.; Basle, 1,229 kc/s (244.1 m.); and Berne, 1,220 kc/s (246 m.). 12.28 p.m.—Time Signal from Neuchâtel Observatory. 12.30—Weather and News Bulletin. 12.40—Gramophone Concert—a Flight across Europe with Musical Landing-stages. 1.35—Weather Report and Exchange Quotations. 1.45—Interval. 3.30—

TUESDAY continued

Concert by the Station Orchestra. 4.0—Programme of Dances and Waltz Songs on Gramophone Records. 5.0—Weather Report. 5.5—Interval. 6.30 (from Berne)—Talk by Dr. Lorenz on Swiss Political Economy. 7.0—Weather Forecast, Time Signal, and Report on Foreign Traffic. 7.5—Talk: Natural Wonders of the Kanderthal. 7.30—Programme for Women. 8.0 (from Berne)—Symphony Concert by the Berne Municipal Orchestra conducted by Albert Nef. Soloist: Rose Bernheim. 9.30—Weather Forecast and News Bulletin. 9.45—Late Concert. Programme of the Music of Modern Composers—Honegger, Ravel and Stravinsky—conducted by Dr. Albert Nef. 10.30 (approx.)—Close Down.

STOCKHOLM (Sweden) Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by Boden, 244 kc/s (1,229.5 m.); Göteborg, 932 kc/s (322 m.); Hörby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Östersund, 389 kc/s (770 m.) and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.30 p.m. (from Göteborg)—Elementary German Lesson. 6.0—Gramophone Concert of Light Music. 7.0—Useful Hints. 7.15—Weather Report and News Bulletin. 7.30—Talk: Sweden from a Tourist's Point of View. 7.50—Orchestral Concert. Soloist: Gustav Gröndahl (Cello). Overture, "Il Seraglio" (Mozart). Movement from the Concerto for Cello and Strings (Ph. E. Bach). Selection from "Rosamunde" (Schubert). Popular Airs and Dances (Brandts-Buys). "Träume" (Wagner). Air from "The Mastersingers" (Wagner). Symphonic Variations for Cello and Orchestra (Boellman). Slavonic Dances (Dvorak). Overture, "Le Cheval de Bronze" (Auber). 9.15—Literary Review. 9.45—Weather Report and News Bulletin. 10.0—Light Music by a String Orchestra. Overture (Fetras). Waltz, Tales from the Vienna Woods (Johann Strauss). Poème érotique (Ottosen). Selection from "Don Giovanni" (Mozart). Waltz, Nina Petrovna (Storaci). Selection from "The White Horse Inn" (Benatzky). 11.0 (approx.)—Close Down.

STRASBOURG (France) Radio-Strasbourg (P.T.T.). 869 kc/s (345 m.); 11.5 kW. 11.30 a.m.—Gramophone Concert of Operatic and Classical Music. 12.45 p.m.—News in French and German. 1.0—Time Signal. 1.2—Gramophone Concert (continued). 2.0—4.45—No Transmission. 4.45—Talk in French. 5.0—Orchestral Concert. March, The Entry of Spring (Blon). Waltz, España (Waldteufel). Gavotte, Madeleine (Pelouid). Overture, "The Barber of Seville" (Rossini). May (Hahn). Les Millions d'Arlequin (Drigo). Napoli from "Impressions d'Italie" (Charpentier). Selections from "The Desert Song" (Romberg). 6.0—Talk in German: The Alsatian Popular Theatre in the Middle Ages. 6.15—Topical Talk in French. 6.30—Gramophone Concert. Le Chasseur maudit (C. Franck). Selections from (a) "Fervaal" (d'Indy), (b) "Samson and Delilah" (Saint-Saëns). Sonata in D (Stamitz). Estrellita (Ponce-Davis). Pas des Echarpes (Chaminade). Selection from "La Favorita" (Donizetti). I belong to you (John-Green). Tu reviens (Paul-Maye). Selection from "Paganini" (Lehar). 7.30—Time Signal. 7.32—News in French and German. 7.45—Gramophone Concert. Overture, "The Merry Wives of Windsor" (Nicolai). The Clock and the Dresden Figures (Ketelbey). The Dolls' Tea Dance (Smith). Ständchen (Schubert). Chant sans paroles (Tchaikovsky). Noël d'amour (Desmoulin). The Little White Cat (Maun). On with the chaos (Nicholls). Baby's Birthday Party (Ronell). We're friends again (Ahler). Blaze Away (Holzmann). Yankee Grit (Holzmann). 8.30—"La Poupee" (The Doll)—Opéra Comique in Four Acts (Audran). 10.30 (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany) Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by Freiburg, 527 kc/s (570 m.). Transmits at intervals from 6.0 a.m. 10.0 a.m.—Recital of Songs from

German Operas. Arias from "Hans Heiling" (Marschner), "Jes-sonda" (Spohr), "Euryanthe" (Weber) and "Das Nachtlager von Granada" (Kreutzer). 10.30—Modern Piano-forte Music—Recital by Rudolf Peters. Sonata in F, Op. 80, No. 3 (Max Reger). Prelude and Fugue, Op. 17 (Peters). Fantasia, Op. 15 (Peters). 11.0—News, Time and Weather. 11.15—12 noon—Sponsored Concerts. 12 noon (from Mannheim)—Opening of the Thirty-eighth Show of the German Agricultural Society. 12.50 p.m.—Time, Weather, News and Programme Announcements. 1.5—Concert from Langenberg. 1.55—News Bulletin. 2.0—2.15—Sponsored Musical Programme. 2.30—Advanced English Lesson. 4.0—Talk on Flowers. 4.30—Talk for Women. 5.0—See Frankfurt. 6.15—Time and Weather. 6.25—Talk: Alsatian Dialects. 6.50—Talk: Radio throughout the World. 7.15—Time and Agricultural Notes. 7.30 (from Freiburg)—Skager Rack Memorial Programme. The Freiburg Chamber Orchestra. Soloist: Margarethe Ritschl (Cembalo). Talk by Captain Werber: The Battle of the Skager Rack from on board the "Elbing." Second Movement from the "Eroica" (Beethoven). 8.0—See Berlin (Witzleben). 8.30—"Clothes make the Man."—Radio Play (Ohlschlaeger, after Keller). 9.40—News from Berlin (Königs Wusterhausen). 9.50—Third Act of "The Mastersingers" (Wagner), relayed from Covent Garden, London.

TOULOUSE (France) Radiophonie du Midi. 779 kc/s (385 m.); 8 kW. Transmits at intervals from 12.30 p.m. 5.0 p.m.—Transmission of Pictures. 5.15—Exchange Quotations. 5.30—Orchestral Selections. Danse macabre (Saint-Saëns). Air from the Suite in D (Bach). 5.45—Orchestral Selections. 6.0—Songs from (a) "Les Cloches de Corneville" (Planquette), (b) "La Mascotte" (Audran) and (c) "Comte Obligado" (Miretti). 6.15—Dance Music. 6.30—Exchange Quotations. 6.45—Cello Recital. Aria (Siciliana), Caro mio ben (Popper). French Serenade (Leoncavallo). Abendlied (Schumann). 7.0—Orchestral Selections. Invitation to the Waltz (Weber). Selection from "Masaniello" (Auber). 7.15—Light Music. 7.30—News Bulletin. 7.45—Military Music. 8.0—Concert. Le Cor (Flegier). Le Soir (Gounod). Flèche d'or (Vacher). Tes yeux changeants (Peyronnin). Les étreintes (Noël). Le Chapeau (Noël). Potpourri (Suppe). 8.30—Songs from (a) "Lohengrin" and (b) "Parsifal" (Wagner), (c) "La Favorita" (Donizetti) and (d) "La Traviata" (Verdi). 8.45—Selections by an Argentine Orchestra. 9.0—Light Music. 9.30—Orchestral Concert from the Café Albrighi. Waltz, Tout Paris (Waldteufel). Selection (Lehar). Dance Music and Romanian Music. Tes yeux (Bonincontro). Spanish Waltz, Zurka (Gallifer). Potpourri of Popular Russian Songs. Selection from "Die geschiedene Frau" (Fall). Selection from "Polenblut" (Nedbal). To Spring (Grieg). Au pied d'un lilas (Berté). Venetian Barcarolle (Leoncavallo). Serenade (Metra). 10.30—North African News. 10.45—Chansonnettes. Les Deux Gendarmes (Nadseau). Si j'avais un tambour (Balaye). Lorsque je vois tes yeux (Brébant). C'est un tout petit (Gavel). 11.0—Dance Music. 11.15—Concert. Enchantement (Massenet). La cruelle berceuse (Botrel). Mélancolie (Delmet). Le Chanson des Heures (Privas). The Fifth Symphony (Beethoven). 12.0—midnight—Weather and Announcements. 12.5 a.m. (Wednesday)—English Music. 12.30 a.m. (approx.)—Close Down.

TRIESTE (Italy) Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW. Transmits at intervals from 8.15 a.m. 7.5 p.m.—Quintet Concert. In the interval at 7.25—English Lesson on Gramophone Records. 8.0 till Close Down.—See Turin.

TURIN (Italy) Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by Milan, 905 kc/s (331.5 m.); and Genoa, 950 kc/s (312.8 m.); and Florence, 590 kc/s (500.8 m.). Transmits at intervals from 8.15 a.m. 6.45 p.m.—Agricultural Notes. 7.0—Announcements.

7.5—Musical Selections. Wien bleib Wien (Schrammel). Selection from "Il re della reclame" (Bettinelli). Selection (May). Stornellata (Barbieri). Burlesca (Carabella). 7.30—Time, Announcements, and Gramophone Records of Variety Music. 8.0—Giornale Radio and Weather. 8.15—Musical Selections. Rondo (Gabriel-Marie). Canzone dell' acqua (Amadei). Furiant (Bayer). Corteggio slavo (Bili). 8.30—Talk by Salvatore Gotta. 8.45—An Opera in Three Acts (to be announced). In the interval: Talk: Astronomical and Meteorological Characteristics of the Month of June. Giornale Radio after the Programme.

VIENNA (Austria) Radio-Wien. 581 kc/s (517 m.); 15 kW. Relayed by Graz, 852 kc/s (352.1 m.); Innsbruck, 1,058 kc/s (283 m.); Klagenfurt, 662 kc/s (453.2 m.); Linz, 1,220 kc/s (246 m.) and Salzburg, 1,373 kc/s (218 m.). Transmits at intervals from 9.20 a.m. 5.0 p.m.—Haydn Memorial Programme arranged by the Vienna Schubert Society in the House where Haydn died. 5.50—Gramophone Records of Light Music. 6.10—Agricultural Talk. 6.35—A Cappella Concert by the Opera State Chorus, conducted by Clemens Krauss. Stabat Mater (Palestrina, arr. Wagner). Deutsche Motette (R. Strauss). 7.25—Time and Announcements. 7.35—Physical Culture Lesson. 8.0—Talk: The Austrian Language. 8.30—Psychological Talk: "Self-Deception." 9.0—Military Band Concert. March, Felsenfest (Recktenwald). Waltz from "Das Veilchenmädel" (Hellmesberger). Overture, "Alessandro Stradella" (Flotow). Suite from "Sylvia" (Delibes). Waltz from "The Vintager's Bride" (Nedbal). Turkish Patrol (Michaelis). Rumba, Schön sind lachende Frau'n (Lehar). Marching Song, Kamerad wir sind die Jugend (Stolz). Potpourri of Old Viennese Folk Music (Komzak). March (Richter). 10.20—News Bulletin. 10.35—Orchestral Concert from the Hotel Krantz-Ambassador.

WARSAW (Poland) Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW. 11.20 a.m.—Aviation Weather Report. 11.25—Interval. 11.45—Press Review. 11.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, Cracow. 12.5 p.m.—Programme Announcements. 12.10—Light Music on Gramophone Records. 1.20—Weather Forecast. 1.25—Interval. 1.35—Popular Music on Gramophone Records. 1.55—Interval. 2.45—Variety Music on Gramophone Records. 3.5—Economic Report and Exchange Quotations. 3.15—Aviation Report. 3.20—Interval. 3.25—Review of Women's Magazines. 3.45—Hydrographic Report. 3.50—Programme for Children. 4.15—Interval. 4.20—Talk: 120 Years Ago. 4.40—Light Music on Gramophone Records. 5.10—Talk from Lech. 5.35—Symphony Concert by the Warsaw Philharmonic Orchestra, conducted by B. Wolfstal. Overture, "Patrie" (Bizet). Suite, Roma (Bizet). Symphonic Poem, Tasso (Liszt). Waltz, Mephisto (Liszt). 6.50—Miscellaneous Items. 7.15—Agricultural Report. 7.25—Programme Announcements. 7.30—Sports Notes. 7.35—Light Music on Gramophone Records. 7.45—Radio Journal. 8.0—Talk: Yesterday, To-day and To-morrow in Poland. 8.15—Concert of Popular Music by the Station Orchestra, conducted by Josef Oziminsky. Soloist: S. Miller (Soprano). March from "Sigurd Jorsalfar" (Grieg). To Spring (Grieg). Peer Gynt Suite, No. 1 (Grieg). Couverture (Novovjelsky). Serenade (Drigo). Carnival Polka (Bucalossi). Three Songs. The Figures on the Musical Clock (Armandola). Waltz, Golden Rain (Waldteufel). Japanese Bell Dance (Yoshitomo). Soprano Solos: (a) The Pipe (Rachmaninov), (b) Water Boy (Robinson), (c) La Libera (Lacôme). Habanera (Ferraris). Galop chromatique (Liszt). 9.50—Technical Correspondence and Notes. 10.5—Piano-forte Recital by Eustache Horodysky. Fantasia in C Minor (Mozart). Sonata for Piano-forte, in E Flat, Op. 27, No. 1 (Beethoven). Theme varié (Paderewsky). 10.40—Radio Journal. 10.45—Weather and Police Notes. 10.50—Dance Music. 12.0—midnight (approx.)—Close Down.



PRINCIPAL EVENTS

WEDNESDAY (June 1)

SYMPHONY CONCERTS

- 8.45 p.m. Strasbourg: Beethoven Festival.
- 9.45 " Berlin (Witzleben): Symphony No. 1 (Stravinsky).

CONCERTS (Vocal and Instrumental)

- 8.0 p.m. Brussels No. 1: Bach programme.
- 8.0 " Schweizerischer Landessender: "Life in our Time" (E. Nick).
- 8.40 " Budapest: Excerpts from Hungarian operettas.
- 8.45 " Radio-Paris: Mendelssohn programme.
- 9.0 " Hamburg: Wetzler programme.
- 9.20 " Breslau: German Folk Songs.
- 10.20 " Copenhagen: Present-day Danish composers.

OPERAS AND OPERETTAS

- 7.55 p.m. Hilversum: La Fille d'Elisondo, (Offenbach).
- 8.0 " Oslo: "Suor Angelica" (Puccini).
- 8.0 " Stockholm: "The Land of Smiles" (Lehár).
- 8.45 " Rome: "I puritani" (Bellini).
- 9.15 " Langenberg, Heilsberg: "Die lustigen Musikanten" (Hoffmann).

RECITALS

- 7.25 p.m. Munich: Hildegard Nanczak (Soprano).
- 8.15 " Prague: Jazz Quartet.
- 9.30 " Warsaw: Alfred Hoehn (Pianoforte).

MISCELLANEOUS

- 2.40 p.m. All British Stations: Running Commentary on the Derby.
- 8.0 " Radio-Suisse Romande: The First of June Festival.
- 8.15 " Munich, Königs Wusterhausen: Vaudeville.

DANCE MUSIC.

- 10.20 p.m. Stockholm: Old Time Dances.
- 10.45 " Budapest and most German Stations: Tzigany Music.
- 11.0 " Copenhagen.

Hermann Hans Wetzler, the composer to whom HAMBURG is devoting an important share of this evening's broadcast, is one who has led so busy a life in other ways that it is astonishing to find him well represented by music of his own, much of it on a big scale. Born at Frankfurt, he was a pupil of the Hoch Conservatoire there, with Frau Schumann and Humperdinck among his teachers. He was only twenty-two when he was summoned to New York, and for the next thirteen or fourteen years he did a good deal on behalf of music there. He organised, among other music-makings, a series of Symphony Concerts which bore his own name, and which reached their climax with a big Richard Strauss Festival in 1904. Since then, except for visits to the Imperial Opera, Russia, he has been conductor at one after another of the big German

Opera Houses, supervising notably fine performances both of old and new works: As is only natural, much of his own music is concerned with the theatre, and outside Germany he is, as yet, best known by his incidental music to Shakespeare's *As You Like It*.

The Waldstein Sonata

The Count Ferdinand Ernst Gabriel Waldstein was one of Beethoven's earliest friends, knowing him from his youthful years in Bonn before he moved to Vienna. The Count himself was no mean musician, pianist and composer, and Beethoven made a set of Variations for four hands at the pianoforte, on an air composed by the Count. The great sonata dedicated to him—the one which is to be broadcast from WARSAW to-night—was composed, so far as we know, in 1804, when Beethoven, after one of his outbreaks of violent temper, had left his friend von Breuning in dudgeon, and gone back to his old country quarters at Döbling.



A Czech Band, such as can be heard from Prague

NATIONAL

- |           | kc/s  | m.      | kW. |
|-----------|-------|---------|-----|
| London:   | 1,148 | 261.3   | 50  |
| Daventry: | 193   | 1,554.4 | 30  |
| Northern: | 995   | 301.5   | 50  |
- 10.15 a.m.—The Daily Service.
  - 10.30—Time Signal (Greenwich); Shipping Forecast.
  - 10.45—11.0—New Pennies—Old Furses "—V.
  - 12 noon—Quentin Maclean at the Organ.
  - 12.45 p.m.—Gramophone Records.
  - 1.0—Time Signal (Greenwich).
  - 1.30—2.30—Jack Martin and his Hotel Majestic Orchestra.
  - 2.40—The Derby. The 149th Renewal of The Derby Stakes. A Running Commentary by R. C. Lyle. Relayed from Epsom.
  - 3.15—Interval.
  - 3.30—Band of the Royal Military School of Music. Director of Music, Captain H. E. Adkins.
  - 4.45—Time Signal (Greenwich).
  - 4.45—Reginald New at the Organ.
  - 5.15—(Daventry)—The Children's Hour.
  - 5.15 (London and Northern)—Dance Music.
  - 6.0—"The First News."
  - 6.30—Time Signal (Greenwich).
  - 6.30—The Foundations of Music. Schumann's Songs.
  - 6.50—"This Surprising World." Mr. Gerald Heard.
  - 7.10—7.25—Mr. A. G. Street: "Idle Thoughts of a Busy Farmer."
  - 7.30—"Speech in the Modern World"—II. Mr. A. Lloyd-James.
  - 8.0—Orchestral Concert. Marian Murch (Soprano). The B.B.C. Orchestra (Section G), conducted by B. Walton O'Donnell.
  - 9.0—Time Signal (Greenwich).
  - 9.0—"The Second News." Weather Forecast, Second General News Bulletin.
  - 9.15—Shipping Forecast; New York Stock Market Report.
  - 9.20—"Musings Without Method." Captain G. Crawshaw.
  - 9.35—"The Turn of the Screw." A version for broadcasting by E. J. King Bull of the famous story by Henry James.
  - 10.35—12 midnight—Dance Music. Maurice Winnick and his Orchestra from the Carlton Hotel.
  - 11.30—Time Signal (Greenwich).

REGIONAL

- |           | kc/s | m.    | kW. |
|-----------|------|-------|-----|
| London:   | 842  | 356.3 | 50  |
| Midland:  | 752  | 398.9 | 25  |
| Northern: | 626  | 479.2 | 50  |
- 10.15 a.m. (London and Northern)—The Daily Service.
  - 10.30—11.0 (London and Northern)—Daventry National Programme.
  - 11.30—12 noon (London)—Experimental Television Transmission (Baird Process).
  - 12 noon—The Midland Studio Orchestra.
  - 1.15 p.m.—Organ Recital by Dr. Harold Rhodes.
  - 2.0—"In the Garden." The Northern Studio Orchestra.
  - 2.40—Daventry National Programme.
  - 5.15—The Children's Hour.
  - 6.0—"The First News."
  - 6.30 (London)—The Raymond Octet. Directed by Cecil Dudley. David Brynley (Tenor).
  - 6.30 (Midland)—Light Music. Pattison's Salon Orchestra. Haydn Evans (Tenor).
  - 6.30 (Northern)—The Studio Orchestra. The Todmorden Male Voice Choir.
  - 7.30 (Midland)—The Studio Chorus.
  - 7.45 (Midland)—"Coming Events." The Regional Director's Monthly Talk.
  - 8.0—Vaudeville. N. B. E. Davidson (Violin Solos). The Western Brothers (Kenneth and George). "The Sweep Ticket" by G. Astall. Graham Lidington (Synchordated Songs at the Piano). The B.B.C. Theatre Orchestra.
  - 9.0 (London)—An Orchestral Concert. Percy Heming (Baritone). The B.B.C. Orchestra (Section F), conducted by Edward Clarke.
  - 9.0 (Midland)—A Band Programme. The Creswell Colliery Band, conducted by David Aspinall. The Cathedral Male Voice Quartet.
  - 9.0 (Northern)—An Organ Recital by Dr. J. E. Yutchinson. Archibald Armstrong (Baritone).
  - 10.15—"The Second News."
  - 10.35 (Midland)—Experimental Transmission by the Futograph Process.
  - 10.40—11.0 (Midland)—As London.
  - 10.35—12 midnight (London and Northern)—Dance Music.

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

- ALGIERS (N. Africa) 825.3 kc/s (363.3 m.); 13 kW. Transmits at intervals from 12.30 p.m. 7.30 p.m.—Popular Songs. 7.40—Talk for Women. 7.55—News and Time. 8.0—"The Shower Bath." Comedy (Bilhaud). 8.30—Beaumarchais Programme on the Bicentenary of his Birth, relayed from the Opera House.
- BARCELONA (Spain) Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW. Transmits at intervals from 8.15 a.m. 8.0 p.m.—Trio Concert. Diana (Lefebvre). Selection (Grieg). La Boîte à musique (de Sévèrac). Selection from "Lilac Time" (Schubert).
- 8.30—Exchange Quotations and Lesson in Catalan Grammar. 9.0—Request Gramophone Records and News. 10.0—Chimes from the Cathedral, Weather Forecast and Exchange Quotations. 10.5—Concert by the Station Orchestra. The Entry of the Halberdiers (Blankenburg). Selection from "The Dance of the Dragonflies" (Lehár). Sarabande (Bach). Intermezzo (Brahms).
- 10.30—Recital of Flamenco Songs by Lola Cabello with Guitar accompaniment by Rafael Rejon. 11.0—Vicente Diez de Tejada reads from his own works. 11.10—Concert of Spanish Music by the Choir "La Artesana" and the Station Orchestra, conducted by Castells Casas. 12.0 midnight—Concert by the Toldra Sextet, relayed from the Granja Royale. 1.0 a.m. (Thursday)—Close Down.
- BELGRADE (Yugoslavia) 697 kc/s (430.4 m.); 2.5 kW. Transmits at intervals from 9.55 a.m. 5.0 p.m.—Orchestral Concert. Introductory Music to "Kneginja Maja" (Krstic). Melody (Svoboda): Selection from "Madame Butterfly" (Puccini). Ukrainian Sketches (Dreyer). Suite, At the Circus (Armandola). 6.55—Time and Programme Announcements. 7.0—Concert from the Moskva Hotel. 7.30—Gramophone Records of Variety Music. 8.0—Symphony Concert from Zagreb. 10.0 (approx.)—News and Sports Notes.

- BERLIN (Germany) Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW. Transmits at intervals from 5.45 a.m. 12 noon—Weather for Farmers. 12.5 p.m. (approx.)—Gramophone Records of Symphony No. 1 in C Minor (Brahms), followed by Weather for Farmers. 12.55—Nauen Time Signal. 1.30—News Bulletin. 2.0—Variety Programme on Gramophone Records, relayed from Berlin (Witzleben). 3.0—Talk for Young People: Heibel as a Young Man. 3.30—Weather and Exchange. 3.45—Talk for Women: The Care of Household Cleaning Appliances. 4.0—Talk: The School System and the Training of Teachers in England and Scotland. 4.30—See Hamburg. 5.30—Talk: German Colonial Activities from the Standpoint of the Foreigner. 6.0—Talk: The German Student Song and Music. 6.25—Talk: The Middle Ages and European Culture. 6.45—A Forecast of the Programme for June. 6.55—Weather for Farmers. 7.0—Talk on Economics. 7.20—Talk for Civil Servants. 7.45—See Berlin (Witzleben). 8.25—Variety from Munich. 10.20—Political Press Review. 10.35—Weather, News and Sports Notes, followed by Concert from Budapest. 12 midnight (approx.)—Close Down.
- BERLIN (Germany) Witzleben. 715 kc/s (419.5 m.); 1.5 kW. Transmits at intervals from 6.0 a.m. 6.15 p.m.—Lute Songs from the Mountains, by Elsa Laura von Wolzogen. Jaga und Sennerin (Bavaria). Aminte (the French Pyrenees). Similiberg (Switzerland). Song (Abruzzi). Scottish Highland Song. Swedish Song. Song (Plüddemann). Im Koaltn Stranagrabn (Styria). 6.35—Carl Hagemann reads from his own works. 6.55—The Witzleben Station informs its Listeners. 7.0—Topical Talk. 7.10—Concert of Light Music from the Hotel Adlon. 7.45—A Report: Work on the Frontier. 8.25—A Variety

- Programme. 9.10—News and Sports Notes.
- 9.20—Pianoforte Concerto in B Flat (Mozart) by Prof. Leonid Kreutzer (Pianoforte) and the Berlin Wireless Orchestra, conducted by Leo Borchart. 10.20—Topical Report: Hungary. 11.0—Weather and Second News, followed by Dance Music. 12.30 a.m. (Thursday)—Close Down.
- BORDEAUX-LAFAYETTE (France) (PTT). 986 kc/s (304 m.); 13 kW. Transmits at intervals from 12.45 p.m. 7.30 p.m.—News Bulletin and Market Prices. 7.55—Lottery Results. 8.0—Agricultural Talk. 8.15—News Bulletin and Weather Forecast. 8.30—Arduran Festival. Concert by the Symphony Orchestra, conducted by A. Guitraud, with Mlle. St. Val (Vocalist) and M. Lafont (Tenor). Introductory Talk by Pierre Caujolle. Selection from "La Mascotte" (arr. Casadesus). Selection from "Gillette de Narbonne" (arr. Casadesus). Selection from "Miss Decima" (arr. Tavan). Selection from "The Grand Mogol" (arr. Casadesus). Selection from "La Poupee" (arr. Tavan). In the intervals, Songs and Gramophone Records from Audran's Operettas.
- BRATISLAVA (Czechoslovakia) 1,076 kc/s (279 m.); 14 kW. Transmits at intervals from 11.0 a.m. 7.0 p.m.—See Prague. 10.15—Announcements.
- BRESLAU (Germany) 923 kc/s (325 m.); 1.5 kW. Relayed by Gletwitz, 1,184 kc/s (253 m.). Transmits at intervals from 6.0 a.m. 5.50 p.m.—Concert of New Compositions by Franz Kauf. Richard Cohn (Bass), W. Wunderlich (Violin), Alfons Kabitschke (Cello), and the Composer (Pianoforte). Romance. In Memoriam. Three Songs: (a) Gleichung, (b) Bergnacht, (c) Liebeslied. Andante, from the Trio in D Minor. Caprice. Grotteske. 6.20—Talk for Workers. 6.40—Talk:



**WEDNESDAY**  
continued

The Mechanisation of Industry. 7.0—Talk on the Diplomatic Service: Ambassadors and Consuls. 7.30—Weather Forecast.

7.35—Concert of Light Music by the Station Orchestra, conducted by Franz Marszalek. Spanish Fantasia, A Festival in Aranjuez (Demersseman). Waltz-Rhapsody, Pusztá - Legenden (Lindsay-Theimer). Selection from "Pharaoh's Wife" (Künneke). March (Bahmann).

8.20—Weather Forecast. 8.25—Variety Programme from Berlin (Witzleben). 9.10—News Bulletin. 9.20—Recital of Old Folk Songs by the Station Choir and Soloists, and Members of the Station Orchestra. Conductor: Ernst Prade. 10.10—Time Signal, Weather Forecast, News Bulletin, Sports Notes and Programme Announcements. 10.45—Cigany Music from Budapest. 12 midnight (approx.)—Close Down.

**BRNO (Czechoslovakia)**  
878 kc/s (342 m.); 35 kW.  
Transmits at intervals from 11.0 a.m. 7.0 p.m.—See Prague. 10.15—News Bulletin.

**BRUSSELS (Belgium) (No. 1)**  
I.N.R. 590 kc/s (509 m.); 15 kW.  
12 noon—Concert by Max Alexys and his Orchestra. 12.30 p.m. (in the interval)—Weather Report. 5.0—Protestant Address. 5.10—Dance Music from the Saint-Sauveur Palais de Danse. 6.15—Lecocq Operaetta Potpourri. 7.15—Talk: The Economic Situation in Europe. 7.30—Medical Talk.

8.0—Concert by the "Divertimento" Group. Soloists: Frédéric Anspach (Tenor), Lydia Tourouwez (Soprano), Suzanne Hennebert (Pianoforte) and Suzanne Du Bois (Pianoforte). Brandenburg Concerto in F, No. 1 (Bach). Choral for Tenor and Cantata No. 140, Wacht auf (Bach). Soprano Solos from the Whitsun Cantata (Bach). Duet for Soprano and Tenor from the Mass in B Flat Minor (Bach). 8.45—Poetry (Victor Hugo, Jules Laforgue and Rostand) on Gramophone Records.

9.0—Concert (continued). Concerto for Two Pianofortes (Bach). Explanatory Talk by Charles Van den Porren. Sonata Prima (Albinoni). Symphonies Nos. 2 and 6 (Abel).

9.45—Concert relayed from the Memline Hall, Antwerp. 11.0—Talk for Pigeon Fanciers, and Close Down.

**BRUSSELS (Belgium) (No. 2)**  
N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.  
12 noon—See Brussels No. 1.  
12.30 p.m.—Weather Report. 12.40—Concert (continued). 5.0—Protestant Address.

5.10—Mendelsolm Concert conducted by Arthur Meulmans. Soloist: Mme. Meunier (Pianoforte). Scottish Symphony. Rondo capriccioso. Overture, "Ruy Blas"

6.0—Gramophone Records. Prayer (Hasselmans). La Serenata (Braga). Selection from "Show of Shows" (Starkey).

6.15—Reading: Doctor Doolittle's Caravan (Lofting).

6.30—Gramophone Concert. Overture, "Prince Igor" (Borodin). Concerto for Violin and Orchestra (Tchaikovsky). Ride of the Valkyries (Wagner).

7.15—Talk: Are the other Planets inhabited? 7.30—Review of International Affairs.

8.0—Sonata for Cello and Piano-forte (Brahms), by Jacques Gaillard and Jean du Chastain.

8.30—Gramophone Records. Gavotte (Rameau). Waltz, Hofballtänze (Lanner). Overture, "Zampa" (Hérold). Waltz, "The Good Old Times" (Johann Strauss). La Columina è un vecicello (Rossini). Selection from "Faust" (Gounod).

9.0—Café Concert, with the Collaboration of Frans Lamoen, Jules Dirieckx, V. Clément and Lizzy Dorée. 10.0—Le Journal Parlé.

10.10—Concert relayed from the Memline Hall, Antwerp. 11.0 (approx.)—Close Down.

**BUCHAREST (Romania)**  
Radio-Bucarest. 761 kc/s (394 m.); 12 kW.  
Transmits at intervals from 11.0 a.m. 4.0 p.m.—Concert of Variety Music and Romanian Music by the Station Orchestra. 5.0—News and Time Signal. 5.10—Concert (contd.). 6.0—Talk on Social Problems and Foreign Politics.

6.40—Song Recital by M. Cavasi. Pourquoi (Pennino). Marmelendes Lüftchen (St. Jensen). Wanderlied (Schumann). Wohin? (Schubert). Romanian Air.

7.0—Pianoforte Recital by Claire Straomf-Makai. Sonata, Op. 31

(Beethoven). Two Mazurkas (Chopin). Il pleut sur la ville (Kodaly). Le Soir au Village (Bartok).

7.30—Talk (to be announced). 7.45—Flute Recital by M. Caratgé. 8.15—Cello Recital by M. Thaler. Sonata (Eccles). Hindou Song (Rimsky-Korsakov). Andalous (Pierdn). 8.45—News and Close Down.

**BUDAPEST (Hungary)**  
545 kc/s (550 m.); 18.5 kW.  
Transmits at intervals from 9.15 a.m. Programme also relayed on 210 metres from 6.50 till Close Down.

5.25 p.m.—Light Music on Gramophone Records. 6.25—Italian Lesson. 6.50—Quintet Concert. Anton Fleischer (Pianoforte), Ferdinand Zolt (Violin), Wilhelm Montag (Violin), Zoltán Hollos (Viola) and Béla Csuka (Cello). Pianoforte Quintet in F Minor, Op. 34 (Brahms). Pianoforte Quintet in B Flat, Op. 30 (Goldmark).

8.10—Talk by Ladislav Toth. 8.40—Concert of Hungarian Songs and Operetta Arias by the Orchestra of the Royal Hungarian Opera House, conducted by Tibor Polgar. Soloists: Louise Szabo and Nikolaus Szédo.

10.30—Concert by the Eugen Farkas Cigany Orchestra, relayed from the Café Spolarich.

**COPENHAGEN (Denmark)**  
1,067 kc/s (218 m.); 0.75 kW.  
Relayed by Kalundborg, 260 kc/s (1,153 m.).  
Transmits at intervals from 7.30 a.m. (Gymnastics).

12 noon—Time and Chimes from the Town Hall. 12.2 p.m.—String Ensemble Concert, conducted by A. Bendix, relayed from the Wivex Restaurant. 2.0—3.0—Interval.

3.0—Orchestral Concert, conducted by Launy Grøndahl. Overture, Mariotta (Gade). Waltz, Barcarolle (Waldteufel). Ballet Music from "The Two Widows" (Smetana). Intermezzo from "The Jewels of the Madonna" (Wolf-Ferrari). Polonaise (Schubert). Strathspey and Quick-step from "Scenes from the Scottish Highlands" (G. Bantock). March (Pacius). Talk for Women. Overture, "Pique Dame" (Suppé). Ballad and Gipsy Dance from the Gipsy Suite (Coleridge-Taylor). Selection from "Bluebeard" (Offenbach). Chant d'amour (Albeniz). Russian Dance (Tchaikovsky). Polketta (Lumbye).

5.0—Gramophone Concert. Amelita Galli-Curci: Aria from "Rigoletto" (Verdi). Joseph Schmidt: Aria from "The Arabian Nights" (Joh. Strauss). The Berlin State Opera Choir: Sailors' Chorus from "The Flying Dutchman" (Wagner). Paul Robeson: My heart is where the mohawk flows (Robinson). Florence Austral: Halleluja. Selections (May): (a) Mir fehlt ein Freund wie du, (b) Ich such' was, ich brauch' was. Ernst Rolf: Hem, hem, hem (Lundberg). Ambrose: Now's the time to fall in love (Sherman-Lewis).

5.40—Exchange and Fish Market Prices. 5.50—Talk in connexion with Women's Peace Day, with Recitations. 6.20—French Lesson. 6.50—Weather Forecast. 7.0—News Bulletin. 7.15—Time Signal. 7.30—Agricultural Talk. 8.0—Chimes from the Town Hall.

8.2—Orchestral Concert of Old French Music, conducted by Emil Reesen. Concerto No. 5 for String Orchestra (Rameau). Ballet Suite (Lully-Mottli).

8.35—"Tartuffe"—Comedy in Five Acts (Molière), translated by A. Flinch, and arranged for Radio. 10.5—News Bulletin.

10.20—Concert of Music by Contemporary Danish Composers—Viggo Brodersen, Hertha Bjorvig (Vocalist), Rudolf Dietzmann (Cello) and Folmer Jensen (Pianoforte). Songs: (a) Three Songs from the Song Cycle "En Moder," (b) Fløjtespilleren (c) Primavera. Sonata, Op. 18, for Cello and Pianoforte.

11.0—Dance Music from the Ritz Restaurant. In the interval at 12 midnight—Time and Chimes from the Town Hall. 12.30 a.m. (Thursday)—Close Down.

**CRACOW (Poland)**  
950 kc/s (312.8 m.); 1.5 kW.  
Transmits at intervals from 11.45 a.m. 4.40 p.m.—Light Music on Gramophone Records. 4.55—Programme from Warsaw. 6.50—Miscellaneous Items and News Bulletin. 7.15—See Warsaw. 7.25—Programme Announcements. 7.30—Answers to Correspondents. 7.45—See Warsaw. 10.35—News Bulletin. 10.40—Gramophone Records of Light Music. 11.0—See Warsaw. 12 midnight (approx.)—Close Down.

**DUBLIN (Ireland)**  
(2RN). 725 kc/s (413 m.); 1.2 kW.  
Relayed by Cork, 1,337 kc/s (224.4 m.).

1.30—2.0 p.m.—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records.

2.40—Relay of a Running Commentary on the Derby. 6.0—Popular Music on Gramophone Records.

6.15—Programme for Children. 7.0—Gramophone Records of Variety Music. 7.20—News Bulletin. 7.30—Time Signal. 7.31—Gaedhlig. 7.45—German Lesson.

8.0—The Station Sextet. 8.20—Variety Programme. 8.50—Soprano Solos by May Camping. 9.5—Gresham Instrumental Trio. 9.20—Bizet and Halévy Song Recital by Irvine Lynch (Bass). 9.35—The Station Sextet. 9.50—Gounod and Faune Song Recital by Mary Crowley (Contralto). 10.5—The Gresham Instrumental Trio. 10.20—The Station Sextet. 10.30—Time Signal, News, Weather Report and Close Down.

**FÉCAMP (France)**  
Radio Normandie. 1,293 kc/s (232 m.); 10 kW.

12 noon—Gramophone Concert of Light Music. 12.30 p.m.—Wireless News. 12.45—Concert of Light Music and Popular Music. 7.30—Wireless News. 8.0—News Bulletin.

8.30—Concert relayed from Trouville, with Talks by the members of the Radio-Club of Trouville-Deauville. One-step. Foxtrot, Dixiana. Talk by M. Monticone. Romance and Minuet from Symphony No. 18, The Queen (Haydn). Talk by M. Maillard. Impromptu in A Flat for Pianoforte (Schubert). Selection from "Griselidis" (Massenet). Le Sommeil de l'Enfant Jesus (Busser). Air (Codini). Song from "La Bohème" (Leoncavallo). La Neige tourbillonne sur la Forêt (Devernay). Foxtrot. Waltz, Gold and Silver (Lehár).

11.0—Dance Music. 1.0 a.m. (Thursday)—Close Down.

**FLORENCE (Italy)**  
Ente Italiano Audizioni Radiofoniche. 599 kc/s (500.8 m.); 20 kW.  
See Turin.

**FRANKFURT-am-MAIN (Germany)**  
770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.).  
Transmits at intervals from 6.0 a.m. 1.0 p.m.—Concert from Langenberg. 2.0—News Bulletin. 2.10—Sponsored Concert. 3.0—Weather Report. 3.10—Time and Economic Notes. 3.15—Programme for Children. 4.55—Economic Notes. 5.0—See Stuttgart. 6.15—Economic Notes. 6.25—Talk: Physical Exercise in the Country. 6.50—See Stuttgart. 7.15—Time, Programme Announcements, Weather and Economic Notes. 7.30—Concert by the Station Orchestra, conducted by Reinhold Merten. Overture, "Le roi l'a dit" (Delibes). Selection from "Dr. Piccolo" (Lecocq). Pictures from the South (Reinecke): (a) Mandoline Players, (b) Bolero. Hungarian Dances Nos. 5 and 6 (Kéler-Béla). Waltz, Luri-Luri (Morena). Selection from "Der arme Jonathan" (Millocker).

8.30—Classical Monologues, by Friedrich Lindner. 9.0—Concert of Light Music. 10.20—See Berlin (Witzleben). 11.0 (approx.)—Time, Weather, News and Sports Notes. 11.20—Cigany Music from Budapest. 12 midnight (approx.)—Close Down.

**HAMBURG (Germany)**  
Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by Bremen, 1,112 kc/s (270 m.); Flensburg, 1,373 kc/s (218 m.); Hanover, 530 kc/s (566 m.); and Kiel, 1,292 kc/s (232.2 m.).  
Transmits at intervals from 5.45 a.m. 4.30 p.m.—(from Hanover)—Concert by the Dresden Philharmonic Orchestra, relayed from Bad Pyrmont. Overture, "Il Seraglio" (Mozart). Air from the Suite in D (Bach). Selection from "I Pagliacci" (Leoncavallo). Variations on a Folk Song (Stöver). Scherzo from "A Midsummer Night's Dream" (Mendelssohn). Overture, "Orpheus in the Underworld" (Offenbach).

5.30 (from Kiel)—Talk: Animals in the Folklore of North Germany. 5.55—Two Young Hamburg Authors read from their own works—Heinz Elder and Walther Heuer. 6.30 (from Bremen)—Talk: Public Buildings in North-West Germany. 6.55—Frank-

furt Exchange and Hamburg Market Prices. 7.0—Topical Talk. 7.15—Weather Report.

7.20 (from Bremen)—Military Band Concert from Soltau. March, Wir präsentieren (Alboub). Overture, "William Tell" (Rossini). Two Alsatian Peasant Dances (Merkling). Selection from "Tannhäuser" (Wagner). March, Wilhelm von Nassauen (Grawert). Waltz from "The Gipsy Baron" (Joh. Strauss).

Intermezzo (Powell). March, Frankfurter Turner (Kämpfer). Paraphrase on Kromer's Song "Teure Heimat" (Nehl). March, Soldaten-Abschied (Rusch). March, Mit Bomben und Granaten (Bilse). March, Am wunderschönen Rhein (Schwarz). Butterflies and Roses (Kockert). Waltz, Morgenblätter (Strauss).

9.0—Concert by the Norag Orchestra, conducted by José Eibenschütz. Soloist: Hermann Wetzler (Pianoforte). Overture, "As You Like It" (Wetzler). Concerto in G for Pianoforte (Beethoven). Symphonic Dance from "Die baskische Venus" (Wetzler).

10.0—Time and News. 10.20—Dance Music from the "Haus Siegler."

**HEILSBURG (Germany)**  
1,085 kc/s (276.5 m.); 60 kW.  
Relayed by Danzig, 662 kc/s (453.2 m.).  
Transmits at intervals from 6.0 a.m. 1.5 p.m.—Gramophone Concert. Suite No. 2 in B Minor (Bach). Overture, "Masaniello" (Auber). Durch Webers Zauberwald (Urbach). Kontraste (Robrecht). Aria from "Mignon" (Thomas). Aria from "Undine" (Lortzing). Song, Frühlingfahrt (Schubert). Klein und niedlich. Schützenlied. Waltz, Mimosa (Jones). Waltz, Sommerabend (Waldteufel). Münchner Kindelmarisch (Stolz-Reich). Es wird in hundert Jahren (Dostal-Gilbert). Florentine March (Fucik).

2.30—3.20—Interval. 3.20—Talk for the Housewife. 3.30—Programme for Children. 4.0 (from Danzig)—Talk for Teachers.

4.30—Concert by the Little Orag Orchestra, conducted by Eugen Wilcken. Overture, "La clochette de l'ermite" (Maillart). The Lost Chord (Sullivan). Liebesfeier (Weingartner). Suite from "Coppélia" (Delibes). Waltz, Dorf-schwalben aus Oesterreich (Jos. Strauss). Selection from "The Merry Widow" (Lehár).

5.30—Choral Concert from the Neurrösgarter Kirche. Psalm No. 98 (Schütz). Kommt, Herze, lasst, uns fröhlich sein (Schütz). Kommt Seelen dieser Tag (Bach). Jesu meine Freude (Bach).

6.15—Agricultural Report. 6.25—Artists' Anecdotes of Yesterday and To-day. 6.50—Book Review.

7.10 (from Danzig)—Quartet in D, Op. 11 (Tchaikovsky) by the Prins Quartet. 7.40—Weather Report. 7.45—See Berlin (Witzleben).

8.25—Songs by Frank Wedekind, sung by Pamela Wedekind. 8.50—News Bulletin. 9.0—Programme from Langenberg, followed by News and Sports Notes and Dance Music from Berlin (Witzleben). 12.30 a.m. (Thursday)—Close Down.

**HILVERSUM (Holland)**  
1,013 kc/s (296.1 m.); 20 kW. (7 kW. up to 4.40 p.m.).  
6.25—9.40 a.m.—Programme of the Workers' Radio Society (V.A.R.A.). 6.25—6.40 and 7.10—7.25—Physical Culture Lesson. 7.40—Gramophone Concert of Variety Music. 8.40—Quintet Concert with Variety Music on Gramophone Records.

9.40—Religious Programme by the Liberal Protestant Radio Society (V.P.R.O.). 9.55 till Close Down.—V.A.R.A. Programme. 9.55—Variety Concert, Dramatic Selections and Gramophone Records of Light Music. 11.40—Septet Concert. March Potpourri, Voorwaerts Marsch (Ciere). Waltz, Rudolfsklänge (Jos. Strauss). Gramophone Records of Variety Music. Tango, Lass uns von Liebe sprechen (Buder). Potpourri, Klänge aus Arkadien (Morena). Gramophone Records of Variety Music. Selection from "Faust" (Gounod). Pasodoble, Spanish Gipsy Dance (Marquina). Gramophone Records of Light Music. Saxophone Solos: (a) Waltz, Cutena (Burno), (b) Twelfth Street Rag (Wiedoeff). Valse boston from "Les Millions d'Arlequin" (Drigo). Foxtrot, Once aboard the Jigger (Serony). Gramophone Records of Light Music. Marionetten auf der Spieluhr (Armandola).

Selection from "The Gipsy Baron" (Joh. Strauss). 1.25 p.m.—Interval. 1.55—Culinary Talk.

2.40—Pianoforte Recital. Selections (Chopin): (a) Nocturne in C Minor, (b) Polonaise in A Flat, (c) Minor, in D Flat, (d) Waltz in A Flat. Jeux d'eau (Ravel). L'île joyeuse (Debussy).

3.10—Programme for Children. 3.55—Organ Recital for Children. 4.10—The Letter Box. 5.10—Septet Concert with Variety Music on Gramophone Records. 6.10—Literary Talk arranged by the People's Radio University. 6.40—"In Mvni-chacht III"—Drama (after the Play by Carl Traut).

7.55—"La Fille d'Elisondo" (The Maid of Elisondo)—Opera (Offenbach). 8.55—Topical Dialogue: The Adventures of MM. Waikker and Tropenduit.

9.10—Organ Recital. Overture, "Martha" (Flotow). Potpourri of "White Horse Inn" (Krcme). 9.30—News Bulletin.

9.40—Orchestral Concert. Hungarian March, Attila (Fucik). Waltz from "Rose Marie" (Friml). Grass-hoppers' Dance (Bucalossi). Siamesische Wachtparade (Lincke). Selection from "The Flower of Hawaii" (Abraham). Potpourri, Oude herinneringen (arr. Hugo de Groot).

10.40—Gramophone Records of Light Music. 11.40 (approx.)—Close Down.

**HUIZEN (Holland)**  
160 kc/s (1,875 m.); 8.5 kW.  
Programme of the Christian Radio Society (N.C.R.V.).

7.40 a.m.—Bible Reading. 7.55—9.10—Gramophone Records of Variety Music. 9.40—Choral Concert. 10.10—Programme for Invalids. 10.40—Harmonium and Soprano Song Recital. 11.40—Police Notes. 11.55—Vocal and Instrumental Concert. 1.40—2.10 p.m.—Interval. 2.10—Reading.

2.40—Quartet Concert. March from "Alceste" (Gluck). Adagio and Allegro (Dupont). Andante from Psalm No. 130 (Gounod). Regrets (Vieuxtemps). Catalan Song (Albeniz). Au seuil du temple (Tournier). Le jardin mouillé (de Presle). Serenade (Rosetti). Arabesque No. 2 (Debussy). Jardins sous la pluie (Debussy). Melody (Angenot). Requiebros (Cassado). Romance, Op. 40 (Saint-Saëns). Gavotte (Slunické). Scherzino (Slunické). Gitana (Hasselmans). Konzertstück (Schmeidler). To the Sea (MacDowell).

4.40—Programme for Children. 5.40—Talk on Agriculture. 6.25—Talk. 6.40—Frisian Programme—Recitations. 7.10—Police Notes. 7.25—Religious Information. 7.40—Announcements.

7.55—Orchestral Concert. Selection from "La Traviata" (Verdi-Lonati). "The violet des cloches (Luigini). Selection from "Les Cloches de Corneville" (Planquette). March from "The Cid" (Cornelius). 8.40—Talk. 9.10—Concert (continued). Music by Melchior, Borchgrevink and Benedictus Grep. Suite in G (Fasch). Prelude, "La croisade des enfants" (Pierdn). Le Collier de Saphirs (Pierdn). In the interval at 9.40—News.

10.10—Gramophone Records of Light Music. 11.10 (approx.)—Close Down.

**KALUNDBORG (Denmark)**  
Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.  
See Copenhagen.

**KATOWICE (Poland)**  
734 kc/s (408 m.); 16 kW.  
Transmits at intervals from 11.58 a.m. 8.15—Concert of Light Music. 8.55—Saxophone and Banjo Selections. 9.15—Reading from "Werther" (Goethe). 9.30—Recital by Leon Borunsky (Pianoforte) and Joseph Kaminsky (Violin). 10.35—Weather Forecast. 10.45—Light Music on Gramophone Records. 11.0—Answers to Correspondents in French.

**LAHTI (Finland)**  
167 kc/s (1,796 m.); 54 kW. Relayed by Helsinki, 815 kc/s (368.1 m.).  
Transmits at intervals from 7.10 a.m. 6.15 p.m.—Songs and Stories for Children. 7.0—Cello Recital by Artto Granroth. 7.20—Talk. 7.40—Dance Music. 8.0—Humorous Programme. 8.15—Dance Music. 8.45—News in Finnish and Swedish. 9.15—Military Music from the Kappeli Restaurant. 10.0 (approx.)—Close Down.

**LANGENBERG (Germany)**  
Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW.



WEDNESDAY

continued

Transmits at intervals from 6.45 a.m. (Exercises, Weather, Time and Concert). 12 noon—Gramophone Concert of Light Music. 12.50 p.m.—Weather, Announcements and Time. 1.0—Concert, conducted by Wolf. Overture, "Donna Diana" (Reznicek). Waltz, Wiener Bürger (Ziehrer). Selections from "Tief-land" (d'Albert). Lonely Night (Clemus). Selections from "Die Puppenfee" (Bayer). Rhapsodische Fantasie (Urban). 2.30—Sponsored Gramophone Concert. 3.30—Economic Notes and Time. 3.50—Programme for Children. 4.25—Educational Talk. 5.0—See Stuttgart. 6.15—Sociological Talk. 6.40—The World on Gramophone Records—The Balkans. 7.0—Weather, Time, Economic Notes and Sports Results. 7.15—Health Talk. 7.30—Talk on Welfare Work. 7.55—News Bulletin. 8.0—Concert, conducted by Wolf. Prelude to "Die Lorelei" (Bruch). Waltz, Mephistos Höllenerufe (Strauss). Selections from "Aida" (Verdi). Romance (Tchaikovsky). Torch Dance of the Brides from "Feramors" (Rubinstein). Slavonic Dances Nos. 7 and 8 (Dvorak). Selection from "The Three Wishes" (Ziehrer). 9.0—Introductory Talk to the following transmission. 9.15—"Die lustigen Musikanten"—Musical Play in Two Acts (Clemens Brentano, Music by Hoffmann). 10.45 (approx.)—News and Sports Notes. 10.50 (approx.)—Concert of Cigany Music from the Café Spolarich, Budapest. 12 midnight (approx.)—Close Down. LEIPZIG (Germany) 1,157 kc/s (250 m.); 2 kW. Relayed by Dresden, 941 kc/s (310 m.). Transmits at intervals from 6.0 a.m. 6.10 p.m.—Educational Talk. 6.35—Italian Lesson. 6.55—Programme to be announced. 7.0—"Letters in the Intellectual Life of Germany"—a Radio Session (Otto Heuschele). 7.40—Orchestral Concert, conducted by Justus Hühelheim. March, Glück auf (Faust). March, Siegestrophäen (Friedemann). Overture, "La dame blanche" (Boieldieu). Selections from "Der Bettelstudent" (Millocker). Waltz from "Der Obersteiger" (Zeller). Auf-

zug der Waldgeister (Hartenhauer). Army March No. 246 (Scherzer). Potpourri, Streichfächer (Morena). Der Rosen Hochzeit-zug (Jessel). Waltz, Mein Lebenslauf ist Lieb und Lust (Jos. Strauss). Potpourri, Deutsche Marschieren (Blankenburg). Fanfare militaire (Ascher). 9.0—Topical Report. 9.15—"Zweimal Wallenstein"—Play in Five Scenes (Schirakauer). 10.15—News Bulletin. 10.20 (approx.)—Pianoforte Recital by Siegfried Grundeis. Prelude in C (Bach). Minuet in D (Mozart). Ecossaises (Beethoven). Impromptu (Schubert). Waltz (Chopin). Concert Etude (Liszt). Jeux d'eau (Ravel). Der Jongleur (Töchl). 12 midnight—Close Down. LJUBLJANA (Yugoslavia) 522 kc/s (574.7 m.); 2.5 kW. Transmits at intervals from 12.15 p.m. 6.0 p.m.—Quintet Concert. 7.0—Russian Lesson. 7.30—Literary Talk. 8.0—Music Lesson. 8.30—Vocal Selections. 9.0—Quintet Concert. 10.0—Time, News Bulletin, and Concert of Light Music. LWÓW (Poland) 788 kc/s (381 m.); 16 kW. Transmits at intervals from 11.45 a.m. 7.15 p.m.—See Warsaw. 7.25—Literary Talk. 7.45—See Warsaw. 8.0—Music Talk. 9.15—10.45—See Warsaw. 10.45—Talk in French: Polish Civilisation in the East. 11.0—12 midnight—See Warsaw. 12 midnight—Close Down. LYONS (France) La Doua (P.T.T.). 644 kc/s (465.8 m.); 1.5 kW. Transmits at intervals from 8.0 a.m. 7.0 p.m.—Light Music on Gramophone Records. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Three Sketches given by the Society of Free Art, followed by Recitations from the Works of Baudelaire. MADRID (Spain) Union Radio (E.A.J.). 707 kc/s (424.3 m.); 2 kW. Transmits at intervals from 9.0 a.m. 8.0 p.m.—Chimes, Exchange, Market Prices and Request Gramophone Concert. 9.15—News and Political Review. 9.30—10.30—Interval. 10.30—Chimes, Time Signal, and

Political Review, followed by Trio Concert. 12.45 a.m. (Thursday)—News Bulletin. 1.0—Chimes and Close Down.

MILAN (Italy) Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW. See Turin.

MORAVSKÁ-OSTRAVA (Czechoslovakia) 1,137 kc/s (263.8 m.); 11 kW. Transmits at intervals from 11.0 a.m. 7.0 p.m.—See Prague. 10.15—Programme Announcements and Theatre Notes.

MUNICH (Germany) 563 kc/s (533 m.); 1.5 kW. Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.), and Nürnberg, 1,256 kc/s (239 m.). Transmits at intervals from 6.45 a.m. 5.0 p.m.—See Stuttgart. 6.15—Time Signal, Weather Forecast, and Agricultural Programme. 6.25—Talk: The Cradle of Greek Culture. 6.45—Talk: Hermann Wirth, the German Archaeologist. 7.5—Talk by Prof. Schmid. 7.25—Song Recital by Hildegard Nanczak (Soprano). 8.0—Mental Exercises. 8.15—Variety Programme by the Small Wireless Orchestra conducted by Kurt Pastor, the Rodina Russo-German Balalaika Orchestra conducted by H. Commichau, the Wireless Choir and Soloists. 10.20—Time Signal, Weather Report, News Bulletin and Sports Notes. 10.45—Cigany Music relayed from Budapest.

OSLO (Norway) Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by Fredrikstad, 816 kc/s (367.6 m.); Hamar, 536 kc/s (560 m.); Notodden, 671 kc/s (447.1 m.); Porsgrund, 662 kc/s (453.2 m.), and Rjukan, 671 kc/s (447.1 m.). Transmits at intervals from 11.10 a.m. 5.30 p.m.—Gramophone Records of Variety Music. 6.0—French Lesson. 6.30—Programme for Boys. 7.0—Weather and News. 7.30 (from

Trondheim, 608 kc/s (493.4 m.)—Talk: Wagner and Nietzsche. 8.0—Time Signal. 8.2—"Suor Angelica" (Sister Angelica)—Opera in One Act (Puccini). 9.0—Reading. 9.30—Agricultural Talk, Weather and News. 10.0—Topical Talk. 10.15—Trio Concert. March (Lieback). Peasant Waltz (Björvikaren). Hambo (Ivar). Waltz, Silver Moon (Carsten). Sailors' Waltz (Pedersen). Waltz (Brown). Selection (Sylvain). 10.45—Dance Music. 12 midnight (approx.)—Close Down.

PALERMO (Italy) Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW. Transmits at intervals from 12.45 p.m. 5.30—6.30 p.m.—Concert of Variety Music and Dance Music. 8.0—Announcements, Giornale dell' Enit, Agricultural Notes and Giornale Record. 8.20—Light Music on Gramophone Records. In the interval at 8.30—Time Signal and Announcements. 8.45—Concert of Variety Music, conducted by F. Militello, and Soloists. In the intervals—Talk and Literary Notes. 10.55—News Bulletin and Close Down.

PARIS (France) Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW. Time signals on (2,650 metres), at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals). Transmits at intervals from 1.0 p.m. 6.45 p.m.—Talk on Music by Victor Larbey. 7.0—Le Journal Parlé. 8.20—Weather Report. 8.30—Dance Music. Pasodoble (Schwartz). Valse musette, Pirouette (Péguri). Tango, La Cumparsita (Rodriguez). Valse musette, Radeuse (Péguri). 8.50—Symphony Concert, conducted by Edouard Flament. Soloist: M. Cantrelle (Violin). The Italian Symphony (Mendelssohn). 9.20—News Bulletin. 9.30—Concert (continued). Indian Rhapsody (Nolety). Ballet Music from "Les deux Pigeons" (Messenger).

PARIS (France) Poste Parisien. 914 kc/s (328.2 m.); 60 kW.

Transmits at intervals from 12 noon. 7.0 p.m.—Light Music on Gramophone Records, Talk and News. 7.30—"L'apprentisse"—Play in Three Acts (Bazu) by the "Amis de Guignol à Paris." 8.30—Gramophone Records, Talk and News. 8.45—Concert.

PARIS (France) Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW. 6.45 a.m.—Physical Culture Course. 7.30—Weather Forecast and Physical Culture (contd.). 7.45—Light Music on Gramophone Records. Selection from "The Chocolate Soldier" (Oscar Straus). Hochzeitszug in Lilliput (Trans-lateur). In the Silent Night (Ziehrer). Wienerkinder (Berger-Ziehrer). 8.0—News Bulletin, Weather Forecast and Press Review. 12 noon—Talk: A Philosopher-Pedagogue—Paul Lapie.

12.30—Gramophone Concert. Part I. Operatic Airs. Selections from "Aida" (Verdi): (a) Divine Aida, (b) Duet from the Prison, (c) Chorus and March. Selections from "Samson and Delilah" (Saint-Saëns): (a) Cursed be thy Race, (b) Spring Song, (c) Softly awakes my Heart, (d) See my Distress. Part II. Opéra-Comique Airs. Overture and Four Selections from "Les Dragons de Villars" (Maillart). Overture and Four Selections from "La Dame blanche" (Boieldieu). Part III. Operetta Music. Air from "Le petit Duc" (Lecocq). Three Songs from "The Merry Widow" (Lehar). In the intervals, at 1.0—Exchange Quotations, News and Weather Forecast, at 1.30 and 2.0—Exchange Quotations. 3.45—Exchange, Sugar and Wheat Prices. 6.30—Wheat Prices, Weather Forecast, Agricultural News and Talk. Market Prices and Racing Results. 7.0—Talk on German Literature—III. Lyric Poetry from 1870 up to the Present Day. 7.30—Medical Talk. 7.45—Commercial Prices and News. 8.0—Literary Readings. 8.30—News and Weather Forecast. 8.40—Fashion Notes. 8.45—Mendelssohn Concert. Overture, Fingal's Cave. Caprices. Overture, "A Midsummer Night's Dream." Poetical Interludes by Mmes. Cita and Suzanne Malard.

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WEDNESDAY continued

9.15—News Bulletin and Review of the Evening Press. 9.30—Gramophone Concert—Music of the Romantic School: Liszt, Schumann, Berlioz and Chopin.

PITTSBURGH (U.S.A.)

Westinghouse Electric (KDKA). 980 kc/s (306 m.); 25 kW. Transmits at intervals from 12.30 p.m. 9.0 p.m.—Teaberry Baseball Scores. 9.5—Business News. 9.15—Programme to be announced. 9.30—Pebecco Weather Report. 9.32—Market Reports. 9.45—KDKA Kiddies' Klub. 10.0—Teaberry Baseball Scores. 10.5—David Lawrence Dispatch. 10.10—KDKA Artist Bulletin. 10.12—Programme Announcements. 10.15—Songs in French Style by Mlle. Diane Laval. 10.30—"The Singing Lady." 10.45—Little Orphan Annie. 11.0—Time Signal. 11.1—Temperature Report. 11.2—Who's News To-day. 11.7—Teaberry Sport Review. 11.12—Press News-Reeler. 11.15—Westinghouse Watchman. 11.30—The Royal Vagabonds. 11.45—Literary Digest Topics, from New York. 11.59—Time Signal. 12 midnight—1.0 a.m. (Thursday)—New York Relay. 12 midnight—Amos 'n Andy. 12.15 a.m.—Eso Programme. Believe it or not, by Ripley. 12.30—The Stebbins Boys. 12.45—Billy Jones and Ernie Hare. 1.0—Colonial Tellers. 1.15—Programme to be announced. 1.30—Jack Frost Melodies. 2.0—O'Henry Stories, from New York. 2.30—George Olsen's Orchestra, with Jack Benny, from New York. 3.0—Bob Nolan's San Felicians, from New York. 3.15—Ellsworth Giles' Home Singers. 3.30—Waves of Melody, from New York. 3.45—Around the Cracker Barrel. 4.0—Time Signal. 4.1—Teaberry Sport Review. 4.11—Temperature Report. 4.12—Weather Report. 4.15—Press Last Minute News Flashes. 4.20—Hotel William Penn Orchestra. 5.0—Orchestral Concert from New York. 5.30—Time Signal and Goodnight.

POZNAŃ (Poland)

896 kc/s (335 m.); 1.9 kW. Transmits at intervals from 11.45 a.m. 6.50 p.m.—Miscellaneous Items and Announcements. 7.15—Talk: Amateur Photography. 7.30—Talk on Philosophy. 7.45—10.35—See Warsaw. 10.35—Sports Notes and Police Report. 10.50—Dancé Music from the Esplanade Café. 12 midnight (approx.)—Close Down.

PRAGUE (Czechoslovakia)

614 kc/s (488.6 m.); 120 kW. Transmits at intervals from 6.15 a.m. 5.30 p.m.—Talk. 6.0—Talk: The Highest Tower in Bohemia. 6.10—Agricultural Report. 6.15—Talk for Workers. 6.25—German Transmission: Announcements and Talk. 7.0—Brass Band Concert, conducted by Milinovsky. 8.0—Health Talk. 8.15—Concert by a Jazz Quartet. E. Schulhoff, Dr. Letfus, R. Zike, and V. Riha. 9.0—Time and News. 9.10 (approx.)—A Play. 10.0—Time, News and Announcements.

RABAT (Morocco)

721.1 kc/s (416 m.); 6 kW. 1.30—3.0 p.m.—Vocal and Instrumental Concert. 5.0—Gramophone Records of Variety Music. 6.0—8.30—No transmission. 8.30—Gramophone Records of Light Music. 8.45—Le Journal Parlé, Weather and News. 9.0—Concert. Pretty Milady (Waltham-Smet). Boston from "The Desert Song" (Romberg-Salabert). Bambolina (Lehar-Lectorey). Song: Variations (Proch). Overture, "Fidelio" (Beethoven-Salabert). Waltz, Wienerblut (Joh. Strauss). Hindu Song (Rimsky-Korsakov). Selection from "Thais" (Massenet-Tavan). Song from "Werther" (Massenet). Sonata in D Minor for Pianoforte (Beethoven). After the Programme—Agricultural Talk, followed by Chamber Music: Sonata for Cello and Pianoforte (Grieg). 11.0—Relay or Gramophone Records of Popular Music.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland)

743 kc/s (403 m.); 25 kW.; Lausanne, 442 kc/s (680 m.); and Geneva, 395 kc/s (760 m.). 12.30 p.m.—Time Signal from Neuchâtel Observatory. 12.31—Weather Forecast and News Bulletin. 12.40—Orchestral Concert. In the interval at 1.0—Exchange Quotations. 1.45—5.0—Interval. 5.0—Time Signal from Neuchâtel Observatory. 5.1—Concert by a String Orchestra,

conducted by Robert Fchenard. 6.0 (from Geneva)—Programme for Children. 7.0—Weather Forecast. 7.1 (from Lausanne)—Book Review. 7.30 (from Lausanne)—Agricultural Talk. 7.55—Announcements. 8.0 (from Geneva)—First of June Celebrations. Choral Selections. Speech and Marches. 8.45 (from Lausanne)—Concert by the Station Orchestra, conducted by Fernand Closset. Soloist: P. Burger (Cello). 10.0—Weather Forecast and News Bulletin. 10.10 (from Geneva)—Answers to Correspondents. 10.30 (from Geneva)—Dance Music, relayed from the "Moulin Rouge." 11.0 (approx.)—Close Down.

RIGA (Latvia)

572 kc/s (525 m.); 15 kW. Transmits at intervals from 6.0 a.m. 6.0 p.m.—English Lesson. 6.30—Agricultural Talk. 7.0—Weather Report. 7.5—Orchestral Concert of Old and Modern Operetta Music. In the intervals at 8.0 and 9.0—News. 9.30—Gramophone Records of Variety Music. 10.30 approx.—Close Down.

ROME (Italy)

Ente Italiano Audizioni Radiofoniche (IRO). 680 kc/s (441 m.); 50 kW. Relay by Naples, 941 kc/s (319 m.); and 2RO, 6,976 kc/s (43 m.). 8.15—8.30 a.m.—Giornale Radio and Announcements. 12 noon—Gramophone Records of Variety Music. 12.35 p.m.—Weather Forecast. 12.45—2.0—Instrumental Concert. Overture, "Poet and Peasant" (Suppé). Violin Solos by Luisa Carnevalini: (a) Arab Melody (Glazounov), (b) Saltarelle (Wien-iavsky). Two Selections: (Grieg): (a) Anitra's Dance, (b) A Wedding Day on Troldhaugen. Selection from "Rose-Marie" (Friml). Fox-trot, Kissnu (Ferry). Bonito (Bran-cato). In the intervals at 1.15—Giornale Radio and Exchange and at 1.30—Time and Announcements. 5.0—Exchange, Report of the Royal Geographical Society. Children's Radio Review, Giornale Radio and Announcements. 5.30—Brahms Song Recital by Margherita Cossa (Soprano). (a) Mairacht, (b) Liebeslied, (c) Vergebliches Ständchen. 5.45—Concert. Selection from "Madama di Tebe" (Lombardo). Pastorale from "La figlia di Jorio" (Franchetti). Buenas Noches, Señora (Padilla). A Little Garden (Caster). Two Intermezzi (Ganne): (a) Nocturne, (b) Les Follets. 6.15—Giornale dell' Enit. 6.25—Talk: The Willow and the Pomegranate-Tree. 6.35 (Naples)—Shipping and Sports Notes. 7.0—Agricultural Notes, Announcements, Giornale Radio and Press Review. 8.0—Time, Announcements and Gramophone Records of Popular Music. 8.15—Talk: Hysteria and Epilepsy. 8.30—Sports Notes and Announcements. 8.45—"I Puritani" (The Puritans)—Opera in Four Acts (Bellini). In the intervals: Review of New Gramophone Records and Topical Review. 10.55—News Bulletin.

SCHENECTADY (U.S.A.)

General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relay at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 11.45 a.m. 9.0 p.m.—The Pilgrims, from New York. 9.30—Bridge Lesson from New York. 9.45—Musical Ad Men. 9.50—News Items. 10.0—Stock Reports and Police Notices. 10.15—11.0—New York Relay. 10.15—Skippy. 10.30—Wayne King's Orchestra. 10.45—Schirmer and Schmitt (Pianoforte Duets). 11.0—When Day is Done. 11.25—Health Talk. 11.30—Weather Report. 11.31—Song and Story Man. 11.45—New Kenmore Orchestra. 11.55—Baseball Scores. 12 midnight (WGY only)—New York State Education Series. 12 midnight (W2XAF only)—Stock Reports and News Items. 12.15 a.m. (Thursday)—New Kenmore Orchestra. 12.45—4.15—New York Relay. 12.45—Trials of the Goldbergs. 1.0—Big Time. 1.30—Halsey Stuart Programme. 2.0—Goodyear Programme. 2.30—Mobiloil Concert. 3.0—Coca Cola Programme. 3.30—NBC Artists Service Musicale. 4.0—Nellie Revell. 4.15—Songs my Mother Taught me. 4.30—De Witt Clinton Orchestra. 5.0—5.30—New York Relay. 5.0—Ralph Kirby (Dream Singer). 5.5—Buddy Rogers and his California Cavaliers. 5.30—

New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LÄNDESSENDER (BEROMÜNSTER) (Switzerland)

653 kc/s (459 m.); 60 kW.; Basle, 1,229 kc/s (244.1 m.); and Berne, 1,220 kc/s (246 m.). 11.30 a.m. (approx.) (from Airolo)—Report of the Jubilee Celebrations on the 50th Anniversary of the opening of the Gotthard Railway. 12.30 p.m. (approx.)—Time Signal from Neuchâtel Observatory. 12.32 (approx.)—Weather Report and News Bulletin. 12.40 (approx.)—Concert by the Station Orchestra. 1.35—Weather Report and Exchange Quotations. 1.45—3.30—Interval. 3.30—Concert by the Station Orchestra. 4.30—Programme for Children. 5.0 (from Berne)—Talk for Photographers. 7.0—Time Signal, Weather Report and Market Prices, followed by Ballet Music on Gramophone Records. 7.30 (from Berne)—Talk by Jaques Dalcroze: Eurythmics, Music and Movement. 8.0 (from Basle)—Life in our Times—Lyric Suite (Kästner). Music by Edmund Nick, relayed from the Basle Municipal Theatre. 9.30—Weather Forecast and News Bulletin. 9.45—Late Concert by the Station Orchestra. 10.30 (approx.)—Close Down.

STOCKHOLM (Sweden)

Radiojästjänst (SASA). 689 kc/s (436 m.); 55 kW. Relay by Boden, 244 kc/s (1,229.5 m.); Göteborg, 932 kc/s (322 m.); Hörby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Östersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.45 p.m.—Gramophone Concert of Light Music. 6.45—Agricultural Programme. 7.15—Weather Report and News Bulletin. 7.30—Talk: "The Maps of Sweden." 8.0—"The Land of Smiles"—Operetta (Lehar). 9.45—Weather Report and News Bulletin. 10.0—Talk on the Disarmament Conference, relayed from Geneva. 10.20—Concert of Old Time Dance Music, relayed from Göteborg. 11.0 (approx.)—Close Down.

STRASBOURG (France)

Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW. 11.30 a.m.—Gramophone Concert of Operatic and Light Music. 12.45 p.m.—News in French and German. 1.0—Time Signal. 1.2—Gramophone Concert (continued). 2.0—4.45—Interval. 4.45—Talk in French: Electric Trains. 5.0—Dance Music. 6.0—Talk in French on Italy—Marini. 6.15—Medical Talk in German. 6.30—Orchestral Concert. Overture, "Preciosa" (Weber). Selection from "Mirella" (Gounod). Dance macabre (Saint-Saëns). Suite, Calirioé (Chaminade). March, Pomp and Circumstance (Elgar). 7.30—Time Signal. 7.32—News in French and German. 7.45—Programme to be announced. 8.15—Gramophone Concert. Parade of the Siamese Guard (Lincke). Parade of the Tin Soldiers (Jessel). Küssen ist keine Sünde (Eysler). Dream of Love after the Ball (Czibulka). Day and Night (Fomine). Mon bateau (Drigo). Légende des flets bleus (Christine). Viens, Maman (Leojac). Selections from (a) "Schön ist die Welt" (Lehar), and (b) "Werther" (Massenet). 8.45—Beethoven Concert, relayed from the Restaurant de l'Orangerie. Soloist: M. G. Drillon (Violin). Symphony in C, Op. 21, No. 1. Violin Solos: (a) Romance in G, Op. 40, (b) Romance in F, Op. 50. Symphony No. 3 in E Flat, Op. 55 (The Eroica). 10.30—Dance Music from the Savoy. 12 midnight (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany)

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 65 kW. Relay by Freiburg, 527 kc/s (570 m.). Transmits at intervals from 6.0 a.m. 10.0 a.m.—Gramophone Concert. Concerto for Cello and Orchestra, Op. 104 (Dvorák). Concerto No. 5 in A Minor for Violin and Orchestra (Vieuxtemps). 11.0—Time, Weather and News. 11.15—Sponsored Concert. 12 noon—Gramophone Concert of

Viennese Music. March, Wien bleibt Wien (Schrammel). Old Viennese Melodies (Pollack). Wiener Bürger (Zieher). Du alter Stephenturm (Brandl-Kreiser). Julius Pataky: (a) Du guter Himmelvelter (Krankauer), (b) Ich hab amal a Rüscherl g'habt. Wien wird schön erst bei Nacht (Stolz). Grüss mir mein Wien (Kálmán). Wiener Fäkerlied (Pick). Viennese Song Potpourri. Vindobona—Potpourri of Viennese Folk Music (Leopold).

12.50 p.m.—Time, Weather, News and Programme Announcements. 1.0—Concert from Langenberg. 1.55—News Bulletin. 2.0—3.30—Sponsored Concert. 3.0 (from Mannheim)—Programme for Children. 4.0—Concert relayed from Wildbad. Introduction, Chorus, Ballad and Dance from "Das Pensionat" (Suppé). Waltz, Dolores (Wald-tupfel). Folk Scene from "The Evangelist" (Kienzl). Mazurka, La Czarina (Ganne). Selections from "Samson and Delilah" (Saint-Saëns). March, Mit Eichenlaub und Schwertern (Blon). 5.0—Variety Concert by the Station Orchestra, the Dance Band of the Stuttgart Philharmonic Orchestra, and Soloists. 6.15—Time and Weather. 6.25 (from Mannheim)—Talk: The Character and the Peculiarities of the Palatinate and its Inhabitants. 6.50—Talk: Post-War Industry in Alsace-Lorraine. 7.15—Time and Agricultural Notes. 7.30—10.20—See Frankfurt. 10.20—See Berlin (Witzleben). 11.0—Time, Weather, News and Programme Announcements. 11.20—Cigány Music relayed from Budapest.

TOULOUSE (France)

Radiophonie du Midi. 779 kc/s (385 m.); 8 kW. Transmits at intervals from 12.30 p.m. 5.0 p.m.—Transmission of Pictures. 5.15—Exchange Quotations. 5.30—Orchestral Selections from (a) "William Tell" (Rossini), and (b) "Il Trovatore" (Verdi). 5.45—Dance Music. 6.0—Songs from (a) "Messaline" (De Lara), (b) "The Marriage of Figaro" (Mozart), (c) "William Tell" (Rossini), and (d) "Pelléas et Mélisande" (Debussy). 6.15—Orchestral Selections. 6.30—Exchange Quotation and Racing Results. 6.45—Orchestral Selections. 7.0—Talk, followed by Two Hungarian Dances Nos. 5 and 6 (Brahms). 7.15—Orchestral Selections. 7.30—News Bulletin. 7.45—Dance Music. 8.0—Military Music. American March (Souls). March from "Carmen" (Bizet). March (Beethoven). Nibelungen-Marsch (Wagner). 8.15—Orchestral Selections. 9.30—Songs from (a) "Patrie" (Paladilhe), (b) "Pénélope" (Faure), (c) "Pelléas et Mélisande" (Debussy), and (d) "Manon Lescaut" (Auber). 9.0—Songs (Massenet) from (a) "Manon" and (b) "Le Roi de Lahore." 9.30—Concert by the Society "La Toulousaine." 10.30—North African News. 10.45—Light Music. 11.0—Concert of Variety Music. 12 midnight—Weather and Announcements. 12.5 a.m. (Thursday)—English Music. 12.30 a.m. (approx.)—Close Down.

TRIESTE (Italy)

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW. Transmits at intervals from 8.15 a.m. 7.5 p.m.—Quintet Concert. Dolly (Simonetti). Tango nostalgico (Chiappina). Serenade (Kostal). Circassian Dance (Carltoni). Selection (Ballig). Selection from "Gipsy Love" (Lehar). Si fa ma non si dice (Mascheroni). 8.0 till Close Down—See Turin.

TURIN (Italy)

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relay by Milan, 905 kc/s (331.5 m.); and Genoa, 959 kc/s (312.8 m.); and Florence, 590 kc/s (500.8 m.). Transmits at intervals from 8.15 a.m. 6.45 p.m.—Agricultural Notes. 7.0—Announcements. 7.5—Musical Selections. Overture, "The Caliph of Bagdad" (Boieldieu). I've always believed in you (Krauss). Sylva (Meniconi). Soledad (Ravasin). Annamese Dance (Hamud). 7.30—Time, Announcements and Gramophone Records of Variety Music. 8.0—Giornale Radio and Weather. 8.15—Talk: Hysteria and Epilepsy. 8.30—Gramophone Records of Variety Music. 8.45—A Comedy in Three Acts (to be announced). 11.0—Giornale Radio.

VIENNA (Austria)

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relay by Graz, 852

kc/s (352.1 m.); Innsbruck 1,058 kc/s (283 m.); Klagenfurt, 662 kc/s (453.2 m.); Linz, 1,220 kc/s (246 m.); and Salzburg, 1,373 kc/s (218 m.). Transmits at intervals from 9.20 a.m. 5.0 p.m.—Concert of Music on Old Instruments. Soloists: Sylvia Grümmer (Viola da Gamba), August Wenzinger (Viola da Gamba and Blockflute), Josef Niedermair (Flute) and Adolf Baller (Harpisichord). Sonata for Blockflute, Viola da Gamba and Harpsichord (Telemann). Sonata for two Gambas and Harpsichord (Marin Marais). Suite for Viola da Gamba (Johann Schenk). Sonata for Flute, two Gambas and Harpsichord (Telemann).

6.0—Recital of Folk Songs of Many Nations. 6.25—Medical Talk. 6.55—Talk: Has the Aim of Rationalisation been attained? 7.20—French Lesson. 7.50—Time, Weather and Programme Announcements. 8.0—Talk: What Everyone should know about the Workers' Dwellings Exhibition. 8.15—Concert by the Vienna Chamber Orchestra, conducted by Dr. Friedrich Hartmann. Overture, "The Merry Wives of Windsor" (Nicola). Minuet (Boccherini). Two Old-French Dances for Cello (d'Hervelois). Ballet Music from "Faust" (Gounod). Hofballtänze (Lanner). Overture, "Die Fledermaus" (Johann Strauss).

9.15—Aage von Kohl reads from her own works, with Introductory Talk. 9.45—News and Weather. 10.0—Dance Music from Hübner's Kursalon.

WARSAW (Poland)

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW. 11.20 a.m.—Aviation Weather Report. 11.25—Interval. 11.45—Press Review. 11.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, Cracov. 12.5 p.m.—Programme Announcements. 12.10—Light Music on Gramophone Records. 1.20—Weather Report. 1.25—Interval. 1.35—Popular Music on Gramophone Records. 1.55—Interval. 2.45—Variety Music on Gramophone Records. 3.5—Economic Report and Exchange Quotations. 3.15—Boy Scouts Report. 3.20—Co-operative Bulletin. 3.25—Listeners' Correspondence. 3.45—Hydrographic Report. 3.50—Light Music on Gramophone Records. 4.15—News Bulletin. 4.20—Talk relayed from Cracov. 4.40—Popular Music on Gramophone Records. 4.45—Linguaphone English Lesson. 5.10—Talk: The Polish Emigrant to Canada. 5.35—Operatic Selections by the Station Orchestra, conducted by Josef Oziminsky. Selection from "La Juive" (Halévy). Selection from "Madame Butterfly" (Puccini). Selection from "La Traviata" (Verdi). Selection from "I Pagliacci" (Leoncavallo). Selection from "Carmen" (Bizet). 6.50—Miscellaneous Items. 7.15—Agricultural Programme. 7.25—Programme Announcements. 7.30—Sports Notes. 7.35—Light Music on Gramophone Records. 7.45—Radio Journal. 8.0—Musical Talk from Lvov. 8.15—Song Recital by the Warsaw Choir. 8.55—Saxophone and Banjo Solos by E. Sienkiewicz. 9.15—Literary Reading. Selection from Werther (Goethe). 9.30—Pianoforte Recital by Alfred Hoehn. Partita in C Minor (Bach). Grand Sonata, Op. 53. The Waldstein (Beethoven). Selection of Short Items. 10.30—Radio Journal. 10.35—Weather and Police Notes. 10.40—Interval. 10.45—Talk from Lvov. 11.0—Dance Music. 12 midnight (approx.)—Close Down.

ZAGREB (Yugoslavia)

Radioklub-Zagreb. 977 kc/s (307 m.); 0.75 kW. Transmits at intervals from 12.20 p.m. 7.25 p.m.—Talk for Sokols. 7.40—Announcements. 7.50—Introductory Talk to the following Transmission. 8.0—Symphony Concert by the Croatian Music Society, relayed from the Society's Hall. Conductor, Boris Papandopulo. Soloist: Professor Geiger-Eichhorn (Pianoforte). Overture, Bellina (Lisinski). First Part Symphony in A Minor—the Unfinished (Borodin). Fantasia on a Serbian Theme (Rimsky-Korsakov). Pianoforte Concerto in F Minor, Op. 21, No. 2 (Chopin). 10.0—Relay of the Sound Film from the Edison Palace Theatre. 10.30—News and Weather. 10.40—Gramophone Records of Variety Music. 11.0 (approx.)—Close Down.



# THURSDAY (June 2)

## PRINCIPAL EVENTS

### SYMPHONY CONCERTS

7.0 p.m. Bucharest.  
9.5 " Munich: Alexander Tcherenpin (piano-forte).

### CONCERTS (Vocal and Instrumental)

12.35 p.m. Warsaw: Polish programme.  
7.30 " Copenhagen: Relay from the Tivoli Concert Hall (till 11.30).  
7.30 " Leipzig: Chamber Orchestra.  
8.0 " Brussels No. 2: Delibes Ballet Selections.  
8.0 " Berlin, Königs Wusterhausen, Heilsberg: In memory of Eugen D'Albert.  
8.0 " Langenberg: Viennese Portraits—Johann Strauss.  
8.30 " Oslo: The Station Orchestra.  
8.55 " Hilversum: Relay from the Concertgebouw, Amsterdam.  
9.0 " Brussels No. 2: Sacred choral music.  
9.0 " Frankfurt, Stuttgart: Concerto for pianoforte, male voice chorus and orchestra (Busoni).  
9.10 " Vienna: Operatic selections.

### OPERAS AND OPERETTAS

7.40 p.m. British Regional Stations: "Tannhäuser" (Wagner), Act I (Conductor, Beecham).  
8.30 " Italian Stations (Northern): "Mese Mariano," "Marcella," (Giordano).  
9.5 " Berlin (Witzleben), Breslau: "Tannhäuser" (Wagner). Acts II and III, relayed from Covent Garden, London.

### PLAY

9.10 p.m. Hamburg, Heilsberg, Königs Wusterhausen, Leipzig: "Der Strom—ein Leben" (The Elbe) (a radio sequence).

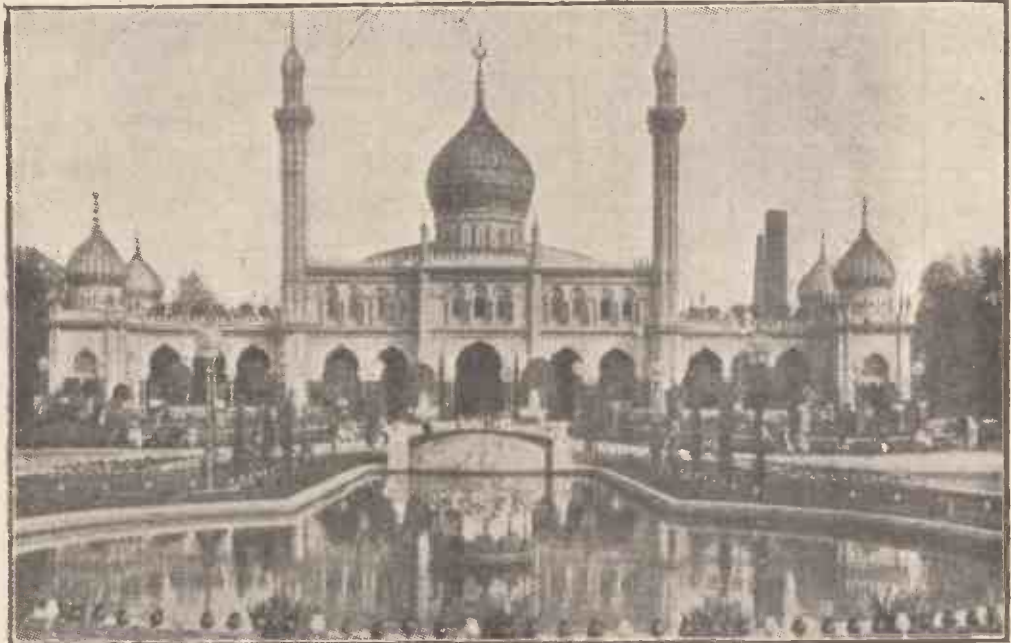
### DANCE MUSIC

10.40 p.m. Hamburg, Königs Wusterhausen.  
11.30 " Copenhagen.

### Copenhagen's Tivoli

This evening, from 7.30 until 11.30, COPENHAGEN station is to relay a Festival programme from the Tivoli concert hall, all of it in cheerful and light-hearted mood. The nightly rendezvous of all who would spend an hour or so of leisure before "lights-out," the Tivoli is where the visitor most naturally takes his way of an evening, and where he finds that his warm-hearted Danish hosts know how to enjoy themselves with the same zest and gusto as they put into their busy working hours. In the

concert hall you may hear music, grave or gay; in another part you may dance to the strains of a modern band, and a regular parade is to be seen—horse, foot and guns—of young people in the uniforms of an older day. Refreshment for the body is at hand, too, and from the terrace of the restaurant there is a splendid view of the illuminated gardens and of the fireworks which are a regular feature. This evening's programme begins with extracts from an opera which is now but rarely heard, though it was a favourite in its own day—Adam's *King for a Day*; the second part of the relay is a vocal and instrumental concert which ends with a short series of dance pieces.



The Tivoli Concert Hall, Copenhagen

### NATIONAL

	kc/s.	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50

10.15 a.m.—The Daily Service.  
10.30—Time Signal (Greenwich); Shipping Forecast.  
10.45—11.0—Sister Drayton: "The New Baby"—IV.  
12 noon—The Studio Orchestra, directed by Guy Daines.  
1.0 p.m.—Time Signal (Greenwich).  
1.0—2.0—The Shepherd's Bush Pavilion Orchestra.  
2.5—"Tracing History Backwards."  
2.30—Speech Training. Mr. A Lloyd-James.  
3.0—Evensong from Westminster Abbey.  
3.50—For the Schools. German Dialogue.  
4.5—The B.B.C. Dance Orchestra.  
4.30—The Midland Studio Orchestra.  
4.45—Time Signal (Greenwich).  
5.15 (Daventry)—The Children's Hour.  
5.15 (London and Northern)—The B.B.C. Dance Orchestra.  
6.0—"The First News."  
6.30—Time Signal (Greenwich).  
6.30—The Foundations of Music. Schumann's Songs.  
6.50—German Talk. Mr. Otto Siepmann.  
7.20—The Weekly Special Notices.  
7.30—Professor Arnold J. Toynbee: "The Disintegration of the Modern World Order"—II.  
8.0—"The Road to the West." A dramatic monologue, written and spoken by Filson Young.  
9.0—Time Signal (Greenwich).  
9.0—"The Second News."  
9.15—Shipping Forecast; New York Stock Market Report.  
9.20—Reparation and the Lausanne Conference—I. Sir Andrew McFadyean.  
9.40—A Recital. The Wireless Singers. Rudolph Dolmetsch (Harpisichord).  
10.30—A Short Service, relayed from St. Michael's, Chester Square.  
10.45—12 midnight—Dance Music.  
12 midnight—12.5 a.m. (Friday)—Experimental Transmission by the Fultograph Process.

### REGIONAL

	kc/s.	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50

10.15 a.m. (London and Northern)—The Daily Service.  
10.30—11.0 (London and Northern)—Daventry National Programme.  
11.0—12 noon (London)—Experimental Television Transmission (Baird Process).  
12 noon—Edward O'Henry at the Organ.  
1.0 p.m.—The Northern Studio Orchestra.  
2.0—3.0—The Whitby Municipal Orchestra, conducted by Frank Gomez.  
3.0 (Northern)—Studio Orchestra.  
3.30—3.45 (Northern)—Miss Phyllis Bentley: Reading.  
4.5—Daventry National Programme.  
5.15—"The Children's Hour."  
6.0—"The First News."  
6.35 (London)—Orchestral Concert. Gabriel Lavelle (Baritone). The B.B.C. Orchestra (Section F), conducted by Joseph Lewis.  
6.35 (Midland)—From the Musical Comedies. The Studio Orchestra. Bertram Newstead (Baritone).  
6.35 (Northern)—The Studio Orchestra. Winifred Ransom (Soprano).  
7.40—Overture and Act I of Wagner's "Tannhäuser." Relayed from The Royal Opera House, Covent Garden. Conductor, Sir Thomas Beecham.  
8.50 (London)—A Chopin Recital by Michel Maskiewitz.  
8.50 (Midland)—An Organ Recital by Gilbert Mills.  
8.50 (Northern)—Mr. W. E. Shewell Cooper: "The Northern Garden."  
9.10 (Northern)—Gramophone Records.  
9.15 (London)—On with the Dance—IV. Old-time Dances. The B.B.C. Theatre Orchestra. Conductor, Leslie Woodgate.  
9.30 (Midland)—"Love-in-Idleness" An Elizabethan Garden, by Gladys Ward.  
9.30 (Northern)—"The Arcadian Follies."  
10.15—"The Second News."  
10.35—11.0 (Midland)—As London.  
10.35—12 midnight (London and Northern)—Dance Music.

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

**BARCELONA (Spain)**  
Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW.  
Transmits at intervals from 8.15 a.m. 8.0 p.m.—Trio Concert. Clair de Lune (Gillet). Selection from "Carmen" (Bizet). Feuille d'Album (Chabrier). Menuet rose (Ganne).  
8.30—Exchange Quotations, Talk in Catalan, Request Gramophone Records and News. 10.0—Chimes from the Cathedral, Weather and Exchange Quotations.  
10.5—Concert by the Station Orchestra. March, Freiheit (Laukier). Selection from "El mal de amores" (Serrano). Danse grotesque (Massenet). Selections (Massenet). Andante ma non troppo (Richard Strauss). 11.0—"The Wedding of Quintia Flores"—Comedy in Three Acts (Alvarez Quintero Bros.). 1.0 a.m. (Friday) (approx.)—Close Down.

**BERLIN (Germany)**  
Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW.  
Transmits at intervals from 5.45 a.m. 12.2 p.m.—Weather for Farmers. 12.2 p.m.—Gramophone Concert—Fritz Kreisler and Marcell Wittrich (Vocalist), followed by Weather for Farmers. 12.55—Time Signal. 1.30—News Bulletin. 2.0—Gramophone Concert of Music by Brahms from Berlin (Witzleben). 3.0—Talk: Ostriches on the Veldt and in Farms. 3.30—Weather and Exchange. 3.45—Talk for Housewives. 4.0—Educational Talk.  
4.30—Concert from Berlin (Witzleben). 5.30—Educational Talk. 6.0—Talk: The Music of Niemann (Hamburg) and Wehle (Berlin). 6.30—Spanish Lesson. 6.55—Weather for Farmers. 7.0—Topical Talk. 7.20—Agricultural Talk. 7.35—Talk on Bolshevism, followed by Weather for Farmers. 8.0—See Berlin (Witzleben). 9.0—News and Sports Notes. 9.10—See Hamburg. 10.20—Weather, News and Sports Notes.  
10.30—Relay of the Third Act of "Tannhäuser"—Opera (Wagner), from Covent Garden. London.

11.40—Concert from Hamburg. 12.30 a.m. (Friday)—Close Down.

**BERLIN (Germany)**  
Witzleben. 715 kc/s (419.5 m.); 1.5 kW.  
Transmits at intervals from 6.0 a.m. 4.30 p.m.—Choral Concert.  
4.50—Concert of Finnish Music. Selections (Sibelius): (a) Impromptu in G Minor, Op. 24, (b) Impromptu in B Flat Minor, Op. 97, (c) Humoresque, Op. 101, (d) Landscape and Song in the Forest, Op. 114, (e) Caprice, Op. 24. Ave Maria (Klemeti). Cradle Song (Sibelius). The Night (Kuula).  
5.15—Violin Recital by Andreas Weissgerber. Hungarian Dances (Brahms-Joachim): (a) No. 1 in G Minor, (b) No. 7 in A, (c) No. 8 in A Minor, and (d) No. 6 in B Flat.  
5.30—Programme for Children. 5.50—Alfred Hein reads from his own Works. 6.5—Astronomical Talk.  
6.30—Concert. Selection from "Zaide" (Mozart). Fahrende Musikanten (Schumann-Doebber). Musik (Lalo). Sérénade espagnole (Chaminade).  
6.55—The Witzleben Station informs its listeners... 7.0—Topical Talk.  
7.10—Concert (continued). Fantastic Waltz (Heinecke). In the Steppes of Central Asia (Borodin). Es muss ein Wunderbares sein. Nocturne No. 3 (Liszt).  
7.55—Labour Market Report.  
8.0—"Eugen d'Albert". Memorial Programme from the Singakademie. The Berlin Symphony Orchestra, conducted by Dr. Max Schillings. Soloists: Mafalda Salvatini (Soprano) and Heinz Jolles (Pianoforte). Selection from "Izeyl." Talk by Prof. Paul Graener. Pianoforte Concerto in E, Op. 12 No. 2. Songs: (a) Lebensschlitten, (b) Wiegenlied, Op. 25, (c) Mittelalterliche Venus hymne.  
9.5—Relay of the Second and Third Acts of "Tannhäuser" (Wagner), from Covent Garden, London. In the interval at 10.10—News. After the programme—Dance Music from the Eden Hotel. 12.30 a.m. (Friday)—Close Down.

**BORDEAUX-LAFAYETTE (France)**  
(PTT). 986 kc/s (304 m.); 13 kW.  
Transmits at intervals from 12.45 p.m.

7.30 p.m.—News and Exchange Quotations. 7.40—Light Music on Gramophone Records. 7.55—Lottery Results. 8.0—Talk on Bullfighting. 8.15—News Bulletin, and Weather Report.  
8.30—Gramophone Concert. Berceuse (Chopin). Selections from "Tannhäuser" (Wagner). Chant Hindu (Rimsky-Korsakov). Hymn to the Sun (Rimsky-Korsakov). Symphonic Poem, Moldavia (Smetana). 9.0—"The Fugue"—Comedy in Three Acts and Four Scenes (Duvernois).

**BRATISLAVA (Czechoslovakia)**  
1,076 kc/s (279 m.); 14 kW.  
Transmits at intervals from 11.0 a.m. 6.50 p.m.—"The Silver Wedding"—One Act Comedy (Eisler). 7.45—See Prague. 10.15—Announcements. 10.20—See Prague.

**BRESLAU (Germany)**  
923 kc/s (325 m.); 1.5 kW. Relay by Gleiwitz, 1,184 kc/s (253 m.).  
Transmits at intervals from 6.0 a.m. 5.0 p.m.—Concert of Light Music on Gramophone Records. Potpourri of Music from Verdi's Operas (Charlie). Concert Waltz (Glazounov). Waltz, Frühlingstimmen (Johann Strauss). Polka, Sängerkunst (Joh. Strauss).  
5.30—Market Prices and Book Review. 5.50—This will interest you!—Surprise Programme. 6.10—Talk: New Tariff Regulations. 6.35—Talk: Old German Deities. 7.0—Weather Forecast. 7.5—Dance Music by the Station Orchestra, conducted by Franz Marszalek.  
8.0—Weather Forecast. 8.5—Discussion: Distress on the Frontier and the Theatre. 8.50—News Bulletin.  
9.5—Second and Third Acts of "Tannhäuser" (Wagner), relayed from Covent Garden, London. In the interval at 10.10—Time Signal, Weather Forecast, News Bulletin, Sports Notes and Programme Announcements. 11.20—Talk for Workers in Esperanto. 11.30—Sports Talk. 11.40 (approx.)—Close Down.

**BRNO (Czechoslovakia)**  
878 kc/s (342 m.); 35 kW.  
Transmits at intervals from 10.0 a.m. 7.0 p.m.—See Prague. 7.20—Balalaika Recital by Ivan Zadorin. 7.45



—See Prague. 8.30—Orchestral Concert of Nocturnal Music. 9.30—See Prague. 10.15—News Bulletin. 10.20—See Prague.

### BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW.  
12 noon—Gramophone Concert. Selection from "La Vie Parisienne" (Offenbach). Selection from "The Tanagra Dancer" (Hirschmann). Serenade (Pierne). Selection from "Paganini" (Lehar). Tango, Like a Cigarette (Macheroni). Nocturne, No. 2 (Chopin). Souvent-toi (Borel-Clerc).  
12.30 p.m.—Weather Report. 12.40—Concert (continued). Selection from "Miss Decima" (Audran). Intermezzo from "L'Amico Fritz" (Mascagni). Selection from "The Tales of Hoffmann" (Offenbach). Selection from "Ta Bouche" (Yvain). Lyric Vision (Mascagni). Selection from "Le Châlet" (Adam). Selection from "Les Mousquetaires au Couvent" (Varney-Tavan). Selection from "Un Homme en habit" (Barnaby). One Step from "Rose-Marie" (Friml). Selection (Sommerfeld). Selection from "Polenblut" (Nedbal). Polka, The Chimes of the Black Forest (Sommerfeld). Rustle of Spring (Sinding). Boosey Ballads. Waltz Melody. Petite Chose (Charly). Selection from "Les Vingt-huit jours de Clairette" (Tavan). March, Stars and Stripes (Sousa).  
5.00—Concert by the Station Symphony Orchestra, conducted by Jean Kumps. Overture, "Don Giovanni" (Mozart). "Pastoral Suite" (Ramsay). Spring Song (Mendelssohn). Kindertraum (Schumann). Histoires (Ibert). Valse triste (Sibelius). Military March No. 1 (Schubert).  
5.45—Programme for Children. 6.15—Talk by M. Doutrepoint.  
6.30—Gramophone Records. Symphony in B Flat No. 5 (Schubert). Canzonetta (Mendelssohn). Selection from "Hansel and Gretel" (Humperdinck).  
7.10—Reading for Children.  
7.15—Gramophone Records. Czardas (Monti). Soirée de Vienne (Schubert-Liszt). La España Cani (Marquina). Overture, "The Nuremberg Doll" (Adam). 7.30—Wireless Notes.  
8.00—Orchestral Concert, conducted by Franz André. Soloists: M. Vrayenne (Baritone), M. Durand (Trumpet), M. Lombard (Xylophone), M. Branders (Pianoforte), and M. Gras (Pianoforte). 10.00—Gardening Talk. 10.10—Gramophone Records. Selection from "Mamzelle Nitouche" (Tavan). Selection from "La Mascotte" (Audran). Ballet Music from "Isoleine" (Messager). 11.0 (approx.)—Close Down.

### BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish.  
12 noon—Concert. Soloists: Madeleine De Beurme (Viola), M. Vanderperren (Cello), and M. Van der Heyden (Pianoforte). Arioso from "The St. John Passion" (Bach). Aria from "Iphigenia in Aulis" (Gluck). Poem No. 2 for Cello and Pianoforte (Vreuls). Berceuse (Sarly). De Klokken van onzen Toren (Wambach). 12.30 p.m.—Weather Report.  
12.40—Gramophone Concert. Intermezzo from "Cavalleria rusticana" (Mascagni). Serenade (Schubert). Simple avec (Thomé). Salut d'amour (Elgar). In a Persian Market (Ketelbey). In a Monastery Garden (Ketelbey). The Willie Hagbo Petersen, Lars Boe and Christian Frederiksen (Singers). 8.30—Review of Politics for the Month of May.  
9.0—Vocal and Instrumental Concert, relayed from the Tivoli Concert Hall. Polonaise from "Eugen Onegin" (Tchaikovsky). Cello Solos by Fritz Dietzmann: (a) Andante cantabile from the "Cello Concerto" (Salomon), (b) Tarantella (Popper). Vocal Quartet: Foraar og Sommer (Heise). En skaemt som Vise (Seedorf-Pedersen). Jubilæum paa Galehuset (Bergstedt). Chamber Duets (Fini Henriques), by Fini Henriques and Otto Fessel. Songs by Margherita Flor: (a) Aria from "Aida" (Verdi), (b) Aria from "Madame Butterfly" (Puccini). 10.10 (from the Axelborg Studio)—Reading. 10.30—News Bulletin. 10.45—Concert (continued). Overture, "Orpheus in the Underworld" (Offenbach-Binder). Quartet Selections: (a) Waltz (Brahms-Nielsen), (b) Skovens fru (Elof Nielsen), (c) Jomfru, vil De med i Skoven? (Kragelund-Nielsen), (d) Under de lysgronne Lindetraer (Harris-Espersen). Spinetvise (Jespersen). 20 Arr

Sacred Heart. Programme arranged by the Reverend Father Eligius, with the Collaboration of Mme. Moons-Naegels and Mlle. Maria Van Bunderen (Songs) and the Pogen Society.  
10.0—Le Journal Parlé. 10.10—Light Music on Gramophone Records. 11.0 (approx.)—Close Down.

### BUCHAREST (Romania)

Radio-Bucharest. 761 kc/s (394 m.); 12 kW.  
Transmits at intervals from 11.0 a.m. 4.0 p.m.—Light Music and Romanian Music by the Gr. Dinico Orchestra. 5.0—News and Time Signal. 5.10—Light Music and Romanian Music (cont.). 6.0—Talk on Art and Music. 6.40—Popular Music on Gramophone Records.  
7.0—Orchestral Concert, conducted by Carlo Brunetti. Concerto grosso (Philip Lazar). Symphonic Dances (Grieg).  
7.45—Talk (to be announced). 8.0—Orchestral Concert (cont.). Romantic Suite, Eliana (Frank Alfano). 8.45—News and Close Down.

### BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW.  
Transmits at intervals from 9.15 a.m. Programme also relayed on 210 m. from 7.30 p.m. till Close Down.  
5.30 p.m.—Concert. Anny Halasz Fischer (Violin). Lenke Dalmat (Pianoforte), and Irene Teichmann (Songs). Malaguena (Albeniz-Kreisler). Mosquitoes (Fainhill). Partita in G Minor (Stöltzel). Sonata in F, Op. 1 (Wagenseil). Elégie (Massenet). April Song (Bizet). Nocturne in D (Chopin-Vilhelmy). Romanian Dances (Béla-Bartok). Folk Saga (Lajtha). Romanian Dance (Kadosa). Selection (Kosa). March in D Minor (Szabo). Children's Song (Weisshaus). Recitative (Szelenyi). Selection from "Carmen" (Bizet). Selection from "Louise" (Charpentier). Romance (Svendsen). Hungarian Poem (Hubay). Arias from "Manon" (Massenet).  
7.0—English Lesson.  
7.30—Concert by the Imre Magyar Cigány-Band. 8.30—A Play in the Studio. 10.20—Time Signal, Weather Forecast and News Bulletin, followed by Gramophone Concert. Part I. Selections from "Lohengrin" (Wagner). Part II. Dance Music.

### COPENHAGEN (Denmark)

1,067 kc/s (281 m.); 0.75 kW. Relay by Kalundborg, 260 kc/s (1,153 m.).  
Transmits at intervals from 7.30 a.m. (Gymnastics).  
12 noon—Time and Chimes from the Town Hall. 12.2 p.m.—String Ensemble Concert, conducted by Max Skalka, relayed from the Hotel d'Angleterre. 2.0—3.0—Interval.  
3.0—Recital of Danish Songs by Elsebeth Riegels. Songs (Heise): (a) Nu er Vinterens kolde Tid, (b) I Syden. Songs (Lange-Müller): (a) En Vaarnt, (b) Lykken. Der ligger en Borg i Dale (Henriques). Jeg bærer med Smil min Byrde (Nielsen).  
3.30—Orchestral Concert, relayed from the Wivex Restaurant. 5.0—Programme for Boys. 5.40—Exchange and Fish Market Prices. 5.50 (from the Randers Studio)—Talk. 6.20—English Lesson for Beginners. 6.50—Weather Forecast. 7.0—News Bulletin. 7.15—Time Signal.  
7.30—Extracts from "King for a Day"—Opera in Three Acts (Adam), relayed from the Tivoli Concert Hall. The Tivoli Concert Hall Orchestra, conducted by Emil Reesen. Soloists: Willie Hagbo Petersen, Lars Boe and Christian Frederiksen (Singers). 8.30—Review of Politics for the Month of May.  
9.0—Vocal and Instrumental Concert, relayed from the Tivoli Concert Hall. Polonaise from "Eugen Onegin" (Tchaikovsky). Cello Solos by Fritz Dietzmann: (a) Andante cantabile from the "Cello Concerto" (Salomon), (b) Tarantella (Popper). Vocal Quartet: Foraar og Sommer (Heise). En skaemt som Vise (Seedorf-Pedersen). Jubilæum paa Galehuset (Bergstedt). Chamber Duets (Fini Henriques), by Fini Henriques and Otto Fessel. Songs by Margherita Flor: (a) Aria from "Aida" (Verdi), (b) Aria from "Madame Butterfly" (Puccini). 10.10 (from the Axelborg Studio)—Reading. 10.30—News Bulletin. 10.45—Concert (continued). Overture, "Orpheus in the Underworld" (Offenbach-Binder). Quartet Selections: (a) Waltz (Brahms-Nielsen), (b) Skovens fru (Elof Nielsen), (c) Jomfru, vil De med i Skoven? (Kragelund-Nielsen), (d) Under de lysgronne Lindetraer (Harris-Espersen). Spinetvise (Jespersen). 20 Arr

## THURSDAY continued

(Jespersen). Selection (Metra). Foxtrot (J. Gilbert). Tango, Tatjana (Cavallo). Foxtrot (Willum). Gallop, Salut for August Bournonville (Lumby).  
11.30—Dance Music from the Nimb Restaurant. In the interval at 12 midnight—Time and Chimes from the Town Hall. 12.30 a.m. (Friday)—Close Down.

### DUBLIN (Ireland)

(R.N). 725 kc/s (413 m.); 1.2 kW. Relay by Cork, 1,337 kc/s (224.4 m.).  
1.30—2.0 p.m.—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records. 6.0—Popular Music on Gramophone Records. 6.15—Programme for Children. 7.0—Light Music on Gramophone Records. 7.10—News Bulletin and Dublin Cattle Market Report. 7.30—Time Signal. 7.31—Dialogue in French. 7.45—Talk (to be announced).  
8.0—Pianoforte Solos by Lilian Conolly. 8.15—Tenor Solos by P. J. O'Toole. 8.30—The Station Sextet. 8.45—Reading. 9.0—Cello Solos by W. Reidy. 9.15—Reading (cont.). 9.30—Songs by Miss McCarthy. 9.40—Accordion Solos by Michael Grogan. 9.55—The Station Sextet. 10.30—Time Signal, News, Weather Forecast and Close Down.

### FÉCAMP (France)

Radio Normandie. 1,293 kc/s (232 m.); 10 kW.  
12 noon—Light Music on Gramophone Records. 12.30—Press News. 12.45—Concert of Popular Music. Scenes pittoresques (Massenet). Au Jardin des Bêtes sauvages (Vellons). L'Eglise de Campagne. Selection from "La Perle du Brésil" (David). Vieille Histoire (Chauvet). Die Spinnerin (Mendelssohn). L'Aurore à la Campagne. Selection from "Louise" (Charpentier). Sérénade Badine (Chauvet).  
7.30—Wireless News. 8.0—News Bulletin. 8.30—Concert, relayed from Rouen. 11.0—Dance Music. 1.0 a.m. (Friday)—Close Down.

### FLORENCE (Italy)

Ente Italiano Audizioni Radiofoniche. 599 kc/s (500.8 m.); 20 kW.  
See Turin.

### FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relay by Cassel, 1,220 kc/s (246 m.).  
Transmits at intervals from 6.0 a.m. 1.0 p.m.—Gramophone Concert. Marches. Overture, "Poet and Peasant" (Suppé). Slavonic Rhapsody (Friedmann). Marches: (a) Deutschemeister, (b) Auf-und Abmarsch der Burgwache im alten Oesterreich. Episode aus dem Jägerleben (Reckling). Pioniermarsch (Schubert). Moonlight on the Alster (Petras). Mit Standarten (v. Blon). Styrian Dances (Lanner). Festival March (Sousa).  
2.0—News Bulletin. 2.10—Sponsored Concert. 3.0—Weather Report. 3.10—Time and Economic Notes. 3.30—See Stuttgart. 4.55—Economic Notes. 5.0—See Langenberg. 6.15—Economic Notes. 6.25—Book Review. 6.50—Talk: The Constitution of France. 7.15—Time and News. 7.30—Concert. 8.30—A Start in Life—A Discussion on Girls leaving School.  
9.0—Concerto Op. 39, for Pianoforte, Orchestra and Male Voice Choir (Busoni). Soloist: Egon Petri (Pianoforte). 10.0—Topical Talk. 10.20—Time and News.

### HAMBURG (Germany)

Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relay by Bremen, 1,112 kc/s (270 m.); Flenburg, 1,373 kc/s (218 m.); Hanover, 530 kc/s (566 m.) and Kiel, 1,202 kc/s (232.2 m.).  
Transmits at intervals from 5.45 a.m. 5.55 p.m.—Variety Programme. 6.30—Health Talk. 6.55—Frankfurt Exchange. 7.0—Topical Talk. 7.15—Weather Report.  
7.20 (from Hanover)—Instrumental Cabaret by the Hanoverian Norag Orchestra, conducted by Otto Ebel von Sosen, and Soloists. Miniature Overture (Becc). Hungarian Fantasia Op. 7, for Cello (Grütz-macher). Humoresque (Levin). Piccolo Solo: Sakadas (Wetzger). Zigeunersehnsucht (Niklas-Kempner). Oboe Solo: Air (Balfe-Klempke). Casuerie intime, for Cello and Violin (Godard). Tabu (Daylight). Waltz-Inter-

mezzo for Vibraphone: Feenreigen (Schmidt). Husarenritt (Spindler). Cornet Solo: Fantasia brillante (Arban). Tanze mit im Walzerschritt (Henry Weber). Cornet Solo: Die Teufelszeug (Schmidt). Big Ben (Weimou). Jazz Caricatures (Huntley). Trumpet Duet, Die kleine Kompagnie (Ganghberger). Humoresque, Süßigkeiten (Lohr). Xylophone Solo: Gallop, Der Jongleur (Dietrich).  
9.10—"The River—a Life Story" (III). "The Elbe"—a Radio Sequence (Hans Leip) with Music by Hermann Erdlen, played by the Norag Philharmonic Orchestra, conducted by the Composer. 10.20—Time and News.

10.40—Orchestral Concert of Dances. Invitation to the Dance (Lanner). Gavotte and Musette (de Teye). Waltz from "The Merry Widow" (Lehar). Boston, Destiny (Baynes). Rose mousse (Bosc). Polka (Rubinstein). Waltz, Carmen Sylva (Ivanovic). Polka-Mazurka, La Violette (Faust). Waltz, Anneliese (Winterberg). Marsch des Wiener Bürgermiliziers (Lanner). Viennese Waltz (Benatzky).

### HEILSBURG (Germany)

1,085 kc/s (276.5 m.); 1.60 kW. Relay by Danzig, 662 kc/s (453.2 m.).  
Transmits at intervals from 6.0 a.m. (Weather, Gymnastics and Concert from Leipzig).  
11.30 a.m.—Concert from Hamburg. 1.5 p.m.—Concert by the Königsberg Opera House Orchestra, conducted by Werner Richter-Reichhelm. Overture, "Die schöne Galathée" (Suppé). Suite from "Sylvia" (Delibes). Selections (Grieg): (a) Norwegian Bridal Procession, (b) Erotik, (c) Ich liebe dich. Vilja's Song from "The Merry Widow" (Lehar). Valse triste (Sibelius). Ballet Music (Lassen). Waltz, Winterstürme (Fucik).  
2.30—3.15—Interval. 3.15—Programme for Children. 4.30—See Stuttgart.  
5.0—Concert by the Little Orag Orchestra, conducted by Eugen Wilcken. Overture, "Raymond" (Thomas). Fin Fest in Aranuez (Demersseman). Potpourri, Wiener Operetten-Revue (Robrecht).  
5.30—German Lesson. 5.45—Book Review. 6.15—Agricultural Prices. 6.25—Agricultural Talk. 6.50—Lesson in English Conversation.  
7.15—Eisner Pianoforte Recital. Sonata in A Minor, Op. 164 (Schubert). Suite 1922 (Hindemith).  
7.45—Friedrich Gerstäcker Memorial Programme. 7.55—Weather Report. 8.0—See Berlin (Witzleben). 9.0—News Bulletin. 9.10—See Hamburg. 10.20 (approx.)—Weather, News and Sports Notes.

11.55—Concert by the Christian Male Voice Choir of Apeldoorn, conducted by L. Mentinck. Soloist: J. P. Caro (Bass). Prayer (Handel). Ecce quomodo moritur (Handel). Nimmer Nacht (Andriessen). Air from the Cantata "Vondel" (Hol). Summer Night (Olmán). In the Forest (Hol). 8.40—Talk (to be announced). 9.10—Choral Concert (continued). De liefste plek (Léser). Goeden nacht (Roeseke). Op het Kerkhof (de Vliegh). Wensch (Hol). Alles leeft (Hol). De Storm (Hol). De Noordzee (Zijderlaan). Domine salvam fac reginam (Giesen). Psalm 146: Verses 1, 6 and 8.  
10.10—News Bulletin, followed by Light Music on Gramophone Records. 11.10 (approx.)—Close Down.

### HILVERSUM (Holland)

1,013 kc/s (296.1 m.); 20 kW. (7 kW. up to 4.40 p.m.).  
Programme of the Algemeene Vereeniging Radio Omroep (A.V.R.O.). 7.40 a.m.—Time Signal. 7.41—Gramophone Records of Variety Music. 9.40—Time Signal. 9.41—The Daily Service. 9.55—Gramophone Records (continued).  
10.10—Ballad Concert. Pianoforte Solos: (a) Soirée de Vienne (Schubert-Liszt), (b) Ecoisaises (Beethoven-Busoni). Songs: (a) Auf dem Wasser zu singen (Schubert), (b) Nacht und Träume (Schubert), (c) Widmung (Schumann), (d) Verborgenheit (Hugo Wolf), (e) Allerseelen (R. Strauss). Pianoforte Solo: Wedding Day on Trolldaugen, Op. 65 No. 6 (Grieg).  
10.40—Dressmaking Lesson. 11.10—Concert (continued). Pianoforte Solo: Andante cantabile from the Pathetic Sonata (Beethoven). Songs: (a) Chanson roumaine (Jos. Jongen), (b) Le voyageur (Panée), (c) La cloche (Saint-Saëns). Pianoforte Solos: (a) Pierrette, Op. 41 (Chaminade), (b) First Arabesque (Debussy), (c) Fantaisie impromptu, Op. 66 (Chopin).  
11.40—Time Signal.

11.42—Orchestral Concert, conducted by Louis Schmidt. Overture, "La finta giardiniera" (Mozart). Miniature Suite (Coates). The Wedding of the Marionettes (Kocerkert). Cabaletta (Lack). Potpourri of Lortzing's Music (Urbach). Barrel Organ Music. Selection from "Der Evangelimann" (Kienzl). Selections (Tosti): (a) Fairy Tale, (b) Ninon. Waltz, Mein Lebenslauf ist Lieb und Lust (Jos. Strauss). Selection from "Die Landstreicher" (Ziehrer). Barrel Organ Music. Parade March (Roland). Selections (Tosti): (a) April, (b) Donna Vatra. La

Scandinave (Ganne). Heimatklänge Marsch (Löwenthal). 1.55 p.m.—Talk. 2.25—Interval. 2.40—Gramophone Records of Light Music. 3.40—Programme for Hospitals. 4.40—Concert by a Children's Choir.  
5.10—Orchestral Concert, conducted by Nico Treep. March (Lankien). Waltz, La Fayette du Temple (Waldteufel). Peer Gynt Suite No. 1 (Grieg). Parade of Jack and Jill (Lake). Selection from "Samson and Delilah" (Saint-Saëns). Selections (Ketelbey): (a) Clair de lune, (b) Jungle Drums. March (Lehar).  
6.10—Talk on Sports. 6.40—Pianoforte Duets by Bob and Berty. 7.10—Talk. 7.40—Time Signal. 7.41—A Radio Play. 8.40—Talk.

8.45—Orchestral Concert, conducted by Edward van Beinum, relayed from the Concert Hall, Amsterdam. Suite; No. 1 from "L'Arlesienne" (Bizet). Prélude à l'après-midi d'un faune (Debussy). L'Apprenti Sorcier (Dukas). 9.55—Weather and News. 10.10—Orchestral Concert with Songs by Bob Scholte. 11.40 (approx.)—Close Down.

### HUIZEN (Holland)

1,600 kc/s (1,875 m.); 8.5 kW. 7.40—8.55 a.m.—Programme of the Christian Radio Society (N.C.R.V.). 7.40—Light Music on Gramophone Records. 8.55—9.40—Interval. 9.40—10.40—Programme of the Catholic Radio Society (K.R.O.). 9.40—Popular Music on Gramophone Records. 9.55—Programme for Invalids. 10.25—Variety Music on Gramophone Records. 10.40—1.40 p.m.—N.C.R.V. Programme. 10.40—Light Music on Gramophone Records. 11.10—Religious Address. 11.40—Time Signal and Police Notes.

11.55—Concert by the K.R.O. Orchestra, conducted by Joahn Gerritsen. March (Rebattu). Overture, "Si j'étais Roi" (Adam). Waltz, España (Waldteufel). Potpourri of the Music of Meyerbeer (Urbach). Adagio from Sonata, Op. 13 in C Minor—the "Pathetic" (Beethoven). Two Norwegian Dances (Grieg). Potpourri, Ein Souper bei Suppé (Morena). The Cockney Lover (Ketelbey). Minuet (Paderewsky). Hurra! Die Musik kommt (Zimmer).  
1.40 p.m. to Close Down—K.R.O. Programme. 1.40—Lesson in Handicrafts. 2.40—Programme for Women. 3.10—Interval. 3.40—Programme for Invalids. 4.40—Handwork for Children.

5.25—Pianoforte Recital, by Rosine de Cocq. Selections (Beverwyk): (a) Meditation, (b) Intermezzo, (c) Dance of the Sylphs. Four Pianoforte Pieces (Kuiler). Theme and Variations (Kerrebijn). Habanera (de Cocq). Rita (de Cocq). 6.25—Dressmaking Lesson. 6.40—Talk (to be announced). 7.10—Police Notes. 7.25—Religious Notes.

7.40—Concert by the Christian Male Voice Choir of Apeldoorn, conducted by L. Mentinck. Soloist: J. P. Caro (Bass). Prayer (Handel). Ecce quomodo moritur (Handel). Nimmer Nacht (Andriessen). Air from the Cantata "Vondel" (Hol). Summer Night (Olmán). In the Forest (Hol). 8.40—Talk (to be announced). 9.10—Choral Concert (continued). De liefste plek (Léser). Goeden nacht (Roeseke). Op het Kerkhof (de Vliegh). Wensch (Hol). Alles leeft (Hol). De Storm (Hol). De Noordzee (Zijderlaan). Domine salvam fac reginam (Giesen). Psalm 146: Verses 1, 6 and 8.  
10.10—News Bulletin, followed by Light Music on Gramophone Records. 11.10 (approx.)—Close Down.

### KALUNDBORG (Denmark)

Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.  
See Copenhagen.

### LANGENBERG (Germany)

Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW.  
Transmits at intervals from 6.45 a.m. (Exercises, Weather, Time and Concert from Frankfurt).  
12 noon—Concert from Munich. 12.50 p.m.—Weather, Announcements and Time. 1.0—Concert. 2.30—Sponsored Gramophone Concert. 3.30—Economic Notes and Time. 3.50—Programme for Children. 4.10—Notes on the Broadcasts for Schools. 4.20—Educational Talk. 5.0—Concert of Dances and Marches, conducted by Wolf. Soloist: Otto Wetzel (Pianoforte). Military March (Schubert). Kaiser-Walzer (Joh. Strauss). Minuet from the Military Symphony (Haydn). Minuet from the Symphony in E Flat



THURSDAY continued

(Mozart). Pianoforte Solos. Hungarian Dances, Nos. 5 and 6 (Brahms). Turkish March (Beethoven). Turkish March (Mozart). Pianoforte Solos: (a) Waltz, Man lebt nur einmal (Strauss-Tausig), (b) Minuet (Schubert), (c) Habanera (Debussy). Waltz, Die Werber (Lanner). Polonaise in A (Chopin). 6.15-Talk: Some Strange Fore-runners of Wireless. 6.40-Italian Lesson. 7.0-Weather, Time, Economic Notes and Sports Results. 7.15-Talk: The Effect of Poverty on Children and Young People. 7.30-Talk: The Drinking-Water Supply in the Rhenish-Westphalian Industrial District. 7.55-News Bulletin. 8.0-Viennese Portraits - Johann Strauss-Last Series. 10.0-News and Sports Notes. 10.20-Orchestral Concert, conducted by Kuhn. Overture, "Neues vom Tage" (Hindemith). La Valse (Ravel). Scherzo (Pfitzner). Perpetuum mobile (Joh. Strauss). Polka from "Ritter Pasman" (Joh. Strauss). 11.15-Concert from a Caf . 12 midnight (approx.)-Close Down.

LEIPZIG (Germany) 1,157 kc/s (250 m.); 2 kW. Relayed by Dresden, 941 kc/s (319 m.). Transmits at intervals from 6.0 a.m. 4.30 p.m.-Concert by the Leipzig Symphony Orchestra, conducted by Hilmar Weber. Overture, "Undine" (Lortzing). Ballet Suite, Hiawatha (Coleridge-Taylor). Concert Polkas Nos. 2 and 3 (Gr nfeld). Selections from "Die Faschingsfee" (K lmann). 5.30-Weather and Time. 5.35-5.50-Interval. 5.50-Economic Notes. 6.0-Talk on Hygiene. 6.15-Talk on Taxation. 6.30-Spanish Lesson. 6.50-Programme to be announced. 7.0-Talk on Sociology. 7.30-Concert by the Leipzig Symphony Orchestra, conducted by Theodor Blumer. Selections from the Serenade in E Flat for Two Oboes, Two Clarinets, Two Horns and Two Bassoons: (a) Allegro maestoso, (b) Minuet, (c) Allegro. Selection from the Suite, Op. 98, for Strings, Harp and Kettle Drum (Haber). Dance Suite from the Pianoforte Pieces for Couperin (R. Strauss). Selection from "Oriental Sketches" (Morcek). 9.10 (approx.)-See Hamburg. 10.15-News and Close Down.

LYONS (France) La Doua (PTT). 644 kc/s (465.8 m.); 1.5 kW. Transmits at intervals from 8.0 a.m. 7.0 p.m.-Popular Music on Gramophone Records. 7.30-Radio Gazette for Lyons and the South-East. 8.30-Song Recital with Accordion Accompaniment.

MADRID (Spain) Union Radio (EAFJ). 707 kc/s (424.3 m.); 2 kW. Transmits at intervals from 9.0 a.m. 8.0 p.m.-Chimes, Exchange, Market Prices, Talk on Mountaineering and Request Gramophone Records. 9.15-9.30-News and Political Review. 10.0-Linguaphone French Lesson. 10.30-Chimes, Time Signal, Political Review and Song Recital, followed by Concert by a Guitar Orchestra, relayed from the Hotel Nacional. 12.45 a.m. (Friday)-News Bulletin. 1.0-Chimes and Close Down.

MILAN (Italy) Ente Italiano Audizioni Radiofoniche. 995 kc/s (331.5 m.); 7 kW. See Turin.

MORAVSK -OSTRAVA (Czechoslovakia) 1,137 kc/s (263.8 m.); 11 kW. Transmits at intervals from 10.0 a.m. 7.0 p.m.-Talk on Moravian Artists: Vil m Mrstik. 7.20-See Brno. 7.45-See Prague. 10.15-Programme Announcements and Theatre Notes. 10.20-See Prague.

MUNICH (Germany) 563 kc/s (533 m.); 1.5 kW. Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.) and N rnberg, 1,256 kc/s (239 m.). Transmits at intervals from 6.45 a.m. 5.0 p.m.-Concert, conducted by Erik Kloss. Overture, "Giralda" (Adam). Japanese Rain Song (Marx). Polka, Op. 2 (Gr nfeld). Selection from "Schwanda the Piper" (Weinberger). Waltz, Dorkinder (K lmann). Potpourri of Russian Airs, Dubinushka (Schirman). Cradle Song (Mozzkovsky). Dream of Love after the Ball (Czibulka). March, Leucht-kugeln (Finkler). 6.15-Time Signal, Weather Report,

and Agricultural Programme. 6.25-Italian Lesson. 6.45 (from N rnberg)-Agricultural Talk. 7.5 (from N rnberg)-Military Band Concert, conducted by Johann Schwarz. March, Coburger Josias. Jubel Ouverture (Christian Bach). Selection from "Oberon" (Weber). Waltz, Wienerkinder (Johann Strauss). The Tin Soldiers (Kockert). Operetta Melodies (Offenbach). March, Perpetuum mobile (Blon). 8.0-Programme Announcements. 8.20-Zither Concert by the Concordia Zither Club, conducted by Josef Jennerwein. 8.45-A Dialogue. 9.5-Symphony Concert, by the Station Orchestra, conducted by Hans Winter. Soloists: Alexander Tcherepnin (Pianoforte), Willy Stuhlfauth (Violin) and Josef K hler (Cello). Three Pieces for Chamber Orchestra: (a) Overture, (b) Mystery, (c) Introduction to a Boxing Match (Tcherepnin). Concertino for Pianoforte, Violin, Cello and String Orchestra (Tcherepnin). Symphony No. 2 in D (Beethoven). 10.20-Time Signal, Weather Report, News and Sports Notes.

OSLO (Norway) Kringkastingselskapet, 277 kc/s (1,083 m.); 60 kW. Relayed by Fredrikstad, 816 kc/s (367.6 m.); Hamar, 536 kc/s (560 m.); Notodden, 671 kc/s (447.1 m.); Porsgrund, 662 kc/s (453.2 m.) and Rjukan, 671 kc/s (447.1 m.). Transmits at intervals from 10.0 a.m. 6.0 p.m.-German Lesson. 6.30-Address with Sacred Music. 7.0-Weather and News. 7.30-Song Recital by Madame Tina Vogt. 8.0-Time Signal. 8.2-Agricultural Talk. 8.30-Orchestral Concert, conducted by Hugo Kramm. Overture, "Maritana" (Wallace). Mozartiana (Tchaikovsky). Ballet Music from "Rosamunde" (Schubert). 9.40-Weather and News. 10.0-Topical Talk. 10.15-Readings. 10.45 (approx.)-Close Down.

PALERMO (Italy) Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW. Transmits at intervals from 12.45 p.m. 5.30 p.m.-Light Music on Gramophone Records. 6.0-6.30-Programme for Children. 8.0-Announcements, Agricultural Notes and Giornale Radio. 8.20-Popular Music on Gramophone Records. In the interval at 8.30-Time Signal and Announcements. 8.45-"Adriana Lecouvreur" - (Adrienne Lecouvreur)-Opera in Three Acts (Gilea). In the intervals: Film Notes. After the Opera, News Bulletin.

PARIS (France) Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW. Time Signals (on 2,650 metres) at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals). Transmits at intervals from 1.0 p.m. 6.45 p.m.-Talk on the Theatre. 7.0-Le Journal Parl . 8.20-Weather Report. 8.30-Gramophone Concert. Overture, "Don Giovanni" (Mozart). Violin Solo: Rondo (Mozart) Selection from "Radamisto" (Handel). Selection from "Richard C ur de Lion" (Gr try). J'ai peur de lui parler la nuit. Le Coucou (Daquin). Le Tambourin (Rameau). Piece for Organ (Handel). Selection from "Le Caid" (Thomas). Selection from "Lysistrata" (Lincke). Aubade printani re (Lacombe). My old Garden (Dangry). My Dream (Fucik). Selections (Myne): (a) C'est moi qui fais tout, (b) Les primes pour tous. Charme de Sirenes (Waldteufel). Grasshoppers' Dance (Bucalossi). Valse musette, C'est ton baiser (Armengol). Pasodoble, Zarita (Mariat). Tango, Remords de Colombine (Dumas). Fox-trot, Vision d'Orient (Dumas). Military March (Kuhne).

PARIS (France) Poste Parisien. 914 kc/s (328.2 m.); 60 kW. Transmits at intervals from 12 noon 7.0 p.m.-Gramophone Records of Light Music, Talk and News. 7.30-Sponsored Gramophone Concert. 8.30-Gramophone Records, Talk and News. 8.45-Vocal and Orchestral Concert. Trumpet Overture, Op. 101 (Mendelssohn). Rigaudon from "Dardanau" (Rameau). Romance in G for Violin and Orchestra (Beethoven). Fugue   la Gigue (Bach). Vivace and Scherzo from Symphony No. 3 (Schumann). Divertissement (Lalo). Haffner Serenade (Mozart). Danse lente (Franck). Military March (Schubert).

PARIS (France) Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW. 6.45 a.m.-Physical Culture Course. 7.30-Weather Forecast and Physical Culture (contd.). 7.45-Light Music on Gramophone Records. 8.0-News Bulletin, Weather Forecast and Press Review. 12 noon-Protestant Address. 12.30 p.m.-Gramophone Concert for Young People. Sardana, El Bac de les Ginestres (Toldra). Hymn to the Forest (Mendelssohn). Chorus from "Carmen" (Bizet). Le Bestiaire (Poulenc). Goliwog's Cake Walk (Debussy). Recitations: (a) La Mort du Loup (de Vigny), (b) L'Ours (Rostand). Evening bells (Billi). The Little Goblins (Eilenberg). Le Chirurgien du Roi s'amuse (Mortier). Bonhomme (Nadaud). Berceuse, L'Couquer d'non mioche (Lemaire). Au Magasin (Bach-Laverne). The Nursery (Inghelbrecht). In the intervals at 1.0-Exchange, News, and Weather; 1.30 and 2.0-Exchange. 3.45-Exchange and Market Prices. 6.45-Market Prices, Weather, Agricultural Report and Racing Results. 7.0-Dialogue between Fr dric Lefebvre and Marcel Pr vost. 7.30-German Lesson. 7.45-German Press Review, Commercial Prices and News. 8.0-"Orange Blossom" - Play (Birabeau-Dolley). In the interval at 8.30-News, Sports Results, Weather Forecast and Review by Dominique Bonnaud; 9.15-Press Review and News. 9.30-Symphony Concert on Gramophone Records. Symphony No. 8 - the Unfinished (Schubert). Pr lude, Fileuse and Sicilienne from "Pell s et M lisande" (Faure). Serenade (Gounod). Le Vallon (Gounod). La Pr cieuse (Couperin-Kreisler). Chanson Louis XIII (Couperin-Kreisler). Loreley (Liszt). Overture, "Le Jeune Henri" (M hul).

THURSDAY continued

10.45-News Bulletin. 10.50 (approx.)-Close Down.

PARIS (France) Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW. 6.45 a.m.-Physical Culture Course. 7.30-Weather Forecast and Physical Culture (contd.). 7.45-Light Music on Gramophone Records. 8.0-News Bulletin, Weather Forecast and Press Review. 12 noon-Protestant Address. 12.30 p.m.-Gramophone Concert for Young People. Sardana, El Bac de les Ginestres (Toldra). Hymn to the Forest (Mendelssohn). Chorus from "Carmen" (Bizet). Le Bestiaire (Poulenc). Goliwog's Cake Walk (Debussy). Recitations: (a) La Mort du Loup (de Vigny), (b) L'Ours (Rostand). Evening bells (Billi). The Little Goblins (Eilenberg). Le Chirurgien du Roi s'amuse (Mortier). Bonhomme (Nadaud). Berceuse, L'Couquer d'non mioche (Lemaire). Au Magasin (Bach-Laverne). The Nursery (Inghelbrecht). In the intervals at 1.0-Exchange, News, and Weather; 1.30 and 2.0-Exchange. 3.45-Exchange and Market Prices. 6.45-Market Prices, Weather, Agricultural Report and Racing Results. 7.0-Dialogue between Fr dric Lefebvre and Marcel Pr vost. 7.30-German Lesson. 7.45-German Press Review, Commercial Prices and News. 8.0-"Orange Blossom" - Play (Birabeau-Dolley). In the interval at 8.30-News, Sports Results, Weather Forecast and Review by Dominique Bonnaud; 9.15-Press Review and News. 9.30-Symphony Concert on Gramophone Records. Symphony No. 8 - the Unfinished (Schubert). Pr lude, Fileuse and Sicilienne from "Pell s et M lisande" (Faure). Serenade (Gounod). Le Vallon (Gounod). La Pr cieuse (Couperin-Kreisler). Chanson Louis XIII (Couperin-Kreisler). Loreley (Liszt). Overture, "Le Jeune Henri" (M hul).

PITTSBURGH (U.S.A.) Westinghouse Electric (KDKA). 980 kc/s (306 m.); 25 kW. Transmits at intervals from 12.30 p.m. 9.0 p.m.-Decorating Notes from New York. 9.15-Teaberry Baseball Scores. 9.20-Business News. 9.25-David Lawrence Dispatch. 9.30-Pebeco Weather Report. 9.31-Market Reports. 9.45-KDKA Kiddies Klub. 10.0-Coffee Matinee, from New York. 10.30-Singing Lady, from New York. 10.45-Little Orphan Annie, from New York. 11.0-Time Signal. 11.1-Temperature Report. 11.2-Who's News To-day. 11.7-Teaberry Sport Review. 11.12-Press News-Reeler. 11.15-Westinghouse Musical Maids. 11.45-Literary Digest Topics in Brief, by Lowell Thomas, from New York. 11.59-Time Signal. 12 midnight-Pepsodent Amos 'n' Andy, from New York. 12.15 a.m. (Friday)-Programme to be announced. 12.30-The Stebbins Boys, from New York. 12.45-Billy Jones and Ernie Hare, from New York. 1.0-The Edgeworth Programme, from New York. 1.15-Rin Tin Tin Thrillers. 1.30-Ivory Programme, from New York. 1.45-Sisters of the Skillet. 2.0-Blackstone Plantation, from New York. 2.30-Thompkins Corners. 3.0-A and P Dance Gypsies, from New York. 3.30-Paris Night Life, from New York. 3.45-Contract Bridge, E. Hall Downs. 4.0-Time Signal. 4.1-Teaberry Sport Review. 4.11-Temperature Report. 4.12-Weather Report. 4.15-Press Last Minute Flashes. 4.20-Programme to be announced. 4.30-Hotel William Penn Orchestra. 5.0-Charlie Olcott, Radio's Funniest Man. 5.15-Time Signal and Goodnight.

PRAGUE (Czechoslovakia) 614 kc/s (488.6 m.); 120 kW. Transmits at intervals from 6.15 a.m. 5.50 p.m.-Talk on Music. 6.0-Talk. 6.10-Agricultural Talk: Orchards. 6.15-Talk: How to study Socialist Literature. 6.25-German Transmissions. 6.30-Talk: New Books on Agriculture. 7.0-Song Recital. Aria from "Rusalka" (Dvorak). Song from "Dalibor" (Smetana). Two Songs (Tchaikovsky). 7.20-June Review. 7.45-Talk: The History of Art. 8.0-Quartet in F. Op. 3, No. 5 (Haydn) by Ondricek's Quartet. 8.30-Orchestral Selections. In the interval at 9.0-Time Signal. 9.30-Waltzes for Two Pianofortes. Waltz from the Suite, Op. 17 (Rachmaninov). Scherzo, Op. 87 (Saint-Saens). Valse romantique (Chabrier). Viennese Rhapsody, Op. 43 (Fl. Schmitt). 10.0-Time and News. 10.15-Announcements. 10.20-Concert. Prelude (Rachmaninov). Rhapsody in Blue (Gershwin). Ballet  gyptien (Luigini). Waltz (Jeremias). Punch (Mayerl). On the Blue Danube (Fischer).

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland) 743 kc/s (403 m.); 25 kW.; Lausanne, 442 kc/s (680 m.); and Geneva, 395 kc/s (760 m.). 12.30 p.m.-Time Signal from Neuch tel Observatory. 12.31-Weather Forecast and News Bulletin. 12.40 (from Geneva)-Gramophone Concert of Light Music. 1.0-Exchange Quotations. 1.5-Gramophone Concert (contd.), with Humorous Item in the interval. 1.45-5.0-Interval. 5.0-Time Signal from Neuch tel Observatory. 5.1-Concert by a String Orchestra, conducted by Robert Echenard. 5.50 (from Geneva)-Literary Programme. 6.10-Concert (contd.). 6.45 (from Geneva)-Programme for Children. 7.0-Weather Forecast. 7.1 (from Geneva)-Film Talk. 7.20 (from Lausanne)-Report of the Swiss Peasants' Union. 7.30 (from Lausanne): Talk: Self-Discipline. 7.55-Announcements. 8.0-Concert by the Station Orchestra. 9.0 (from Geneva)-Recital of Spanish and Cuban Songs by Mme. Segrera. 9.15 (from Montreux)-Concert of Viennese Music by the Orchestra of the Hungaria Restaurant, conducted by M. Machotka. 10.0-Weather Forecast and News Bulletin. 10.15 (approx.)-Close Down.

ROME (Italy) Ente Italiano Audizioni Radiofoniche (IRO). 680 kc/s (441 m.); 50 kW. Relayed by Naples, 941 kc/s (319 m.); and ZRO, 6,976 kc/s (43 m.). 8.15-8.30 a.m.-Giornale Radio. 12.30 p.m.-2.0-Gramophone Concert of Variety Music. In the intervals at 12.35-Weather, 1.15-Giornale Radio and Exchange, and at 1.30-Time and Announcements. 5.0-Exchange Quotations. 5.5-Programme for Children. 5.25-Giornale Radio and Announcements. 5.30-Song Recital by Felia Parisini (Soprano) and Tosca Ferroni (Mezzo-Soprano). Arias and Duet from "Zanetto" (Mascagni). 5.45-Variety Concert. Marche arabe (Ganne). Serenata a Seny (Culotta). Gypsies of the Volga (Spialek). Selection (Padilla). Hungarian Dances Nos. 1 and 2 (Brahms). 6.15-Giornale dell'Enit. 6.25-Educational Talk. 6.35-6.55-Interval. 6.55 (Naples)-Shipping and Sports Notes. 7.0-Agricultural Notes, Announcements, Giornale Radio and Press Review. 8.0-Time, Announcements and Gramophone Records of Variety Music. 8.30-Talk for the Housewife, followed by Sports Notes and Announcements. 8.45-Orchestral Concert with Violin Solos by Arrigo Serrato. Andante pastorale from the Concerto grosso in F Minor (Locatelli). Dance of the Slaves from "Iphig nie en Aulide" (Gluck). Violin Solo: Concerto in A Minor, with Orchestral accompaniment (Vivaldi-Nacchez). Cinema and Topical Review. Autumn from the ballet, The Seasons (Glazounov). Concerto in D Minor for Violin and Orchestra (Wi niavsky).

STOCKHOLM (Sweden) Radiotj nst (SASA). 680 kc/s (436 m.); 55 kW. Relayed by Boden, 244 kc/s (1,229.5 m.); G teborg, 932 kc/s (322 m.); H rby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Ostersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.45 p.m.-Gramophone Concert of Popular Music. 6.45-Reading. 7.15-Weather Report and News Bulletin. 7.30-Talk-II. The Maps of Sweden. 8.0-Concert by the Station Orchestra. Polonaise from "Faust" (Lassen). Suite, The Fair (Damm). Scherzo (Goldmark). Prelude to Act V of "King Manfred" (Reinecke). Selection of French Airs (Jacquet). Selection from "H rodiade" (Massenet). Rakoczy Overture (K ler-B la). 9.25-Talk (to be announced). 9.45-Weather Report and News Bulletin. 10.0-Concert of Light Music. 11.0 (approx.)-Close Down.

STOCKHOLM (Sweden) Radiotj nst (SASA). 680 kc/s (436 m.); 55 kW. Relayed by Boden, 244 kc/s (1,229.5 m.); G teborg, 932 kc/s (322 m.); H rby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Ostersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.45 p.m.-Gramophone Concert of Popular Music. 6.45-Reading. 7.15-Weather Report and News Bulletin. 7.30-Talk-II. The Maps of Sweden. 8.0-Concert by the Station Orchestra. Polonaise from "Faust" (Lassen). Suite, The Fair (Damm). Scherzo (Goldmark). Prelude to Act V of "King Manfred" (Reinecke). Selection of French Airs (Jacquet). Selection from "H rodiade" (Massenet). Rakoczy Overture (K ler-B la). 9.25-Talk (to be announced). 9.45-Weather Report and News Bulletin. 10.0-Concert of Light Music. 11.0 (approx.)-Close Down.

STRASBOURG (France) Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW. 11.30 a.m.-Gramophone Concert of Operatic and Light Music. 12.45 p.m.-News in French and German. 1.0-Time Signal. 1.2-Gramophone Concert (continued). 2.0-Programme for Children. 3.0-4.15-No Transmissions. 4.15-Elocution Lesson in French. 4.30-Relay of a Concert from ships in Marseilles Harbour. 6.0-Talk in French: Through French Museums. 6.15-Talk in French: The Nutritive Value of Fish. 6.30-Orchestral Concert, conducted by Maurice de Villers. Selections from "Coppelia" (Delibes). Overture, Mozart (Hahn). Tr me (Wagner). Selection from "Hansel and Gretel" (Humperdinck). Marche grecque (Ganne). 7.30-Time Signal. 7.32-News in French and German. 7.45-Orchestral Concert, conducted by Maurice de Villers. Overture (H ndel). Aria from "Susanna" (H ndel). Selections from "Rienzi" (Wagner). Aria from "Tannh user" (Wagner). Chanson

9.45-"Butterflies"-Comedy in One Act (Silvio Zambaldi). 10.30-Selections from "Philemon et Baucis" (Gounod). 10.55-News Bulletin. SCHENECTADY (U.S.A.) General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.), and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 11.45 a.m. 9.0 p.m.-Musical Comedy Hits from New York. 9.30-Musical Ad Men. 9.50-News Items. 10.0-Stock Reports and Police Notices. 10.15-Skippy from New York. 10.30-Bosco Children's Programme. 10.45-Swanee Serenaders from New York. 11.0-Joe and Eddie. 11.15-Annette McCullough (Grooner). 11.30-Musical Comedy Hits. 11.55-Basball Scores. 12 midnight (WGY only)-Through the Opera Glass. 12 midnight (W2XAF only)-Stock Reports and News Items. 12.30 a.m. (Friday)-4.0 a.m.-New York Relay. 12.30-Barbasol Programme. 12.45-Trials of the Goldbergs. 1.0-Fleishman Hour. 2.0-Big Six of the Air. 2.30-Adventures of Sherlock Holmes. 3.0-Lucky Strike Dance Hour. 4.0-Carmelo Cascio (Pianist). 4.15-Floyd Walter (Organist). 4.45-Cotton Club Orchestra from New York. 5.0-DeWitt Clinton Orchestra. 5.30-New Kenmore Orchestra. 6.0 (approx.)-Close Down.

SCHWEIZERISCHER LANDESENDER (BEROM NSTER) (Switzerland) 653 kc/s (459 m.); 60 kW.; Basle, 1,229 kc/s (244.1 m.); and Berne, 1,220 kc/s (246 m.). 12.28 p.m.-Time Signal from Neuch tel Observatory. 12.30-Weather Report and News Bulletin. 12.40-Gramophone Concert of Sound-Film Music. 1.35-Weather Report and Exchange Quotations. 1.45-3.30-Interval. 3.30 (from Z rich)-Programme for Women. 4.0-Concert by the Station Orchestra. 5.0-Interval. 6.30 (from Basle)-Talk: Towns of the far North. 7.0-Time Signal, Weather Forecast and Traffic Report, followed by Light Music on Gramophone Records. 7.30 (from Basle)-Elementary Italian Lesson. 8.0 (from Z rich)-Young Authors' Programme, with a Musical Setting by the Station Orchestra, conducted by Erwin Gilbert. 9.30-Weather Forecast and News Bulletin. 9.45-Dance Music by the Station Orchestra. 10.30 (approx.)-Close Down.

STOCKHOLM (Sweden) Radiotj nst (SASA). 680 kc/s (436 m.); 55 kW. Relayed by Boden, 244 kc/s (1,229.5 m.); G teborg, 932 kc/s (322 m.); H rby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Ostersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.45 p.m.-Gramophone Concert of Popular Music. 6.45-Reading. 7.15-Weather Report and News Bulletin. 7.30-Talk-II. The Maps of Sweden. 8.0-Concert by the Station Orchestra. Polonaise from "Faust" (Lassen). Suite, The Fair (Damm). Scherzo (Goldmark). Prelude to Act V of "King Manfred" (Reinecke). Selection of French Airs (Jacquet). Selection from "H rodiade" (Massenet). Rakoczy Overture (K ler-B la). 9.25-Talk (to be announced). 9.45-Weather Report and News Bulletin. 10.0-Concert of Light Music. 11.0 (approx.)-Close Down.

STRASBOURG (France) Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW. 11.30 a.m.-Gramophone Concert of Operatic and Light Music. 12.45 p.m.-News in French and German. 1.0-Time Signal. 1.2-Gramophone Concert (continued). 2.0-Programme for Children. 3.0-4.15-No Transmissions. 4.15-Elocution Lesson in French. 4.30-Relay of a Concert from ships in Marseilles Harbour. 6.0-Talk in French: Through French Museums. 6.15-Talk in French: The Nutritive Value of Fish. 6.30-Orchestral Concert, conducted by Maurice de Villers. Selections from "Coppelia" (Delibes). Overture, Mozart (Hahn). Tr me (Wagner). Selection from "Hansel and Gretel" (Humperdinck). Marche grecque (Ganne). 7.30-Time Signal. 7.32-News in French and German. 7.45-Orchestral Concert, conducted by Maurice de Villers. Overture (H ndel). Aria from "Susanna" (H ndel). Selections from "Rienzi" (Wagner). Aria from "Tannh user" (Wagner). Chanson



**THURSDAY**  
continued

plaintive (Pesse). Song, Si j'étais le page charmant (Pesse). Burlesque March (Suppé).  
8.45—Concert by the Municipal Orchestra, conducted by E. G. Munch, relayed from the Restaurant de l'Orangerie. Coronation March from "The Prophet" (Meyerbeer). Overture, "Rienzi" (Wagner). Suite from "Namuoua" (Lalo). Danse persane (Giraud). Invitation to the Waltz (Weber, Herzog). March from "Aida" (Verdi). 10.30 (approx.)—Close Down.

**STUTTGART (MÜHL-ACKER) (Germany)**

Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relay by Freiburg, 527 kc/s (570 m.).  
Transmits at intervals from 6.0 a.m. 10.0 a.m.—Recital of Russian Violin Music by Kurt Krause (violin) and Traute Zarges (Pianoforte). Four Pieces, Op. 18 (Sokolov). Ballad, Op. 17 (Dobroven). Romance, Op. 23 (Szymanovsky). Sonata, Op. 29 (Achron).  
11.0—Time, Weather and News.  
11.15—11.30—Sponsored Musical Programme. 12 noon—Concert from Munich. 12.50 p.m.—Time, Weather, News and Programme Announcements.  
1.0—Gramophone Records of Famous Instrumentalists. Wilhelm Kempff (Pianoforte): (a) Prelude to the Ratswahlkantate, (b) Prelude and Fugue in D from "Das wohltemperierte Klavier" (Bach). Fritz Kreisler (Violin): Andante cantabile, Op. 11 (Tchaikovsky). Walter Rehberg (Pianoforte): Impromptu in G, Op. 90 (Schubert). Pablo Casals (Cello): (a) Moment Musical (Schubert), (b) Le Cygne (Saint-Saëns). Erica Morini (Violin): Air from the Concerto in A Minor (Goldmark). Alfred Cortot (Pianoforte): (a) Nocturne in E Flat; Op. 9, No. 2, (b) Waltz in G Sharp Minor, Op. 64, No. 2 (Chopin). Tossy Spivakovsky (Violin): Slavonic Dance Melody in E Minor, No. 2 (Dvorak-Kreisler). Karol Szreter (Pianoforte): (a) A Wedding Day on Troldhaugen, (b) Norwegian Bridal Procession (Grieg). Yehudi Menuhin (Violin): Improvisation, Nigun (Bloch). Moritz Rosenthal

(Pianoforte): Wiener Karneval—on Themes by Johann Strauss. 1.55—News Bulletin. 2.0—2.15—Sponsored Musical Programme. 2.30—Elementary Spanish Lesson. 3.0—Elementary English Lesson. 3.30—Programme for Young People. 4.30 (from Mannheim)—Radio Report on the Thirty-Eighth Show of the German Agricultural Society.  
5.0—See Langenberg. 6.15—Time and Weather. 6.25 (from Mannheim)—Talk: At the Garibaldi Memorial, on the Fiftieth Anniversary of his Death. 6.50—"Can you read Goethe?"—Study Circle. 7.15—Time and Agricultural Notes. 7.30—10.20—See Frankfurt. 10.20—Time, Weather, News and Programme Announcements. 10.45—Concert Programme from Langenberg. 12 midnight (approx.)—Close Down.

**TOULOUSE (France)**

Radiophonie du Midi. 779 kc/s (385 m.); 8 kW.  
Transmits at intervals from 12.30 p.m. 5.0 p.m.—Transmission of Pictures. 5.15—Exchange Quotations. 5.45—Orchestral Selections from: (a) "Les Vingt-huit Jours de Clairette" (Tavan) and (b) "Pas sur la bouche" (Yvain). 6.0—Chansonnettes. 6.15—Military Music. 6.30—Exchange Quotations and Horse Racing Results. 6.45—Opéra-Comique Music. 7.0—Concert. Andante from the Quartet in G Minor (Debussy). Abendlied (Schumann). Souvenir (Nicholls). Adagio from the Quartet No. 2 in G (Beethoven). Sound Film Music. 7.30—News Bulletin.  
7.45—Concert. Dream of Love after the Ball (Czibulka). The Wedding of the Marionettes (Katscher). Les Millions d'Arlequin (Drigo). Valse mélancolique (Darsin). Ballgelfüster (Meyer-Helmund). Wiewervogel (Translatour). Moonlight on the Rhine (Vollstedt). Moonlight on the Danube (Gay).  
8.15—Songs from (a) "Les Noces de Jeannette" (Massé), (b) "La Bohème" (Puccini) and (c) "Don Quichotte" (Massenet). 8.30—Accordion Solos. 8.45—Military Music. 9.0—Songs from (a) "Rigoletto" (Verdi), (b) "Fortunio" (Messager) and (c) "La Vivandière" (Godard). 9.15—Dance Music. 9.30—Orchestral Selections. 9.45—Songs from (a) "Siegfried"

(Wagner), (b) "Le Roi d'Ys" (Lalo) and (c) "The Magic Flute" (Mozart). 10.0—Orchestra Selections. 10.30—North African News. 10.45—Songs from (a) "The Drum-Major's Daughter" (Offenbach) and (b) "Hit the Deck" (Youmans). 11.0—Concert of Variety Music. 12 midnight—Weather and Announcements. 12.5 a.m. (Friday)—English Music. 12.30 (approx.)—Close Down.

**TRIESTE (Italy)**

Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW.  
Transmits at intervals from 8.15 a.m. 7.5 p.m.—Quintet Concert. Selection (Solazzi). Paranze (Barbi). Rosa che bella cosa (Innocenzi). Sun of the South (Dreyer). Suite, Une Fête à Aranjuez (Démersseman). Il negro innamorato (Abbati). Chi è questa bella signora? (Mascheroni). 8.0 till Close Down—See Turin.

**TURIN (Italy)**

Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relay by Milan, 905 kc/s (331.5 m.); and Genoa, 959 kc/s (312.8 m.); and Florence, 599 kc/s (500.8 m.).  
Transmits at intervals from 8.15 a.m. 6.45 p.m.—Agricultural Notes. 7.0—Announcements. 7.5—Musical Selections. Selection from "Si j'étais roi" (Adam). In the Magic of a Spring Night (Jessel). Stornellando (de Micheli). 7.30—Time, Announcements and Gramophone Records of Variety Music. 8.0—Giornale Radio and Weather. 8.15—Gramophone Records of Variety Music. 8.25—Talk for Housewives.  
8.30—"Mese Mariano"—Opera in One Act (Giordano) followed by "Marcella"—Opera in Three Acts (Giordano). In the intervals: Cinema Review, Talk and Giornale Radio. News after the Programme.

**VIENNA (Austria)**

Radio-Wien. 581 kc/s (517 m.); 15 kW. Relay by Graz, 852 kc/s (352.1 m.); Innsbruck, 1,058 kc/s (283 m.); Klagenfurt, 662 kc/s

(453.2 m.); Linz, 1,220 kc/s (246 m.); and Salzburg, 1,373 kc/s (218 m.).  
Transmits at intervals from 9.20 a.m. 6.15 p.m.—Talk for Women: Men and Women in Statistics. 6.40—Talk: The Book Expert. 7.5—Talk: Our Present Knowledge of the Descent of Man. 7.30—Time and Announcements. 7.40—Dance Music. 8.40—Reading.

9.10—Concert by the Vienna Symphony Orchestra, conducted by Paul Redl. Selections from "Lakmé" (Delibes). Barcarolle from "The Tales of Hoffmann" (Offenbach). Prelude to the Third Act of "The Cricket on the Hearth" (Goldmark). Intermezzo from "Cavalleria Rusticana" (Mascagni). Selections from "Eugen Onegin" (Tchaikovsky). Intermezzo from "I Pagliacci" (Leoncavallo). Introduction to the Second Act of "The Queen of Sheba" (Goldmark). Selection from "Mignon" (Thomas). Selections (Meyerbeer): (a) Introduction to the Second Act of "The North Star", (b) Coronation March from "The Prophet". 10.15—News Bulletin. 10.30—Orchestral Concert. Florentine March (Fucik). Overture, "Carneval in Rom" (Joh. Strauss). Waltz, Schmeicheleien (Wacek). Selection from "The Bartered Bride" (Smetana). Serenade (Moszkovsky). Selection from "Der Rastelbinder" (Lehár). Waltz (Weinberger). March from "Der fliegende Rittmeister" (Dostal).

**WARSAW (Poland)**

Polskie Radio. 212.5 kc/s (1,411 m.); 120 kW.  
11.20 a.m.—Aviation Weather Report. 11.25—Interval. 11.45—Press Review. 11.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, Cracow. 12.5 p.m.—Programme Announcements. 12.10—Weather Report. 12.15—Talk: Fighting the Hail. 12.35—Classical Concert of Polish Music by the Warsaw Philharmonic Orchestra, conducted by Josef Oziminski. Soloists: M. Mokrzycka (Soprano), Mme. Rabczewicz (Pianoforte), and Cas. Wilkomirsky (Cello). Polonaise in A (Chopin). First Movement from the Concerto in E Minor for Piano-

forte and Orchestra (Chopin). Songs: (a) Air from "The Countess" (Moniuszko), (b) Air from "Halka" (Moniuszko). Cello Solo: Polonaise from "The Countess" (Moniuszko). Songs: (a) Little Swallow (Moniuszko), (b) The Goldfish (Moniuszko). Overture and Mazurka from "Halka" (Moniuszko). 2.0—Interval. 2.45—Light Music on Gramophone Music. 3.5—Economic Report and Exchange Quotations. 3.15—Announcements. 3.20—Interval. 3.25—Book Review. 3.45—Hydrographic Report. 3.50—Programme for Children. 4.15—Interval. 4.20—Elementary French Lesson. 4.40—Popular Music on Gramophone Records. 5.10—Talk: The Universe and the Atom. 5.35—Vocal and Instrumental Concert. Mme. Igielska (Songs), Mme. Ossendowska (Violin), Mme. Zaleska (Pianoforte). Sonata in A Major for Violin and Pianoforte (Mozart). Songs. Pianoforte Solos: (a) Melody (Rachmaninov), (b) Mazurka (Wielhorsky), (c) Oriental Dance, Wiedza (Ossendowska), (d) Cordoba and Seguedilla (Albeniz). Songs. Violin Solos: (a) Love Song (Suk-Kocian), (b) A Woman's Caprice (Provanik), (c) Berceuse (Sym), (d) Mazurka (Statkovsky), (e) 17th Century Song, (f) Hidalgo e Gitana (Ossendowska). 6.50—Miscellaneous Items. 7.15—Programme relayed from Cracow. 7.45—Programme Announcements. 7.50—Radio Journal. 8.0—Feuilleton: Behind Prison Walls. 8.15—Concert of Light Music by the Warsaw Philharmonic Orchestra, conducted by S. Navrot. Soloist: G. Lozovsky. Polonaise from "Eugen Onegin" (Tchaikovsky). Overture, Pique Dame (Suppé). Oriental Dance, Suraya (Siede). Waltz, The Enchanted Princess (Tchaikovsky). Three Instrumental Solos. Village Suite (Aradedi). Intermezzo (Siede). Waltz, Golden Rain (Waldteufel). Three Instrumental Solos. Algerian Scene (Kettelbey). Polka (Eysler). Oberkis (Namyslovsky). Mazurka (Levandovsky). 9.35—Reading from Wilno, 533 kc/s (563 m.). 10.20—Radio Journal. 10.25—Weather and Police Notes. 10.30—Sports Notes. 10.35—Dance Music.

**PRINCIPAL EVENTS**

**SYMPHONY CONCERTS**

- 8.15 p.m. Leipzig: Symphony Orchestra.
- 8.15 " Warsaw: Philharmonic Orchestra.
- 8.30 " Vienna: Symphony No. 3 (Franz Schmidt).
- 9.15 " Stuttgart, Frankfurt, Königs Wusterhausen: Philharmonic Orchestra.

**CONCERTS (Vocal and Instrumental)**

- 5.0 p.m. Brussels No. 1: Wagner programme.
- 7.40 " Heilsberg: Mozart programme.
- 7.40 " Vienna: Swedish folk music.
- 8.0 " Radio-Paris: Beethoven—Wagner.
- 8.10 " Budapest: Relay from the Hochschule.
- 8.10 " Copenhagen: Finnish music.
- 8.15 " Hamburg: Kiel Orchestral anniversary concert.
- 8.30 " Radio-Suisse Romande: Sacred Music.
- 8.30 " Stockholm: Swedish music, Conductor: Georg Schnéevoigt.
- 10.45 " Berlin, Breslau: "Late" Concert (Johann Strauss).

**OPERAS**

- 7.45 p.m. Prague: "The Hermit's Bell" (Mailart).
- 9.55 " Daventry: "The Dusk of the Gods," Act 3, from Covent Garden.

**CHAMBER MUSIC**

- 9.10 p.m. Berlin (Witzleben): Quintet in C (Schubert).
- 9.10 " Copenhagen: Mozart, Beethoven.

**PLAYS**

- 8.50 p.m. Heilsberg: "Chitra" (Tagore).
- 8.50 " Munich: "The Trial of Socrates."

**MISCELLANEOUS**

- 10.0 p.m. Copenhagen: Copenhagen Rowing Club Festival.

**DANCE MUSIC**

- 10.10 p.m. Vienna: Harry Tafet's Band.

**FRIDAY (June 3)**

**Death and Transfiguration**

The chief piece in the programme with which the Kiel orchestra celebrates its 25th anniversary this evening—the NORAG stations are relaying the programme—is Richard Strauss' tone poem, *Death and Transfiguration*. The score is prefaced by a poem by Alexander Ritter, the friend whose influence did a good deal to turn Strauss' energies away from the more strictly orthodox music in which he was brought up. But in this case, the music inspired



Richard Strauss

the poem, not the other way round as is usual with such programme music. It has, however, been accepted by the composer himself and his admirers as forming a satisfactory clue to what Strauss' music means. It describes a sick man, aware that death is very near him, and dreaming, amid the most wretched surroundings, of his happy childhood; of growing man's strength, of the struggles of his high ideals against an unkind world, and his striving towards a splendid goal which he never reached. Death seems to him like an iron hammer about to strike him down, but before it falls, he can hear a message of deliverance, of transfiguration coming down to him from on high, and it is on that exalted plane that the tone-poem ends.

**Beethoven's Absent Beloved**

"The one form of music which I do not like composing," said Beethoven, "is song." It is certainly not by his songs that he wins our reverence and thanks, though he gave the world a few which stand worthily beside the symphonies and string quartets, among them the series which RADIO-PARIS is to broadcast in a French version this evening, but which the whole world knows best by its German title—*An die ferne Geliebte*. Composed in 1815 and published a year later, with a dedication to Prince Lobkowitz, they form a real song cycle, and should be sung without breaks between them. The poems are by Alois Jetteles, a young student of medicine, and youth's passionate longing is the mood of all six. The first thinks of song as bridging the gulf which stretches between the lovers, and the second imagines a primrose path to a dreamland where they shall meet. The third bids the swallows and the little brooks, the clouds and breezes bear a message to the distant loved one, and the fourth, following a like train of fancy, would have the breezes carry the singer to her. The fifth recounts the beauties of spring, the joys it brings to all the world except the lonely lover's heart, and the last is a dedication of all the songs to her whose love inspired them. In it Beethoven's music recalls the melody of the first song, but with a new and deeper meaning, lending the close of the cycle a sense of spiritual exaltation above the world of hard reality.



NATIONAL

kc/s m. kW. London: 1,148 261.3 50 Daventry: 193 1,554.4 30 Northern: 995 301.5 50... NOTE: THE HOURS OF TRANSMISSION ARE REDUCED TO BRITISH SUMMER TIME

BARCELONA (Spain)

Radio-Barcelona (EAJ1). 860 kc/s (349 m.); 8 kW. Transmits at intervals from 8.15 a.m. 8.0 p.m.—Trio Concert. Les Papillons (Couperin). Selection from "Le Cid" (Massenet). Gavotte (Lully). La Serenata (Braga).

BERLIN (Germany)

Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW. Transmits at intervals from 5.45 a.m. 12 noon—Weather for Farmers. 12.2 p.m.—Gramophone Concert of Classical and Light Music, followed by Weather for Farmers. 12.55—Time Signal. 1.30—News Bulletin. 2.0—Gramophone Concert of Classical Music, relayed from Berlin (Witzleben).

REGIONAL

kc/s m. kW. London: 842 356.3 50 Midland: 752 398.9 25 Northern: 626 479.2 50... BORDEAUX-LAFAYETTE (France) (PTT). 986 kc/s (304 m.); 13 kW.

FRIDAY continued

Night's Dream" (Mendelssohn-Weininger). Songs: (a) Air from "The Barber of Seville" (Rossini), (b) Song from "Si j'étais Roi" (Adam). Selection from "Louise" (Charpentier-Casadesus).

BRATISLAVA (Czechoslovakia)

1,076 kc/s (279 m.); 14 kW. Transmits at intervals from 10.30 a.m. 7.0—See Brno. 7.45—See Prague. 10.30—Announcements. 10.35—See Prague.

BRESLAU (Germany)

923 kc/s (325 m.); 1.5 kW. Relayed by Gleiwitz, 1,184 kc/s (253 m.). Transmits at intervals from 6.0 a.m. 6.50 p.m.—Talk: The East Germans. 7.15—Weather Forecast. 7.20—Talk: Old Germanic Civilisation at its Height. 7.40—Weather Forecast. 7.45—Concert of Popular Music by the Silesian Philharmonic Orchestra, conducted by Franz Marszalek.

BRNO (Czechoslovakia)

878 kc/s (342 m.); 35 kW. Transmits at intervals from 10.30 a.m. 7.0 p.m.—Dramatic Programme. 7.45—See Prague. 10.30—News Bulletin. 10.35—See Prague.

BRUSSELS (Belgium) (No. 1)

I.N.R. 590 kc/s (509 m.); 15 kW. 12 noon—Trio Concert. Franz Wigy (Violin), P. Leemans (Pianoforte) and De Necker (Cello). Pasodoble (Brokier). Serenata Morisca (Chapi). Negro Cradle Song (Clutsum). Selection from "Le Jongleur de Notre-Dame" (Massenet). Waltz (Holländer). 12.30 p.m.—Weather Report. 12.40—Concert (continued)—Tango, "Ta voix (Dumas). Hindu Song from "Sadko" (Rimsky-Korsakov). Rustic Dance for "Cello (Squire). Les Trésors de Colombine (Drigo). Olga (Flynn). 1.00—Gramophone Concert of Light Music by the Station Symphony Orchestra, conducted by Arthur Meulemans.

BUDAPEST (Hungary)

545 kc/s (550 m.); 18.5 kW. Transmits at intervals from 9.15 a.m. Programme also relayed on 210 metres from 7.0 p.m. to Close Down. 5.30 p.m.—Concert of Light Music, conducted by Stefan Bertha. 6.30—Shorthand Lesson. 7.0—Song Recital by Josef Cseleenyi. 7.45—Talk: The Rowing Competition, Berlin-Vienna-Budapest. 8.10—Last Concert of the Season, relayed from the Hochschule für Musik. The Orchestra conducted by Anton Fleischer. Chaconne (Vitali). Dramatic Scene for Soprano and Orchestra, Sappho (Vollmann). Danse macabre (Liszt). Cantata No. 76, The Heavens declare the Glory of God (Bach). Memorial Speech on the Haydn Bicentenary by Count Zichy. Symphony in D (Haydn). 9.0—Talk: The General Political Position. 10.10—Concert by the Karl Bura Cigány Band relayed from the Markus Restaurant. 11.0—Dance Music by the "Broadway Boys" Dance Band, relayed from the Tarjan Restaurant. COPENHAGEN (Denmark) 1,067 kc/s (281 m.); 0.75 kW. Relayed by Kalundborg, 260 kc/s (1,153 m.).

Strauss). Christine Potpourri (Salabert). Selections by Madame Cambier. Way Down South (Myddleton). Craymignons Liégeois. Ballet Music from "Carmen" (Bizet). Roll on, Mississippi, roll on (West). If you're really and truly in Love (Butler). Waltz, It happened in Monterey (Wayne). Sweet and Lovely (Arheim). Let's get friendly (Dougherty). Bubbling over with love (Russell and Ager). 11.0 (approx.)—Close Down.

BRUSSELS (Belgium) (No. 2)

N.I.R. 887 kc/s (338.2 m.); 15 kW. Programme in Flemish. 12 noon—"The Barber of Seville"—Opera (Rossini), given in Italian on Gramophone Records. In the interval at 12.30 p.m.—Weather. 5.0 p.m.—Orchestral Concert, conducted by Franz André. Overture, "Le Cousin de Poeringhe" (Van Oost). Selection from "Die Fledermaus" (Johann Strauss). Selection from "Fatinitza" (Suppé). Selection (Offenbach). 5.45—Programme for Children. 6.15—Talk: Youth and Joy. 6.30—Gramophone Concert. Symphony on a French Mountain Theme, for Pianoforte and Orchestra. Selection from "Romeo and Juliet" (Gounod). Gavotte No. 2 (Popper). Variations on a Popular Theme for Guitar (Krotkov). I'll always be in love with you (Steph). Selection from "The Last Waltz" (Oscar Straus). Old Russian Air for Guitar. Hawaiian Sandman (O'Flynn). Selection from "The Gipsy Princess" (Kálmán-Ischpold).

7.30—Talk: Natural History. 8.0—Orchestral Concert, conducted by Arthur Meulemans. 8.45—Talk: Aristide Briand. 9.0—Concert (continued). 10.0—Le Journal Parlé. 10.10—Gramophone Dance Music. Foxtrot, Got the Bench, got the Park. Waltz, Girl of a Million Dreams. Rumba, Bei mir. Fox-trot, My Brother makes the noises for the Talkies. Waltz, Comedy Foxtrot, Fourteen Rollicking Sailors. Tango. Plegaria. Foxtrot, Still I love her. Tango. Foxtrot, When you were my Sweetheart. Tango, Three little times. Foxtrot, River, stay way from my door. Tango, Denk dabei an mich. Foxtrot, Lonesome Lover. Marienwalzer. Foxtrot, Bubbling over with Love. 11.0 (approx.)—Close Down.

BUCHAREST (Romania)

Radio-Bucarest. 761 kc/s (394 m.); 12 kW. Transmits at intervals from 11.0 a.m. 4.0 p.m.—Concert by the Station Orchestra. March (Fucik). Frühlingstimmen (Johann Strauss). Ballet Suite (Oskar Gyldmark). Gavotte (Popper). Russian Scenes (Bantock). Melody (Rubinstein). 5.0—News and Time Signal. 5.10—Concert (continued). In a Persian Market (Ketelbey). Selection from "The Flower of Hawaii" (Abraham). Suite in Old Style (Foulds). 6.0—Talk on Philosophy and Religion. 6.40—Light Music on Gramophone Records. 7.0—Violin Recital, by Alex Theodorosco. Sonata in D Major (Handel). Poem (Notara). 7.30—Choral Concert of Sacred Music and Romanian Music. 8.0—Talk (to be announced). 8.15—Choral Concert (continued). 8.45—News and Close Down.

FLORENCE (Italy)

Ente Italiano Audizioni Radiofoniche. 599 kc/s (500.8 m.); 20 kW. See Turin. FRANKFURT-am-MAIN (Germany) 770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.). Transmits at intervals from 6.0 a.m. 12 noon—Orchestral Concert of Marches and Waltzes. March, Mit klingendem Spiel (Translatour). Anina Waltz from "Die Chansonette" (Dellinger). Selections (E. Strauss): (a) March, Sarazenen, (b) Waltz, Tanz-Kandidaten, (c) Jubel-Walzer. March, Frisch gewagt (v. Blon). Waltz, Grafenberger (Gung'l). Waltz, Wiener Kinder (Jos. Strauss). Kinderlieder Marsch (Fetras). 12.50 p.m.—News and Weather. 12.55—Time Signal. 1.0—See Stuttgart. 2.0—News Bulletin. 2.10—Sponsored Concert. 3.0—Weather Report. 3.10—Time and Economic Notes. 4.55—Economic Notes. 5.0—Concert from Munich. 6.15—Economic Notes. 6.25—Talk: At the Garibaldi Memorial, on the Fiftieth Anniversary of his Death. 6.50—Mandoline Concert. 7.15—Time and Announcements. 7.30—Legal Talk:

Transmits at intervals from 7.30 a.m. 12.15 p.m.—Talk for Schools: Sicily. 12.45—String Ensemble Concert, conducted by A. Bendix, relayed from the Wivex Restaurant. 2.0—3.0—Interval.

3.0—Orchestral Concert, conducted by Launy Gröndahl. Overture, "His Life for the Czar" (Glinka). Valse lyrique (Sibelius). Aragonese (Falla). Selection from "The Barber of Seville" (Rossini). Salut d'amour (Elgar). Norwegian Artists' Carnival (Svendsen). Reading, "The Secret Marriage" (Cimarosa). Habillage (Bossi). Selection from "Hänsel and Gretel" (Humperdinck). Autumn, and November from "The Seasons" (Tchaikovsky). Mandoline Serenade for Strings and Pianoforte (Desormes). Zulu March (Alberti). 5.0—Programme for Children. 5.40—Exchange and Fish Market Prices. 5.50—Recital of Old Icelandic Lyrics. 6.20—German Lesson for Beginners. 6.50—Weather Forecast. 7.0—News Bulletin. 7.15—Time Signal. 7.32—Talk. 8.0—Chimes from the Town Hall. 8.2—Items by Per Knutzon. 8.10—Orchestral Concert of Finnish Music. Selections from the Divertimento (Melartin). (a) Prelude, (b) Minuet and (c) Dance. Selections (Sibelius): (a) Valse triste, (b) Four Selections from the Music to Strindberg's "Svanevit". 8.40—"Heikki and Lakkala"—Play (Otto Schrayh). 9.10—Chamber Music. Trio in B flat for Pianoforte, Violin and Cello (Mozart). Variations for Pianoforte, Violin and Cello on Müller's Song "Ich bin der Schneider Kakadu" (Beethoven). 9.45—News Bulletin. 10.0—Relay of the Spring Festival of the Copenhagen Rowing Club from the Lorry Establishment. 1.0 a.m. (Saturday)—Close Down.

DUBLIN (Ireland)

(2RN). 725 kc/s (413 m.); 1.2 kW. Relayed by Cork, 1,337 kc/s (224.4 m.). 2.30—2.0 p.m.—Time Signal, Weather Forecast, Stock Report and Light Music on Gramophone Records. 6.0—Popular Music on Gramophone Records. 6.15—Programme for Children. 7.0—Light Music on Gramophone Records. 7.20—News Bulletin. 7.30—Time Signal. 7.31—Talk on Gardening. 7.45—Talk (to be announced). 8.0—Concert by the Station Symphony Orchestra, conducted by Vincent O'Brien. 10.30—Time Signal, News, Weather Forecast and Close Down.

FÉCAMP (France)

Radio Normandie. 1,293 kc/s (232 m.); 10 kW. 12 noon—Gramophone Concert of Popular Music. 12.30 p.m.—News Bulletin. 12.45—Concert of Classical Music. Prelude in E flat (Saint-Saëns). Legend from "Le Jongleur de Notre-Dame" (Massenet). Ballet from "Isoline" (Messager). Selection from "La Mascotte" (Audran). Selection from "Le Comte Obligado" (Moretti). Le Cygne (Saint-Saëns). 7.30—Wireless News. 8.0—News Bulletin. 8.15—Agricultural Notes. 8.30—Relay of a Concert from Caen. 11.0—Dance Music. 1.0 a.m. (Saturday)—Close Down.

FRANKFURT-am-MAIN (Germany)

770 kc/s (390 m.); 1.5 kW. Relayed by Cassel, 1,220 kc/s (246 m.). Transmits at intervals from 6.0 a.m. 12 noon—Orchestral Concert of Marches and Waltzes. March, Mit klingendem Spiel (Translatour). Anina Waltz from "Die Chansonette" (Dellinger). Selections (E. Strauss): (a) March, Sarazenen, (b) Waltz, Tanz-Kandidaten, (c) Jubel-Walzer. March, Frisch gewagt (v. Blon). Waltz, Grafenberger (Gung'l). Waltz, Wiener Kinder (Jos. Strauss). Kinderlieder Marsch (Fetras). 12.50 p.m.—News and Weather. 12.55—Time Signal. 1.0—See Stuttgart. 2.0—News Bulletin. 2.10—Sponsored Concert. 3.0—Weather Report. 3.10—Time and Economic Notes. 4.55—Economic Notes. 5.0—Concert from Munich. 6.15—Economic Notes. 6.25—Talk: At the Garibaldi Memorial, on the Fiftieth Anniversary of his Death. 6.50—Mandoline Concert. 7.15—Time and Announcements. 7.30—Legal Talk:



Young Offenders. 8.0—10.20—See Stuttgart. 10.20—Time and News. 10.45—Concert. 12 midnight (approx.)—Close Down.

**HAMBURG (Germany)**  
Norag (ha, in Morse). 806 kc/s (372 m.); 1.5 kW. Relayed by Bremen, 1,112 kc/s (270 m.); Flensburg, 1,373 kc/s (218 m.); Hanover, 530 kc/s (566 m.); and Kiel, 1,292 kc/s (232.2 m.).

Transmits at intervals from 5.45 a.m. 6.10 p.m.—Variety Programme. 6.35—Talk for Workers. 6.55—Frankfurt Exchange and Hamburg Market Prices. 7.0—Topical Talk. 7.15—Weather Report. 7.20—"Points of View"—Readings.

8.15 (from Kiel)—Festive Concert by the Kiel Municipal Orchestra on its Twenty-fifth Anniversary. Conductors: Eugen Jochum, Prof. Rudolf Krasselt, Prof. Ludwig Neubeck and Richard Richter. Leonora Overture, No. 3 (Beethoven). Talk by the President of the Kiel Musical Society. Variations on a Theme by Haydn (Brahms). Prelude and Death of Isolde from "Tristan and Isolde" (Wagner). Tod und Verklärung (R. Strauss).—Prelude to "The Mastersingers" (Wagner).

10.0—Time and News. 10.20—Concert from the Hotel Reichshof.

**HEILSBURG (Germany)**  
1,085 kc/s (276.5 m.); 60 kW. Relayed by Danzig, 662 kc/s (453.2 m.). Transmits at intervals from 6.0 a.m. (Weather, Gymnastics and Gramophone Concert).

11.30 a.m.—Concert from Breslau. 7.5 p.m.—Concert, conducted by Eugen Wilcken. March, Uncle Teddy (Fucik). Waltz, Aquarellen (Joseph Strauss). Overture, "Fra Diavolo" (Auber). Canzonetta (d'Ambrosio). Waltz (Ackermann). Selection from "The Tales of Hoffmann" (Offenbach). Suite, In einem Puppenhaus (Engelmann). Waltz, Madeline (Waldteufel). Selection from "The Gipsy Baron" (Johann Strauss).

2.30—Sponsored Programme with Gramophone Records. 4.0—Programme for Children.

4.30—Orchestral Concert, conducted by Eugen Wilcken. March, Vorwärts! Aufwärts! (Hohmann-Webau). Waltz, Roses and Marguerites (Waldteufel). Overture, "Die Felsenmühle" (Reissiger). Ballet Divertissement (Blättermann). Küsse im Dunkeln (Micheli). Debreczian (Meisel). Gounod Potpourri (Urbach). Waltz, Der erste Brief (Reggiov). Selection from "The Merry Peasant" (Fall).

5.55—Review of New Books. 6.15—Agricultural Market Prices. 6.25—Talk: Dogs in Towns. 6.50—"Delev von Liliencron"—Programme of Literature and Music. 7.35—Weather Report.

7.40—Mozart Concert by the Königsberg Opera House Orchestra, conducted by Erich Seidler. Soloist: Bruno Eisner (Pianoforte). Concert Suite (arranged Busoni). Pianoforte Concerto in G. Symphony in D. 8.40—Programme Announcements. 8.50—"Chitra"—A Play (Rabindranath Tagore). Music by Lendvai. 10.0 (approx.)—Weather, News and Sports Notes.

**HILVERSUM (Holland)**  
1,013 kc/s (296.1 m.); 20 kW. (7 kW. up to 4.40 p.m.).

6.25—9.40 a.m.—Programme of the Workers' Radio Society (V.A.R.A.). 6.25—6.40 and 7.10—7.25—Gymnastics. 7.40—Gramophone Records of Variety Music. 8.40—Septet Concert.

9.40—Religious Programme by the Liberal Protestant Radio Society (V.P.R.O.). 9.55—11.40—V.A.R.A. Programme. 9.55—Recitations. 10.10—Septet Concert. 10.40—Recitations. 10.55—Concert (contd.).

11.40 a.m.—3.40 p.m.—Programme of the Allgemeine Vereeniging Radio Omroep (A.V.R.O.).

11.40—Orchestral Concert, conducted by Nico Treep. March, Es lebe das Leben (Ischpold). Overture, "Le roi d'Yvetot" (Adam). Suite, (Juel-Fredriksen). Kirschblütenfest (Dickler). Spanish Waltz, España (Waldteufel). Gramophone Records of Variety Music. Selection from "Madame Butterfly" (Puccini). Polonaise from "Eugen Onegin" (Tchaikovsky). Goldfischens Hochzeitstag (Noack). Serenade (Heykens). Gramophone Records of Variety Music. Selection from "The Love Parade" (Schertzing). Spatzenparade (Rathke). A.V.R.O. March (Treep). 1.40 p.m.—Transmission for Schools. 2.10—Orchestral Concert, conducted by Hemmes. Overture, "Le Lac

des Fées" (Auber). Cavatina (Saint-Saëns). Selection from "La Gioconda" (Ponchielli). Minuet from "Falstaff" (Verdi). Romance (d'Ambrosio). La Mousmé (Ganne). Gramophone Records of Variety Music. Waltz, Neu Wien (Johann Strauss). Selection from "Polenblut" (Nedbal). Studentenpolka (Müllöcker). Annenpolka (Johann Strauss). March, Hand in Hand (v. Blon).

3.40—7.40—V.A.R.A. Programme.

3.40—Pianoforte Recital. Sonata (Turini). Menuet vif (Pierné). Waltz (Pierné). Romance sans paroles (Pierné). Cache-cache (Pierné). 4.10—Programme for Children.

4.40—Orchestral Concert, conducted by Hugo de Groot. Overture, "Jeanne, Jeannette et Janneton" (Lacôme). Country Gardens (Grainger). Molly on the Shore (Grainger). Tango from "Baby in the Bar" (Grosz). Fantasia, Kamarinskaja (Glinka). Melody in E (Rachmaninoff). Waltz (Dvorak). Three Marches (Elgär). Gramophone Records of Variety Music. Liebeswalzer (Johann Strauss). Chant sans paroles (Tchaikovsky). Potpourri of Verdi's Music (arr. Morena). Gramophone Records of Variety Music.

6.20—Organ Recital. Me (Irving Berlin). Love Song (Flégier). Murnelndes Lüftchen (Jensen). Syncope (Kreisler). Kleiner Wiener Marsch (Kreisler). 6.40—Gramophone Records of Variety Music.

6.55—Orchestral Concert (contd.). March, Smoky Smokes (Holzmann). Waltz, Fascination (Marchetti). Serenade (Tarenghi). Selection from "The Tales of Hoffmann" (Offenbach). Ballet Music from "La Gioconda" (Ponchielli).

7.40—10.40—V.P.R.O. Programme. 7.40—Talk for Young People.

8.10—Pianoforte Recital by M. Calenbach. Variations in E (Handel). Three Sonatas (Scarlatti): (a) in F Sharp, (b) in D, (c) in A. Variations (Mendelssohn). 8.40—Talk. 9.10—Pianoforte Recital (contd.). Selections (Chopin): (a) Mazurka in C Sharp Minor, Op. 30, No. 4, (b) Waltz in C Sharp Minor, Op. 64, No. 2, (c) Etude in G Flat, Op. 25, No. 9, (d) Etude in A Flat. Three Selections (Liszt): (a) Un sospiro, (b) Sonetto del Petrarca, (c) Légende de St. François de Paul marchant sur les flots.

9.40—Religious Notes. 9.45—News Bulletin. 9.55—Recitations. 10.25—Gramophone Records of Variety Music.

10.40—V.A.R.A. Programme. Gramophone Records of Variety Music. 11.40 (approx.)—Close Down.

**HUIZEN (Holland)**  
160 kc/s (1,875 m.); 8.5 kW.

Programme of the Catholic Radio Society (K.R.O.).

7.40—8.00—Gramophone Records of Variety Music. 8.55—9.40—Interval. 9.40—Gramophone Records of Variety Music. 11.10—Programme for Hospitals. 11.40—Police Notes. 11.55—Quintet Concert.

1.40—Vocal and Instrumental Concert. Soloists: Mlle. Els Berentzen (Violin), Mischa Fokin (Bass-Baritone) and Fred Boshart (Pianoforte). Sonata in D for Violin and Pianoforte (Beethoven). Russian National Melodies. Larghetto (Handel-Hubay). Tambourin (Leclair-Kreisler). Canzonetta (Tchaikovsky). Aubade (d'Ambrosio). National Russian Melodies.

3.0—Gramophone Records: Selections from "Die Fledermaus" (Johann Strauss).

3.40—Vocal and Instrumental Concert. Soloists: Mme. Sophie Brautigam-Ides (Soprano) and Mlle. Agnes Maria Luns (Pianoforte). French Songs of the Eighteenth Century. Three Songs. Vögelin (Grieg). Aus mein Tagebuch (Reger). Es blüht ein Blümlein rosenrot (Reger). Am schönsten Sommerabend (Grieg). Mit einer Primula Veris (Grieg). Obsession (Luns). Le Secret (Fauré). Mandoline (Debussy). 4.40—Talk by Heer Ritter.

4.55—Concert by the K.R.O. Ensemble. Overture (Leuschner). Serenade: Verschnaidt, verwert (Leuschner). First Waltz (Durand). Narcissus (Nevin). Selection from "Cavalleria rusticana" (Mascagni). Garden of Love (Wood-Chapelier). Memories of Grieg (Urbach). Rustle of Spring (Sinding). Il natale di Pierrot (Monti). Anamitische Zauberer (Siede). Canzon di maggio (de Micheli).

6.20—Talk on Horticulture. 6.50—Talk by J. van der Hoeven Leonhard. 7.10—Police Notes.

## FRIDAY continued

7.40—Orchestral Concert, conducted by Johann Gerritsen. Soloist: Piet Hertvelt (Violin). Overture, "Anacreon" (Cherubini). Concerto for Violin in E Flat (Mozart). Petite Suite (Debussy). Havanais. (Saint-Saëns). Overture, Nordische Sennfahrt (Gade). Second Suite from "Peer Gynt" (Grieg). Overture, Die Fledermaus" (Johann Strauss). Kaiserwalzer (Strauss). Radetzky March (Strauss).

10.40—Gramophone Records of Variety Music. 11.40 (approx.)—Close Down.

**KALUNDBORG (Denmark)**  
Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kW.

See Copenhagen.

**LANGENBERG (Germany)**  
Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kW.

Transmits at intervals from 6.45 a.m. (Exercises, Weather, Time and Concert from Frankfurt).

12 noon—Concert from Frankfurt. 12.50 p.m.—Weather, Announcements and Time. 1.00—Concert, conducted by Wolf. 2.30—Sponsored Gramophone Concert. 3.30—Economic Notes and Time. 3.50—Programme for Children.

5.0—Concert, conducted by Wolf. Overture, "Alfonso and Estrella" (Schubert). Waltz, from "Faust" (Gounod). First Suite from "Peer Gynt" (Grieg). Selections (Clemus): (a) Mädeln und Bürschen, (b) Militär-Burleske. Ballet égyptien (Luigini). Serenade (Leungin). Selection from "Frühlingst" (Jos. Strauss-Reiterer).

6.15—Talk: German Destiny as mirrored in German Towns—Trier. 6.40—English Conversation. 7.0—Weather, Time, Economic Notes and Sports Results. 7.15—Topical Talk. 7.30—Talk: The Labour Market.

8.0—Orchestral Concert, conducted by Kühn. March, Gruss in die Ferne (Döring). Overture, "Si j'étais roi" (Adam). Dance from "The Huguenots" (Meyerbeer). Selections (Joh. Strauss): (a) Waltz, Gruss aus Wien, (b) Annen-Polka. Ballet Music from "Carmen" (Bizet). Selections from "Der liebe Augustin" (Fall). Waltz, Frauenliebe und-leben (Blon). Suite from "Les Millions d'Arlequin" (Drigo). Selections from "The Gipsy Baron" (Joh. Strauss). March, Unter Brief und Siegel (Becker). In the interval, "Songs of Europe," by Annemarie Trojan (Soprano).

10.0—News and Sports Notes. 10.45—Concert from Frankfurt. 12 midnight (approx.)—Close Down.

**LEIPZIG (Germany)**  
1,157 kc/s (259 m.); 2 kW. Relayed by Dresden, 941 kc/s (319 m.).

Transmits at intervals from 6.0 a.m. 7.25—Concert by the Leipzig Symphony Orchestra, conducted by Theodor Blumer. Selections (Lecocq): (a) Overture, "Giroffé-Giroffé," (b) Overture, Graziella. Waltz, Die Schönbrunner (Lanner). Selections from "Der Sternruker" (Lehar). Petite Suite (Debussy). Intermezzo from "A Waltz Dream" (O. Strauss). Galop, Flirt (Ziehrer). 5.30—Review of Technical Books. 5.50—News Bulletin. 6.0—Talk: Backward Children. 6.25—English Lesson. 6.50—Talk: The Right Procedure after a Motor-Accident. 7.5—Talk for Employees.

7.30—Concert by the Leipzig Bandonian Concert Orchestra, conducted by Walter Nitsche. Romantic Overture (Kéler-Béla). Waltz, A Spring Morning (Naef). Fantasia on Silcher's Songs, "Anchen von Tharau" (Fries). March, Adlerflug (Blankenburg). 8.0—Economic Notes.

8.15—Concert by the Leipzig Symphony Orchestra, conducted by Erich Band. Soloist: Lubka Kolesa (Pianoforte). Symphony No. 3, in D (Schubert). Pianoforte Concerto in A Minor Op. 54 (Schumann). Overture in G Minor (Bruckner). Symphony in B Flat, Op. 60, No. 4 (Beethoven).

10.5—News Bulletin, followed by Dance Music. 11.30 (approx.)—Close Down.

**LYONS (France)**  
La Doua (PTTV) 644 kc/s (465.8 m.); 1.5 kW.

Transmits at intervals from 8.0 a.m. 7.0 p.m.—Light Music on Gramophone Records. 7.30—Radio Gazette for Lyons and the South-East.

8.30—Instrumental Concert. Jean Vitkovsky (Pianoforte), Etienne Genin (Violin) Gustave Fellot (Cello), M. P. Horn, and M.

Chevalier (Baritone), Trio in E for Pianoforte, Violin and Cello (Mozart). Nocturne in E Flat (Chopin). The Bee (Schubert). Baritone Solos: (a) Romance (Nicolo Isouard), (b) Serenade (Schubert). Romanesque. Nah (Lindblad). Sonata for Pianoforte and Horn (Beethoven). Baritone Solos: (a) Chanson du petit Cheval (de Séverac), (b) Chanson du Pêcheur (Fauré), (c) Nocturne (César Franck). Violin Solos: (a) Berceuse (César Cui), (b) Sicilienne and Rigaudon (Francoeur). Cello Solos: (a) Two Romances (Mendelssohn), (b) Serenade (Saint-Saëns).

**MADRID (Spain)**  
Union Radio (EATJ). 707 kc/s (424.3 m.); 2 kW.

Transmits at intervals from 9.0 a.m. 8.0 p.m.—Chimes, Exchange, Market Prices and Request Gramophone Records. In the interval at 8.30—Educational Talk. 9.15—9.30—News Bulletin and Political Review. 10.30—Chimes, Time Signal and Political Review.

10.45 (approx.)—Symphony Concert on Gramophone Records. Overture, "A Midsummer Night's Dream" (Mendelssohn). Death and Transfiguration (Richard Strauss). Symphony (Haydn). Selections from "Petrushka" (Stravinsky).

12.45 a.m. (Saturday)—News Bulletin and Programme Announcements for Listeners abroad. 1.0—Chimes and Close Down.

**MILAN (Italy)**  
Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kW. See Turin.

**MORAVSKÁ-OSTRAVA (Czechoslovakia)**  
1,137 kc/s (263.8 m.); 11 kW.

Transmits at intervals from 10.30 a.m. 7.0 p.m.—See Brno. 7.45—See Prague. 10.30—Programme Announcements and Theatre Notes. 10.35—See Prague.

**MUNICH (Germany)**  
563 kc/s (533 m.); 1.5 kW. Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.), and Nürnberg, 1,256 kc/s (239 m.).

Transmits at intervals from 6.45 a.m. 5.0 p.m.—Orchestral Concert, conducted by Erich Kloss. Soloist: Hugo Reker (Violin). Festival Overture (Leutner). Adagio from the Violin Concerto (Bruch). Selection from "Ariadne auf Naxos" (Richard Strauss). Waltz, Delirium (Johann Strauss). Ballet Suite (Poppy). Serenata al Buio (de Micheli). Polish Dance (Scharwenka). March, The Gladiators' Farewell (Blankenburg).

6.15—Time Signal, Weather Report and Agricultural Notes. 6.25—Talk: Collapsible Boats. 6.45—Talk: Avoiding Accidents with Collapsible Boats. 7.5—Talk by C. Schwerla: My Experiences with a Collapsible Boat.

7.25—Pianoforte Recital by Egon Petri. Gavotte (Gluck-Brahms). Serenade from "Don Giovanni" (Mozart). Fantasia on "Carmen" (Bizet-Busoni). Four Preludes (Debussy): (a) La Fille aux Cheveux de lin, (b) La Sérénade interrompue, (c) La Cathédrale engloutie, (d) Minstrels. Fantasia in F Minor (Chopin). Songs arranged for Pianoforte (Schubert-Liszt): (a) Die Forelle, (b) Gretchen am Spinnrad, (c) Auf dem Wasser zu singen, (d) Erlkönig.

8.15—Talk, with Gramophone Illustrations, Mexican Music. 8.50—"The Trial of Socrates"—Radio Play in Four Acts (Kysner). 10.20—Time Signal, Weather Report, News Bulletin, Sports Notes and Traffic Report.

**OSLO (Norway)**  
Kringkastingselskapet. 277 kc/s (1,083 m.); 60 kW. Relayed by Fredrikstad, 816 kc/s (367.6 m.); Hamar, 536 kc/s (560 m.); Notodden, 671 kc/s (447.1 m.); Porsgrunn, 662 kc/s (453.2 m.); and Rykan, 671 kc/s (447.1 m.).

Transmits at intervals from 10.0 a.m. 5.0 p.m.—Gramophone Records of Variety Music. 5.30—Theatre Review. 6.0—French Lesson. 6.30—Chamber Music. Sonata in C, Op. 10, for Pianoforte and Violin (Arvid Kleven). Fantasia (Alnaes). 7.0—Weather and News. 7.30—English Lesson. 8.0—Time Signal. 8.2—National Programme from Trondheim. 9.10—Talk: Wagner: "Tristan and Isolde." 9.40—Weather and News. 10.15—Quartet Concert for Oboe, Clarinet, Cornet and Bassoon. 10.45 (approx.)—Close Down.

**PALERMO (Italy)**  
Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kW.

Transmits at intervals from 12.45 p.m.

5.30—6.30 p.m.—Concert of Variety Music and Dance Music. 8.0—Announcements, Radio Giornale dell'Enit, Agricultural Notes, Report of the Royal Geographical Society and Giornale Radio. 8.20—Popular Music on Gramophone Records. In the interval at 8.30—Time Signal and Announcements.

8.45—Instrumental and Vocal Concert. Soloists: G. Scala (Pianoforte), R. Padova (Soprano), and A. Grignani (Tenor). Pianoforte Solos: (a) Sonatina (Mortaci), (b) Serenata (Savasta), (c) La Trotola (Setaccioli). Soprano Solos: (a) Selection from "La Wally" (Catalani), (b) Song from "Gianni Schicchi" (Puccini). Tenor Solos: (a) The Flower song from "Carmen," (b) Serenata (Mascagni). Talk by F. De Maria. Pianoforte Solos: (a) Zephyr (Suk), (b) Nocturne (Chopin), (c) Etude (Chopin). Soprano Solos: (a) Song from "L'Amico Fritz" (Mascagni), (b) Song from "Tosca" (Puccini). Tenor Solos: (a) Song from "I Pagliacci" (Leoncavallo), (b) Occhi de Fata (Denza). After the Concert, Dance Music on Gramophone Records. 10.55—News and Close Down.

**PARIS (France)**

Eiffel Tower (FLE). 207.5 kc/s (1,445.7 m.); 13 kW. Time Signals (on 2,650 m.) at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals).

Transmits at intervals from 1.0 p.m. 6.45 p.m.—Theatre Review. 7.0—Le Journal Parlé. 8.20—Weather Report. 8.30—"Bébé prend médecine"—Radio Play in One Act (du Pontavice).

9.0—Symphony Concert, conducted by Edouard Flament. Soloists: M. Manouvrier (Flute) and M. Bas (Violin). Selection from "Antar" (Rimsky-Korsakov). Flute Solo: Minuet from "Orpheus" (Gluck). Two Lyric Pieces (Grieg): (a) Herzwunden, (b) An den Frühling. Violin Solo. Fifteen Extracts from "The Rubaiyat of Omar Khayyam" with music by René Lenormand. Bacchanale from "Samson and Delilah" (Saint-Saëns). Waltz, The Passing of Salome (Joyce-Salabert). 10.0 (approx.)—Close Down.

**PARIS (France)**  
Poste Parisien. 914 kc/s (328.2 m.); 60 kW.

Transmits at intervals from 12 noon 6.45 p.m.—Sponsored Concert. 7.4—Popular Music on Gramophone Records, News and Announcements. 8.30—Gramophone Records, Talk and News. 8.45—Concert of French Songs by Music Hall Artists. 9.45—Dance Music on Gramophone Records.

**PARIS (France)**  
Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kW.

6.45 a.m.—Physical Culture Lesson. 7.30—Weather and Physical Culture (continued).

7.45—Gramophone Records. Minuet (Mozart). Pièce en forme de Habanera (Ravel). Le Printemps (Milhaud). Tambourin (Leclair). 8.0—News, Weather and Press Review. 12 noon—Jewish Programme: Readings and Music.

12.30 p.m.—"Gardens and Fountains"—Gramophone Concert. In a Monastery Garden (Ketelbey). A la Fontaine (Charpentier). Le Jardin des amours (Mouret). In the Garden of Allah (Rico). The Fairy Garden from "Mother Goose" (Ravel). La Fontaine de Carahouet (Létorey). Jeux d'eau (Ravel). La Belle est au jardin d'amour (Weckert). Night in the Gardens of Spain (Falla). My Garden of Roses (Wood). Fountain Scene from "Pelléas et Mélisande" (Debussy). In the Flower Garden from "Marouf" (Rabaud). Jardins sous la pluie (Debussy). Fontane di Roma (Respighi). In the intervals at 1.0—Exchange, News and Weather, at 1.30—Exchange and at 2.0—Exchange and Announcements.

3.45—Exchange and Market Prices. 6.30—Market Prices, Weather, Agricultural Report, Agricultural Talk and Racing Results. 7.0—Talk: The Cotton Problem and the French Colonies. 7.45—Commercial Prices and News.

8.0—Concert. The Orchestra, conducted by Henri Doffesc. Soloists: Madeleine. Vhita, Suzanne Banguerie and Georges Jouatte (Songs). Overture, "Coriolanus" (Beethoven). Song: An die ferne, Geliebte (Beethoven). 8.30—News and Weather. 8.40—Gastronomic Review. 8.45—Concert (continued). Duet and Death of Isolde from "Tristan



**FRIDAY**  
continued

und Isolde" (Wagner). 9.15—  
Press Review and News. 9.30—  
Concert (continued). Walter's Prize  
Song and Overture to "The  
Mastersingers" (Wagner).

**PITTSBURGH (U.S.A.)**

Westinghouse Electric (KDKA).  
980 kc/s (306 m.); 25 kW.  
Transmits at intervals from 12.30 p.m.  
9.0 p.m.—Teaberry Baseball Scores.  
9.5—Business News. 9.15—Rita  
Cavalieri (Spanish Soprano). 9.30—  
Pebecco Weather Report. 9.33—Mar-  
ket Reports. 9.45—KDKA Kid-  
dies' Klub. 10.0—Teaberry Baseball  
Scores. 10.5—David Lawrence Dis-  
patch. 10.10—KDKA Artist Bul-  
letin. 10.12—Programme Announ-  
cements. 10.15—KDKA Orchestra,  
Thé Dansante.  
10.30—The Singing Lady, from *New*  
*York*. 10.45—Little Orphan Annie,  
from *New York*. 11.0—Time Signal.  
11.1—Temperature Report. 11.2—  
Who's News To-Day. 11.7—Tea-  
berry Sport Review. 11.12—Press  
News-Reeler. 11.15—KDKA Or-  
chestra. 11.30—Royal Vagabonds,  
from *New York*. 11.45—Literary  
Digest Topics in Brief by Lowell  
Thomas, from *New York*. 11.59—  
Time Signal.  
12 midnight—3.45 a.m. (Saturday)—  
*New York* Review. 12 midnight—  
Pepodent Amos 'n' Andy. 12.15 a.m.  
(Saturday)—Esso Programme—Elsie  
Janis. 12.30—Stebbins Boys. 12.45—  
Billy Jones and Ernie Hare. 1.0—  
Nestlé's Programme. 1.30—Ivory  
Programme. 1.45—Sisters of the  
Skillet. 2.0—Friendship Town. 2.30  
—Armour Programme. 3.0—White-  
man's Pontiac Chieftains.  
3.30—Love Songs and Waltzes. 3.45  
—Programme to be announced. 4.0—  
Time Signal. 4.1—Teaberry Sport  
Review. 4.11—Temperature Report.  
4.12—Weather Report. 4.15—Press  
Last Minute News Flashes. 4.20—  
Hotel William Penn Orchestra. 5.0—  
Cotton Club Orchestra, from *New*  
*York*. 5.15—Time Signal and Good-  
night.

**POZNAŃ (Poland)**

896 kc/s (335 m.); 1.9 kW.  
Transmits at intervals from 11.45 a.m.  
6.50 p.m.—Miscellaneous Items and  
Announcements. 7.15—Italian Lesson  
on Linguaphone Records. 7.30—  
Talk: Public Opinion in France.  
7.45—10.45—See *Warsaw*. 10.45—  
Topical Talk. 11.0—Sports Notes  
and Police Report. 11.15—Dance  
Music on Gramophone Records.  
12 midnight (approx.)—Close Down.

**PRAGUE (Czechoslovakia)**

614 kc/s (488.6 m.); 120 kW.  
Transmits at intervals from 6.15 a.m.  
6.0 p.m.—Talk: The National Theatre  
in Vienna in 1892. 6.10—Agricul-  
tural Report. 6.15—Talk for  
Workers: Holidays. 6.25—German  
Transmission: Announcements and  
Two Talks. 7.0—See *Brno*.  
7.45—"The Hermit's Bell"—Comic  
Opera in Three Acts (Maillart).  
9.0—(in the interval)—Time and  
News. 10.15—Announcements.  
10.35—Gramophone Records of Light  
Music.

**RADIO-SUISSE ROMANDE**  
**(SOTTENS) (Switzerland)**

743 kc/s (403 m.); 25 kW;  
*Lausanne*, 442 kc/s (680 m.);  
and *Geneva*, 395 kc/s (760 m.).  
12.30 p.m.—Time Signal from *Neuchâtel*  
Observatory. 12.31—Weather  
Forecast and News Bulletin. 12.40  
(from *Geneva*)—Gramophone Concert  
of Light Music. 1.0—Exchange  
Quotations. 1.5—Gramophone Con-  
cert (contd.). 1.45—5.0—Interval.  
5.0—Time Signal from *Neuchâtel*  
Observatory. 5.1 (from *Geneva*)—  
Programme for Women. 5.45—Con-  
cert by a String Orchestra conducted  
by Robert Echenard. 7.0—Weather  
Forecast. 7.1 (from *Lausanne*)—  
Sports Notes. 7.20 (from *Lausanne*)—  
Report of the Swiss Automobile  
Club. 7.30 (from *Geneva*)—Talk:  
The Work of the Disarmament Con-  
ference. 7.55—Announcements.  
8.0 (from *Geneva*)—Anecdotes, by  
Pierre Duniton. 8.10 (from *Geneva*)  
—Talk on Mountaineering.  
8.30—Concert of Sacred Music re-  
layed from the Cathedral. The Lau-  
sanne Male Voice Choir and the  
Ladies' Choir of the Conservatoire,  
conducted by A. Denéraz. Solo-  
ists: Mlle. Rosset (Soprano), M.  
Schwartz (Tenor), Mme. Troyon  
Blaes (Pianoforte) and Charles  
Faller (Organ). 11th Century  
Hymn to Dionysius, for Male  
Voice Choir and Organ. Tenor  
Solo with Organ: Die Ehre Gottes  
in der Natur. Male Voice Choir  
and Organ: Mass in C (Liszt).  
Soprano Solos with Organ: (a) Ave  
Maria (Cherubini), (b) Air, from

"St. Paul" (Mendelssohn). Mixed  
Choir: Le luth silencieux (Dené-  
raz). Die Wallfahrt nach Kevelaar  
(Humperdinck).  
10.10—Weather Forecast and News  
Bulletin. 10.20 (approx.)—Close  
Down.

**ROME (Italy)**

Ente Italiano Audizioni Radio-  
foniche (IRO). 680 kc/s (441 m.);  
50 kW. Relayed by *Naples*, 941 kc/s  
(319 m.) and *2RO*, 6,976 kc/s  
(43 m.).  
8.15—8.30 a.m.—Giornale Radio and  
Announcements. 12 noon—Gramo-  
phone Records of Variety Music.  
12.35 p.m.—Weather Forecast.  
12.45—2.0—Sextet Concert. Pat-  
tuglia di zigani (Ranzato). Ronda  
dei pierrots (Sinigaglia). Figurine  
di Carnevale (Pick-Mangiagalli).  
Dance of the Waves from "Lore-  
ley" (Catalani). Tanzende Liebe  
(Schebeck). Selection (Ripp). In  
the intervals at 1.15—Giornale  
Radio and Exchange and at 1.30—  
Time and Announcements.  
4.45 (*Naples*)—Talk for Women.  
5.0—Exchange, Children's Radio Re-  
view, Giornale Radio and Announ-  
cements. 5.30—Song Recital by  
Ivana Cecchi (Mezzo-Soprano). Aria  
from "La Favorita" (Donizetti).  
Habancera from "Carmen" (Bizet).  
5.45—Concert. Selection from "The  
Italian Girl in Algiers" (Rossini).  
Waltz, Donna Grazia (Ravasini).  
Cortège orientale (Ganne). En-  
tracte (Annat-Alvez). Rumba,  
To a Rose (Simons). Selection  
(Abraham).  
6.15—Giornale dell'Enit. 6.55  
(*Naples*)—Shipping and Sports Notes.  
7.0—Agricultural Report, Announ-  
cements, Giornale radio and Press  
Review. 7.50—Gramophone Records  
of Variety Music. 8.0—Time,  
Announcements and Report of the  
International Institute of Agriculture  
(in Italian, French, English, German  
and Spanish). 8.30—Sports Notes  
and Announcements.  
8.45—Orchestral Concert, with Bianca  
Stagno-Bellincioni (Soprano) and  
Emilio Livi (Tenor). Selection  
from "Un viaggio a Reims"  
(Rossini). Pianoforte Solos: (a)  
Gagliarda (Galilei, arranged by  
Respighi), (b) Ballet from "Il  
Conte Orlando" (Molinari; ar-  
ranged by Respighi). Soprano  
Solos: (a) Two Arias from "Forza  
d'amor paterno" (Stradella, ar-  
ranged by Gentili), (b) Perceuse  
de Jocelyn (Godard) with Violin  
obligato. Two Selections for  
Orchestra (Chabrier): (a) Idyll  
from the Pastoral Suite, (b) Rhap-  
sody, España. Tenor Solos: (a)  
Rondini al nido (de Crescenzo),  
(b) Aria from "Méphistopheles"  
(Boito), (c) Aria from "L'elisir  
d'amore" (Donizetti). Talk on  
Garibaldi. Selections from  
"Manon" (Massenet). Invitation  
to the Dance (Weber-Berlioz).  
News after the Programme.

**SCHENECTADY (U.S.A.)**

General Electric Company (WGY).  
790 kc/s (379.5 m.); 50 kW.  
Relayed at intervals by W2XAF on  
9,530 kc/s (31.48 m.) and by  
W2XAD on 15,340 kc/s (19.56 m.).  
Transmits at intervals from 11.45 a.m.  
9.0 p.m.—Decorating Notes from *New*  
*York*. 9.15—Old Time Tunester.  
9.30—Musical Ad. Men. 9.50—  
News Items. 10.0—Stock Reports  
and Police Notices. 10.15—Skipty,  
from *New York*. 10.30—The Suc-  
cess Doctor. 10.45—New York  
State Department Talk. 11.0—Mus-  
ical Programme. 11.24—Base-  
ball Scores. 11.30—With Gray Mc-  
Clintock in the Canadian Northwest.  
11.45—Silver Streaks. 12 (mid-  
night) (WGY only)—General Electric  
Programme. 12 midnight (W2XAF  
only)—Stock Reports and News  
Items. 12.15 a.m. (Saturday)—  
Weather Report. 12.16—New Ken-  
more Orchestra. 12.45—Trials of  
the Goldbergs from *New York*.  
1.0 (WGY only)—The Cities Service  
Programme from *New York*. 1.0  
(W2XAF only)—International Gen-  
eral Electric Programme. 1.30—WGY  
Farm Forum. 2.0—4.0—New York  
Relay. 2.0—Cluicout Club Eskimos.  
2.30—Pond's Programme. 3.0—Na-  
tional Oratorio Society Programme.  
4.0—Freddy Engel's Orchestra. 4.30  
—De Witt Clinton Orchestra. 5.0—  
5.30—*New York* Relay. 5.0—Ralph  
Kirberry (Dream Singer). 5.5—  
Hotel New Yorker Orchestra. 5.30—  
New Kenmore Orchestra. 6.0  
(approx.)—Close Down.

**SCHWEIZERISCHER**  
**LANDESSENDER (BERO-**  
**MÜNSTER) (Switzerland)**

653 kc/s (459 m.); 60 kW.;

*Basle*, 1,229 kc/s (244.1 m.);  
and *Berne*, 1,220 kc/s (246 m.).  
12.28 p.m.—Time Signal from *Neuchâtel*  
Observatory. 12.30—Weather  
Report and News Bulletin. 12.40—  
Concert by the Station Orchestra.  
1.35—Weather Report and Exchange  
Quotations. 1.45—Interval. 3.30—  
Dance Music on Gramophone  
Records. 4.0—Danish and Scan-  
dinavian Music on Gramophone  
Records. 4.30 (from *Berne*)—Fairy  
Tales for Children. 5.0—6.30—  
Interval. 6.30 (from *Berne*)—Talk on  
Natural History: Fishes. 7.0—Time  
Signal, Weather Forecast, Market  
Prices, Tourist Report, and Sports  
Notes, followed by Swiss Country  
Music on Gramophone Records.  
7.30 (from *Berne*)—Agricultural Talk.  
8.0—Concert by the Station Or-  
chestra. 8.35 (from *Berne*)—"Dr.  
Gittüfel"—Play in Swiss Dialect.  
9.30—Weather Forecast and News  
Bulletin.  
9.45—The Passion Plays in Selzach.  
Relay from the Selzach Passion  
Play Theatre; Talk on Selzach and  
its Tradition; Interviews with the  
Producers, Actors, etc.; Relay of a  
Rehearsal of a Scene from the Passion  
Plays. 10.30 (approx.)—Close Down.

**STOCKHOLM (Sweden)**

Radiojäst (SASA). 689 kc/s  
(436 m.); 55 kW. Relayed by  
*Boden*, 244 kc/s (1,220.5 m.);  
*Göteborg*, 932 kc/s (322 m.);  
*Hörby*, 1,166 kc/s (257 m.);  
*Motala*, 222.5 kc/s (1,348 m.);  
*Östersund*, 389 kc/s (770 m.) and  
*Sundsvall*, 554 kc/s (542 m.).  
Transmits at intervals from 7.20 a.m.  
5.20 p.m.—Song Recital by Georg  
Funktquist, with Hawaiian Guitar  
Selections in the interval. 5.45—  
Gramophone Concert of Light Music.  
6.45—Talk. 7.15—Weather Report  
and News Bulletin. 7.30—See *Vienna*.  
8.30—Orchestral Concert by the  
Malmö Musical Society, conducted  
by Georg Schnevoigt, relayed from  
Malmö. Polish Festival (Lind-  
berg). Symphonic Poem, The Song  
(Atterberg). Rhapsody, Midsom-  
marvaka (Alfvén).  
9.0—Talk: Sweden as a Country  
for Tourists. 9.20—Brahms Piano-  
forte Recital by Greta Berven. Two  
Interludes. Romance in F. Rhapsody  
in G Minor. 9.45—Weather Report  
and News Bulletin. 10.0—Light  
Music by a String Orchestra. 11.0  
(approx.)—Close Down.

**STRASBOURG (France)**

Radio-Strasbourg (PTT). 869 kc/s  
(345 m.); 11.5 kW.  
11.30 a.m.—Gramophone Concert of  
Operatic and Classical Music.  
12.45 p.m.—News in French and  
German. 1.0—Time Signal. 1.2—  
Gramophone Concert (continued).  
2.0—4.45—Interval. 4.45—Literary  
Talk in French. 5.0—Dance Music.  
6.0—Topical Talk in German. 6.15—  
Legal Talk in German.  
6.30—Orchestral Concert. Overture,  
Die schöne Melusine (Mendels-  
sohn). Selection from "L'Afric-  
aine" (Meyerbeer). Dance of the  
Waves from "Loreley" (Catalani).  
Ballet égyptien (Luigini). Selections  
from "La Reine Fiammette"  
(Leroux).  
7.30—Time Signal. 7.32—News in  
French and German.  
7.45—Orchestral Concert. March,  
Jasper Scout (Demaele). Hesi-  
tation Waltz (Antiga). Overture,  
"La Fille de Madame Angot"  
(Lecocq). Chinese Serenade  
(Siede). Selection from "The  
Merry Widow" (Lehár). Inter-  
mezzo, Amber Eyes (Löhr).  
Serenade nuptiale (Klose). Marche  
des Copains (Krier).  
8.30—Municipal Band Concert, re-  
layed from Metz. 10.30—Relay from  
Paris of the Evening arranged by the  
"Radio Colonial" Station. 11.0  
(approx.)—Close Down.

**STUTTGART (MÜHL-**  
**ACKER) (Germany)**

Süddeutscher Rundfunk. 832 kc/s  
(360.5 m.); 60 kW. Relayed by  
*Freiburg*, 527 kc/s (570 m.).  
Transmits at intervals from 6.0 a.m.  
10.0 a.m.—Song Recital by *Elisa*  
*Keller*. Songs (Mahler): (a)  
Liebst du um Schönheit, (b) Ich  
bin der Welt abhanden gekommen,  
(c) Wer hat dies Liedlein erdacht?  
Four Songs (Richard Strauss):  
(a) Traum durch die Dämmerung,  
(b) Ach Lieb, ich muss nun schei-  
den, (c) Nachtang, (d) Ruhe, meine  
Seele. Three Songs (Ottmar  
Schöck): (a) Das Ziel, (b) Ra-  
venna, (c) Hufschied.

10.20 (from *Freiburg*)—Talk for  
Schools. 11.0—Time, Weather and  
News. 11.15—Sponsored Concert.  
12 (noon)—See *Frankfurt*. 12.50  
p.m.—Time, Weather, News and  
Programme Announcements.

1.0 (from *Freiburg*)—Concert by the  
*Freiburg* Concert Orchestra con-  
ducted by Richard Friedl. Soloist:  
Herbert Fröhlich (Violin). Overt-  
ure, "L'isola disabitata" (Haydn).  
Violin Concerto in A (Mozart).  
Movements from the Haffner  
Serenade. Violin Solos: (a)  
Melody (Glück-Kreiser), (b)  
Melody on a Theme by Beethoven  
(Kreiser), (c) Poem (Fibich), (d)  
Waltz (Hummel-Burmester).  
1.55—News Bulletin. 2.0—2.15—  
Sponsored Musical Programme. 2.30  
—3.0—Advanced English Lesson.  
4.0 (from *Badenweiler*)—Concert by  
the *Badenweiler* Orchestra conducted  
by Albert Hitzig. Homage March  
from "Sigurd Jorsalfar" (Grieg).  
Overture, Mater Dolorosa (Scas-  
sola). Serenata d'Amalfi (Becc).  
Selection from "Rigoletto"  
(Verdi). Rídonami la palma (Tos-  
ti). Selection from "The Circus  
Princess" (Kálmán).  
5.0—Concert from *Munich*. 6.15—  
Time, Weather and Agricultural  
Notes. 6.25 (from *Freiburg*)—Talk:  
Hygiene without Money. 6.50—  
Mandoline Recital. 7.15—Time and  
Programme Announcements for the  
Coming Week in Esperanto. 7.30—  
See *Frankfurt*. 8.0—Concert of Swab-  
ian Folk Music, by a Peasant Or-  
chestra and Chorus, conducted by  
Emil Kahn.  
8.30—"Everyday Poisons"—from Tea  
to Alcohol—A Variety Programme  
(Dr. Curt Elwenspöck). The Station  
Orchestra conducted by Gustav  
Görlich, Karl Köstlin, Curt Elwen-  
spöck, Käte Mann, Hans Hanus, Carl  
Struve and Otto Seyfert.  
9.15—Concert by the Stuttgart Phil-  
harmonic Orchestra conducted by  
Emil Kahn. Overture to a Puppet  
Play (Gal). Le Tombeau de  
Couperin (Ravel). Serenade in G  
(Reger).  
10.20—Time, Weather, News, Pro-  
gramme Announcements and Sports  
Notes. 10.45—See *Frankfurt*. 12  
midnight (approx.)—Close Down.

**TOULOUSE (France)**

Radiophonie du Midi. 779 kc/s  
(385 m.); 8 kW.  
Transmits at intervals from 12.30 p.m.  
5.0 p.m.—Transmission of Pictures.  
5.15—Exchange Quotations.  
5.30—Orchestral Selections. Ballet  
Music from "Hérodiade" (Mas-  
senet). Selection from "L'Afric-  
aine" (Meyerbeer).  
5.45—Sound Film Music. 6.0—  
Orchestral Selections (Wagner): (a)  
Overture, "Rienzi", (b) Selection  
from "Fannhäuser". 6.15—Orches-  
tral Selections from (a) "The  
Czarinas Princess" (Kálmán), (b)  
"Pas sur la bouche" (Yvain).  
6.30—Exchange Quotations. 6.45—  
Spanish Songs.  
7.0—Talk, followed by Selection  
from "Tiefland" (d'Albert). 7.15—  
from "Tiefland" (d'Albert). 7.15—  
Accordion Solos. 7.30—News Bulle-  
tin. 7.45—French Military Music  
(Pares). 8.0—Songs from (a) "The  
Barber of Seville" (Rossini), (b)  
"Tosca" (Puccini), and (c) "Manon"  
(Massenet). 8.15—Orchestral Selec-  
tions. 8.45—Light Music. 9.0—  
Orchestral Concert from the Café  
des Américains. 10.30—North Afri-  
can News. 10.45—Orchestral Con-  
cert (continued).  
11.0—Organ Solos. Gipsy Love Song  
(Agen). Indian Love Call (Friml).  
Yesterday (Harrison). My Blue  
Heaven (Donaldson).  
11.15—Orchestral Concert. La Prière  
d'une vierge. The Little Gnomes  
(Eilenberg). Valse poudrée (Popy).  
Ma Poupée chérie (Sévérac). Un  
peu d'amour (Silésu). La lettre  
de Manon (Gillet). Selection  
from "Rosamunde" (Schubert).  
Aria for Strings (Bach). Polonaise  
No. 1 in A (Chopin). Hungarian  
Dances Nos. 1 and 2 (Brahms).  
Minuet in G (Beethoven). Nor-  
wegian Dances (Grieg).  
12 midnight—Weather and Announ-  
cements. 12.5 a.m. (Saturday)—  
English Music. 12.30—Close Down.

**TRIESTE (Italy)**

Ente Italiano Audizioni Radio-  
foniche. 1,211 kc/s (247.7 m.);  
10 kW.  
Transmits at intervals from 8.15 a.m.  
7.10 p.m.—Quintet Concert. Vent'anni  
(Marf). Selection from "The  
Last Waltz" (Oscar Strauss).  
Notte stellata (Cortopassi). A la  
Martirina (Maccagno). Per voi,  
signora (Chiappo). Selection from  
"Herbstmonöver" (Kálmán). Passa  
una donna (Ruggier).  
8.0 till Close Down—See *Turin*.

**TURIN (Italy)**

Ente Italiano Audizioni Radio-  
foniche. 1,066 kc/s (273.7 m.);  
7 kW. Relayed by *Milano*, 905 kc/s  
(331.5 m.), and *Genoa*, 959 kc/s  
(312.8 m.), and *Florence*, 599 kc/s  
(500.8 m.).  
Transmits at intervals from 8.15 a.m.  
6.45 p.m.—Agricultural Notes and  
Report of the Royal Geographical  
Society. 7.5—Announcements.  
7.10—Musical Selections. Patria  
(Pennati-Malvezzi). Farfalle  
(Mattani). Rausch (Sonntag).  
Selection from "Les Saltim-  
banques" (Ganne).  
7.30—Time, Announcements and  
Gramophone Records of Variety  
Music. 8.0—Giornale Radio. Weather  
and Gramophone Records of Variety  
Music. 8.45—Radio Talk.  
8.50—Concert of Chamber Music.  
9.50—Review of New Books. 10.0  
—Variety Programme. In the inter-  
vals: Talk and Literary Notes. 11.0—  
Giornale Radio.

**VIENNA (Austria)**

Radio-Wien. 581 kc/s (517 m.).  
15 kW. Relayed by *Graz*, 852 kc/s  
(352.1 m.); *Klagenfurt*, 1,058 kc/s  
(283 m.); *Innsbruck*, 662 kc/s  
(453.2 m.); *Linz*, 1,220 kc/s  
(246 m.), and *Salzburg*, 1,373 kc/s  
(218 m.).  
Transmits at intervals from 9.20 a.m.  
5.5 p.m.—Orchestral Concert. March,  
"Tiroler Holzackerbau" (Wag-  
ner). Overture, "Rübenzahn"  
(Flotow). Waltz, Vindobona  
(Klein). Nocturne, Selige Stunden  
(Mayer-Aichhorn). Waltz, Fas-  
chingskinder (Zieher). Selection  
from "Where the Lark sings"  
(Lehar). Parade of the Tin  
Soldiers (Jessel). Humoresque  
(Dvorak). Marionetten (O. Weber).  
Foxtro, Marie Marie (Reland).  
Tango, Ohne Worte lass uns  
scheiden (Jurmann). March, The  
Star-Spangled Banner (Souza).  
6.15—Tourist Report. 6.30—Talk:  
Austria in the Tenth Olympic Games  
at Los Angeles. 6.45—Weekly Sports  
Report. 7.0—Talk: The Fiftieth  
Anniversary of the "Rudolfiner  
Haus" Hospital. 7.30—Time and  
Announcements.  
7.40—Concert of Swedish Folk Music  
by the Austro-Swedish A-Cappella  
Choir, conducted by Karl Söderberg.  
8.30—Franz Schmidt Concert by  
the Vienna Symphony Orchestra,  
conducted by the Composer.  
Third Symphony in A. Variations  
on a Hussar Song.  
9.55—News Bulletin. 10.10—Dance  
Music from the Café Sacher.

**WARSAW (Poland)**

Polskie Radio. 212.5 kc/s (1,411  
m.); 120 kW.  
11.20 a.m.—Aviation Weather Report.  
11.25—Interval. 11.45—Press Re-  
view. 11.58—Time Signal and  
Bugle Call from the Tower of St.  
Mary's Church, *Cracow*. 12.5 p.m.—  
Programme Announcements. 12.10  
—Light Music on Gramophone  
Records. 1.20—Weather Report.  
1.25—Interval. 1.35—Popular Music  
on Gramophone Records. 1.35—  
Interval. 2.45—Variety Music on  
Gramophone Records. 3.5—Economic  
Report and Exchange Quotations.  
3.15—Report of a Polish Musical  
Society. 3.20—Interval. 3.25—  
Talk from *Cracow*. 3.45—Hydro-  
graphic Report. 3.50—Light Music  
on Gramophone Records. 4.20—  
Talk relayed from *Wilno*, 533 kc/s  
(563 m.). 4.40—Popular Music on  
Gramophone Records. 4.55—Lingua-  
phone English Lesson. 5.10—Talk:  
The Fantastic World of Automata.  
5.35—Concert of Light Music, by  
the State Police Orchestra, conducted  
by Al. Sielski. Rakoczy Overture,  
(Kéler-Béla). Valse des fillettes  
(Idall). Egyptian Serenade, Amina  
(Lincke). Mazurka, Bondarczuk  
(Levandovsky). Selection from "The  
Circus Princess" (Kálmán). Japanese  
Serenade, Etajatjah (Nehl). March,  
Sport (Huber).  
6.50—Miscellaneous Items. 7.15—  
Agricultural Press Review relayed  
from *Wilno*. 7.25—Programme  
Announcements. 7.30—Sports Notes.  
7.35—Light Music on Gramophone  
Records. 7.45—Radio Journal.  
8.0—Talk on Music.  
8.15—Symphony Concert, by the  
Warsaw Philharmonic Orchestra  
conducted by Emil Mlynarsky.  
Soloist: Henri Sztompka (Piano-  
forte). Overture, The Tatra  
Mountains (Zelensky). Polish  
Fantasia for Pianoforte and Orches-  
tra (Paderewsky). Children's  
Symphony (Palester). Symphony  
in A Minor—the Scottish Sym-  
phony (Mendelssohn). Literary  
Reading in the interval.  
10.40—Radio Journal. 10.45—  
Weather and Police Notes. 10.50—  
Dance Music. 12 midnight (approx.)  
—Close Down.



PRINCIPAL EVENTS

SATURDAY (June 4)

CONCERTS (Vocal and Instrumental)

- 5.0 p.m. Brussels No. 2: The Station Orchestra.
- 5.0 " Radio-Suisse Romande: Swiss music Festival.
- 7.45 " Bucharest: Romanian music.
- 7.50 " Stockholm: Military Band.
- 8.0 " Brussels No. 1: The Station Orchestra.
- 8.0 " Oslo: The Station Orchestra.
- 8.0 " Schweizerischer Landessender: Swiss programme.
- 9.0 " Budapest: Military Band.
- 9.0 " Prague: Brass Band.
- 10.20 " Leipzig: Relay from Castle Belvedere, Weimar.
- 10.45 " Langenberg, Munich: "Latz" Concert.

OPERAS AND OPERETTAS

- 7.10 p.m. Berlin (Witzleben): "Sicilian Vespers" (Verdi), Concert version (gramophone).
- 8.0 " Brussels No. 2: "Kuokkelbeen" (Hullebroeck).
- 8.30 " Strasbourg: "The Grand Mogul" (Audran).
- 8.45 " Rome: "I Puritani" (Bellini).

RECITAL

- 10.10 p.m. Warsaw: Chopin.

MISCELLANEOUS

- 8.0 p.m. Frankfurt, Königs Wusterhausen, Stuttgart: Relay from Bad Hornburg, "Old Berlin Types."
- 8.0 " Hamburg: "Nebelhörn" (Cabaret).
- 9.15 " Breslau, Munich: "Rund um die Saule."

DANCE MUSIC

- 9.30 p.m. Radio-Paris: Bela Rex and his Viennese Band.
- 10.0 " Stockholm.
- 10.45 " Copenhagen.
- 12 (midnight), Langenberg: Masters of Jazz.

The Queen of Spades

Except for *Eugen Onegin*, the most successful of Tchaikovsky's eight operas was *The Queen of Spades*, to a libretto by his brother, Modeste, after a story of



[Photo: Seimolke, Breslau]

The old Rathaus, Breslau.

(see Breslau and Munich programmes, 9.15 p.m.)

Pushkin's. It combines the dramatic and the lyrical in the way which was most congenial to Tchaikovsky's own temperament, and in that way, is not unlike *Eugen*. He realized himself that he was more at home in purely instrumental music, but, as he said, "to refrain from writing opera is the act of a hero, and we have only one such hero in our time—Brahms." The title of the opera was the nickname given to an old Countess, an inveterate gambler who contrived always to win at cards. Herman, a penniless lieutenant, seeking to frighten the old lady into giving away her secret, frightened her instead to death. Her spectre haunted him constantly and whispered the secret in his ear, but his beloved tried to dissuade him from using such unholy knowledge, and when he refused, she drowned herself. On the day of the old Countess' funeral, Herman put the system to the test and won heavily on the first two trials. But on the third, instead of the expected ace, there turned up the Queen of Spades, and the old lady's ghost leaned across the table to mock the unlucky loser; terrified by her appearance, he stabbed himself. In contrast with the tragic part of the tale is a *Pastoral Comedy* in the second act, with music in simple folksong vein; it is being broadcast by FRANKFURT this evening.

Chopin's Sonata for His Master

Though not published till 1851, two years after Chopin's death, the Sonata, Op. 4, which is to be broadcast from WARSAW this evening, was in the hands of the publisher Haslinger, of Vienna, as early as 1828, the composer's nineteenth year. "As a pupil of his, I dedicated it to Elsner," said Chopin, and that is now its chief claim on our interest—as a pupil's exercise. Only here and there in it are there flashes of the Chopin the world knows and loves, hints of the grace and charm which were to be the hall-mark of his mature work. Elsner, remembered now almost solely because he was Chopin's master, was a notable figure in his own day, as composer and teacher, and he left an imposing volume of music in many forms, for the stage, the Church and the concert hall. He was the first director of the Warsaw Conservatoire.

NATIONAL			
	kc/s	m.	kW.
London:	1,148	261.3	50
Daventry:	193	1,554.4	30
Northern:	995	301.5	50
10.15 a.m.—The Daily Service.			
10.30—Time Signal (Greenwich); Shipping Forecast.			
10.45—Celebration in London of the Birthday of His Majesty The King. Trooping the Colour on the Horse Guards Parade, including a commentary by Major J. B. S. Bourne-May.			
12 noon—"Domestic Economies"—III.			
12.15 p.m.—The Northern Studio Orchestra.			
12.45—Reginald New at the Organ.			
1.0—Time Signal (Greenwich).			
1.30—2.30—The Commodore Grand Orchestra.			
3.30—Frederick Hartley Quintet. Frederic Lake (Tenor).			
4.45—Time Signal (Greenwich).			
4.45—Reginald Foort at the Organ.			
5.15 (Daventry)—The Children's Hour.			
5.15 (London and Northern)—The B.B.C. Dance Orchestra, directed by Henry Hall.			
6.0—"The First News."			
6.25—"Interval."			
6.30—Time Signal (Greenwich).			
6.30—Dr. J. D. Benjafield: "An Eye-witness Account of the 1,000 Miles Race at Brooklands."			
6.45—Recital by Rita Mackay (Soprano).			
7.5—7.25—Topical Talk.			
7.30—Light Music. Leslie Bridgewater's Harp Quintet.			
8.0—Vaudeville. Alfredo and his Vagabond Orchestra. "Mike's Quiver Full," by Giles Dugdale. Imito: Animal Imitations. Elsie and Doris Waters (Entertainers). Floy Penrhyn in "Mrs. Bolter and the Lion." Alexander and Mose. The B.B.C. Dance Orchestra.			
9.20—"Hazard"—III. Kapitänleutnant a. D. Joachim Breithaupt: "Zeppelin Raid on London."			
9.50—Russian Music. The B.B.C. Orchestra (Section B) (Leader, Arthur Catterall). Overture, Carnival (Glazunov); The enchanted Lake and Baba-Yaga (Liadov); Danses Polovtsiennes (Borodin).			
10.35—12 midnight—Dance Music.			
11.30—Time Signal (Greenwich).			

REGIONAL			
	kc/s	m.	kW.
London:	842	356.3	50
Midland:	752	398.9	25
Northern:	626	479.2	50
10.15 a.m. (London and Northern)—The Daily Service.			
10.30—12.15 p.m. (London and Northern)—Daventry National Programme.			
12.15—2.30 p.m. (London)—Daventry National Programme.			
12.15 (Northern)—The Studio Orchestra.			
12.45—2.30 (Northern)—Daventry National Programme.			
3.30 (London and Northern)—Frederick Hartley Quintet. Frederic Lake (Tenor) (Daventry National Programme).			
3.30 (Midland)—Dance Music.			
4.45—Daventry National Programme.			
5.15—The Children's Hour.			
6.0—"The First News."			
6.25—Regional Sports Bulletin.			
6.30—(London)—Sydney Baynes and his Orchestra. Rosina Verne (Contralto).			
6.25 (Midland)—The Studio Chorus.			
6.30 (Northern)—Laddie Clarke's Imperial Hydro Hotel Orchestra.			
7.5 (Midland)—The City of Birmingham Police Band, conducted by Richard Wassell.			
7.45 (Northern)—Promenade Concert. The Hallé Light Orchestra conducted by Alfred Barker. Stephen Wearing (Pianoforte).			
8.0 (London)—Chamber Music. André Mangeot (Violin); Walter Price (Violin); Helen Perkin (Pianoforte).			
8.0 (Midland)—The Studio Orchestra. Percy Underwood (Baritone).			
9.15—"The Pride of the Regiment," or "Cashiered for his Country," An Unlikely Tale of the Crimean War. Set to Music by Walter Leigh.			
10.15—"The Second News."			
10.35 (Midland)—Experimental Transmission by the Fultograph Process.			
10.40—11.0 (Midland)—As London.			
10.35—12 midnight (London and Northern)—Dance Music.			

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

<b>ALGIERS (N. Africa)</b> 825.3 kc/s (363.3 m.); 13 kW. Transmits at intervals from 12.30 p.m. 7.30 p.m.—Orchestral Concert 8.30—Request Gramophone Concert	<b>BARCELONA (Spain)</b> Radio-Barcelona (EAJI). 860 kc/s (349 m.); 8 kW. Transmits at intervals from 8.15 a.m. 7.0 p.m.—Programme for Children, followed by Trio Concert and Humorous Picture Transmission. 8.30—Exchange Quotations, Request Gramophone Records and News Bulletin. 10.0—Chimes from the Cathedral, Weather and Exchange Quotations. 10.15—Concert by the Station Orchestra. Pasodoble, Lecumberri (Franco). Baile español (Fernandez). Paysage (Douliez). Ballet, Panades (Sancho Marraco). 11.0—Programme from Madrid.	<b>BELGRADE (Yugoslavia)</b> 1,697 kc/s (430.4 m.); 2.5 kW. Transmits at intervals from 11.0 a.m. 4.0 p.m.—Request Concert on Gramophone Records. 5.0—Balalaika Concert by the Ivaskenko Orchestra. 6.55—Time and Programme Announcements. 7.0—Concert from the "Rudnicanin" Restaurant. 7.30—Talk. 8.0—Orchestral Concert. Overture, "Djanieleh" (Bizet). Ballet Suite, La Suite (Delibes). Selection from "Boris Godounov" (Moussorgsky). 8.50—Programme to be announced. 9.45—Saxophone Recital, by Herr Alexander Nikolic. 10.15—News Bulletin. 10.35—Relay of Foreign Stations.	<b>BERLIN (Germany)</b> Königs Wusterhausen. 183.5 kc/s (1,635 m.); 60 kW. Transmits at intervals from 5.45 a.m. 12 noon—Weather for Farmers. 12.2 p.m.—Gramophone Concert of Opera Music, followed by Weather for Farmers. 12.55 p.m.—Time Signal. 1.30—News Bulletin. 2.0—Gramophone Concert of Operetta Music relayed from Berlin (Witzleben). 3.0—Programme for Children. 3.30—Weather and Ex-
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change: 3.45—Talk for Women. 4.0—Talk: Forgotten Pioneers. 4.30—See Hamburg. 5.30—Health Talk. 5.50—Talk: "What Everyone should know about Accidents in the Water." 6.10—Talk: The Town of Haithabu. 6.30—Talk: Naturalism in the Literature of the Nineteenth Century. 6.55—Weather for Farmers. 7.0—English Lesson. 7.30—Religious Talk, followed by Weather for Farmers. 8.0—See Frankfurt. 10.20—Weather, News and Sports Notes. 10.30 (approx.)—Dance Music from Berlin (Witzleben). 12.30 a.m. (Sunday)—Close Down.	<b>BERLIN (Germany)</b> Witzleben. 715 kc/s (419.5 m.); 1.5 kW. Transmits at intervals from 6.0 a.m. 4.5 p.m.—Orchestral Concert. Overture, "Zampa" (Hérold). Hungarian Rhapsody No. 1 (Liszt). Largo from the Symphony, "From the New World" (Dvorak). Suite from "The Sleeping Beauty" (Tchaikovsky). Overture, "His Life for the Czar" (Glinka). Selection from "Cavalleria rusticana" (Mascagni). The Musical Box (Liadov). Two Elegiac Melodies (Grieg). Waltz, Die Kosenden (Lanner). 6.0—The Narrative of the Week. 6.25—Talk: American Journalism. 6.50—Labour Market Report. 6.55—The Witzleben Station informs its Listeners. 7.0—Topical Talk. 7.10—Extracts from "Sicilian Vespers"—Opera (Verdi) on Gramophone Records. 7.50—Sports Notes. 8.0—See Munich. 9.10—News and Sports Notes. 9.20—Cabaret Concert. 10.25—Weather, News and Sports Notes. 10.30 (approx.)—Dance Music. 12.30 a.m. (Sunday)—Close Down.	<b>BORDEAUX-LAFAYETTE (France)</b> (PTT) 986 kc/s (304 m.); 13 kW. Transmits at intervals from 12.45 p.m. 6.30 p.m.—Radio Journal. 8.0—News Bulletin, Exchange Quotations and Lottery Results. 8.5—Sports Notes. 8.10—Advanced English Lesson. 8.25—News Bulletin and Weather Forecast. 8.30—Concert of Opera Music on Gramophone Records. Selection from "Manon" (Massenet). Selection from "Le Roi d'Ys" (Lalo). Air from "Manon"
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(Massenet). Selection from "Hérodiade" (Massenet). Selection from "Rigoletto" (Verdi). Selection from "Faust" (Gounod). 9.0—"Villa des Mimosas"—One-Act Comedy (Vovard). "The Taming of the Housewife"—Comedy in One Act (Weber).	<b>BRATISLAVA (Czechoslovakia)</b> 1,076 kc/s (279 m.); 14 kW. Transmits at intervals from 7.0 p.m.—Recital of Jugoslavian Songs. 7.40—See Prague. 10.15—Announcements. 10.20—See Moravská-Ostrava.	<b>BRESLAU (Germany)</b> 923 kc/s (325 m.); 1.5 kW. Relay by Gleinitz, 1,184 kc/s (253 m.). Transmits at intervals from 6.0 a.m. 5.30 p.m.—Report on the International Tennis Tournament, relayed from the Südpark. 6.0—Review of the Week's Talks and Literary Items. 6.30—Reading. 6.45—Weather Forecast. 6.50—Gramophone Concert of Light Music. March (Seiffert). Waltz, Wiener Bonbons (Johann Strauss). Madrigale (Simonetti). Czardas (Morti). Spanish Serenade (Murgutti). Gavotte, Alfonsina (Trafio). The Kiss (Arditi). Doll Dance (Debussy). Burlesque, The Juggler (Toch). Musik muss sein (May). Das tapfere Schneiderlein (May). Clog Dance (Flynn). Potpourri (Oscar Straus). 7.40—Weather Forecast, followed by This will interest you! Surprise Programme. 8.0—See Munich. 9.15—"Rund um die Saule"—a Silesian Radio Play with Music (Schenke and Szczuka). 10.20—Time Signal, Weather Forecast, News Bulletin, Sports Notes and Programme Announcements. 10.30—Dance Music from the Kurpark Hotel, Bad Salzbrunn. 12 midnight (approx.)—Close Down.	<b>BRNO (Czechoslovakia)</b> 878 kc/s (342 m.); 35 kW. Transmits at intervals from 10.0 a.m. 7.0 p.m.—Comedy in One Act (Peran). 7.40—See Prague. 10.15—News Bulletin. 10.20—See Moravská-Ostrava.	<b>BRUSSELS (Belgium) (No. 1)</b> I.N.R. 590 kc/s (509 m.); 15 kW. 12 noon—Concert by Max Alexys and
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**SATURDAY**  
continued

his Orchestra. 12.30 p.m.—Weather.  
12.40—Concert (continued). 5.0—  
Concert conducted by Charles Wal-  
pot. March, Perusa (Heymann).  
Waltz, The Polar Star (Waldteufel).  
Overture, "Masaniello" (Auber).  
The Vision of Fuji San (Kettelbey).  
Gipsy Desire (Nicklass). Selection  
from "Les Cloches de Corneville"  
(Planquette). Tango, Primer amor  
(de Caro). Potpourri, Hallo, Hallo!  
Hier Wien (Morena).  
6.0—Gramophone Concert. Les  
Plaisirs champêtres (Montclair-  
Casadesus). Aria from "The  
Marriage of Figaro" (Mozart).  
Die Forelle (Schubert). Aria  
from "The Marriage of Figaro"  
(Mozart). Nocturne from the  
Quartet in D (Borodin). Scherzo  
from the Quartet, Op. 12 (Rimsky-  
Korsakov).  
7.15—Talk: The Political Situation  
in Europe—England. 7.30—Literary  
Review.  
8.0—Orchestral Concert, conducted  
by Jean Kumps. Soloist: Mlle.  
Strulers (Songs). Overture, "The  
Barber of Bagdad" (Cornelius).  
Gymnopédies (Satie). Symphony  
in G (Haydn). Prélude à l'après-  
midi d'un faune (Debussy). The  
Nursery (Ingelbrecht).  
8.45—"What a Life!"—Sketch  
(Grevesse). 9.0—Concert (continued).  
Selection from "Arlequin" (d'Ollone).  
Aria from "Faust" (Gounod). Selection  
from "Louise" (Charpentier).  
Two Arias from "The Tales of  
Hoffmann" (Offenbach). Waltz from  
"Faust" (Gounod).  
10.0—Talk on Gardening.  
10.10—Concert by a Tea-Room  
Orchestra. Florentine March  
(Fucik). Strauss Waltz-Potpourri  
(Weber). Petite Suite for Piano-  
forte and Orchestra (Olsen). Ronde  
des Lutins (d'Ambrosio). Selection  
from "Lilac Time" (Schu-  
bert-Berté). Tango, Rosario (No-  
vuo). Fantasia on Italian Songs  
(de Michel). Waltz, Dance away  
the Night (Thompson). Foxtrot,  
Do-ray-mi-fa-soh (Sylviano). 11.0  
(approx.)—Close Down.  
**BRUSSELS (Belgium) (No. 2)**  
N.I.R. 887 kc/s (338.2 m.); 15 kW.  
Programme in Flemish.  
12 noon—Gramophone Concert of  
Light Music. In the interval at  
12.30 p.m.—Weather.  
1.0—Trio Concert. Frans Wigy  
(Violin), P. Leemans (Pianoforte)

and De Nocker (Cello). Spanish  
March (Volpatti). Waltz, Etincelles  
(Waldteufel). Narcissus (Nevin).  
Selection from "Monsieur  
Beucaire" (Messager). Cradle  
Song (Gretchaninow). Aubade  
printanière (Lacombe). Selection  
from "Sylvia" (Delibes). Soir à  
Rio (Calleman). Scherzo for  
Cello (Van Goëns). Petite Suite  
(Chaminade).  
5.0—Orchestral Concert, conducted  
by Jean Kumps. Symphony in B  
Flat (Schubert). Two Basque  
Airs (Kumps). Romance in F for  
Violin (Beethoven). Scherzo and  
Nocturne from "A Midsummer  
Night's Dream" (Mendelssohn).  
Village Dances (Grétry).  
6.0—Gramophone Records. Selections  
from "Ronny" (Kálmán). Selection  
from "Paganini" (Lehár).  
6.15—Reading. 6.30—Gramo-  
phone Records of Variety Music.  
7.15—Talk. 7.30—Agricultural  
Report.  
8.0—"Knokkelbeen"—Opereita in  
Three Acts (Hullebroeck). In the  
intervals at 8.45—Dramatic Pro-  
gramme and at 10.0—Le Journal  
Parlé.  
10.30—Gramophone Dance Music.  
Foxtrot, It's great to be in love.  
Selection from "Waltzes from  
Vienna." Foxtrot, Blues in my  
Heart. Waltz, Beautiful Ohio.  
Tango, Wenn du einmal mich  
beträgst. Foxtrot, I'm a Dreamer.  
Waltz, Missouri. Tango, Vergib,  
vergib Paloma. Foxtrot, Singing  
in the Bath Tub. 11.0 (approx.)—  
Close Down.  
**BUCHAREST (Romania)**  
Radio-Bucarest. 761 kc/s (394  
m.); 12 kW.  
Transmits at intervals from 11.0 a.m.  
4.0 p.m.—Concert of Light Music  
and Romanian Music by the Sibi-  
cano Orchestra. 5.0—News and Time  
Signal. 5.10—Concert (contd.).  
6.0—Talk on History and Geography.  
6.40—Popular Music on Gramo-  
phone Records. 7.0—Dramatic  
Programme.  
7.45—Romanian Music by the Luca  
Orchestra. 8.45—News Bulletin and  
Close Down.  
**BUDAPEST (Hungary)**  
545 kc/s (550 m.); 18.5 kW.  
Transmits at intervals from 9.15 a.m.  
Programme also relayed on 210 metres  
from 7.40 p.m. till Close Down.

5.0 p.m.—Concert by the Karl Tol  
Cigány Band. 6.0—Talk on the  
Education of Children. 6.30—Cem-  
balo Recital by Andor Krudy. 7.0—  
Answers to Correspondents. 7.40—  
Recital of Alois Tarnay's Songs by  
Nikolaus Szedó, accompanied by the  
Composer. 8.15—Variety Programme  
by Ila Szász and Ludwig Szendy.  
9.0—Concert by the Band of the First  
Royal Hungarian Infantry Regi-  
ment, conducted by Richard Eric-  
say. March from "Rienzi" (Wag-  
ner). Waltz, (Johann Strauss). Hun-  
garian Overture (Schemmel). Selection  
from "Lucia di Lammer-  
moor" (Donizetti). Kuricz  
Fantasia (Fricsay). In einem Musik-  
automaten Salon.  
10.30—Time Signal, Weather Report  
and News Bulletin, followed by  
Concert by the Nándor Sovánka Cigány  
Band, relayed from the Barosse Café.  
**COPENHAGEN (Denmark)**  
1,067 kc/s (281 m.); 0.75 kW.  
Relayed by Kalundborg, 260 kc/s  
(1,153 m.).  
Transmits at intervals from 7.30 a.m.  
(Gymnastics).  
12 noon—Time and Chimes from  
the Town Hall. 12.2 p.m.—String  
Ensemble Concert relayed from the  
Hotel d'Angleterre. 2.0—2.30—  
Interval.  
2.30—Gramophone Concert. Kerstin  
Thorborg: Berceuse de Jocelyn  
(Godard). Beniamino Gigli: Good-  
bye (Tosti). Eva Turner: Aria  
from "Aida" (Verdi). Two  
Selections (May): (a) Musik muss  
sein, (b) Wenn ich vergnügt bin.  
Richard Crooks: I'll always be  
true (Benatzky). Sid Phillips:  
Granny's Photo-Album (Greer).  
Rudy Vallee: Begging for Love  
(I. Berlin). 3.0—Programme for  
Children.  
3.30—Orchestral Concert, conducted  
by Emil Reesen. Soloist: Minna  
Nyegaard (Violin). Overture,  
"Mascarade" (Carl Nielsen).  
Waltz, Dolores (Waldteufel). Ser-  
enade (Rygaard). Suite, Four  
Ways (E. Coates). Waltz from  
"Pierrette's Veil" (Dohnányi).  
Violin Solos: (a) Poupée valsante  
(Poldini-Kreisler), (b) Lotus Land  
(C. Scott), (c) Spanish Dance  
(Falla-Kreisler). Prelude to "Vi-

findaka" (Tofft). Fantasia o<sup>n</sup>  
Hebrew Melodies (Jul. Reesen).  
Three Pieces arranged for Strings  
(Launy Gröndahl); (a) Bourrée,  
(b) Aria, (c) Minuet. Swedish  
Dance, No. 4 in D (Aulin).  
5.40—Exchange and Fish Market  
Prices. 5.50—Talk. 6.20—French  
Lesson. 6.50—Weather Forecast.  
7.0—News Bulletin. 7.15—Time  
Signal. 7.32. (from the Odense Studio)  
—Talk arranged by the Tourist  
Society. 8.0—Chimes from the  
Town Hall.  
8.2—International Programme of  
Workers' Songs and Poems. Eng-  
lish Song. Russian Song. French  
Song (de Geyter). Readings: (a)  
Denmark—Aage Hermann, (b)  
Switzerland—Marcel Martinet, (c)  
Germany—Fritz Riebold. Aus-  
trian Song (Schu). Dutch Song  
(Nobel). Swedish Song. Polish  
Song.  
8.45—Orchestral Concert of Operetta  
Music, conducted by Launy Grön-  
dahl. Overture, "Giroflé-Giro-  
fla" (Lecocq). Selection from  
"Mam'zelle Nitouche" (Hervé).  
Selection from "Der Bettelstu-  
dent" (Millöcker). Overture,  
"Prinz Methusalem" (Joh.  
Strauss).  
9.15—Readings. 9.45—Song Rec-  
ital by Inger Stockmart Hermann.  
10.5—News Bulletin.  
10.20—Orchestral Concert, conducted  
by Launy Gröndahl. Overture,  
"Le Roi d'Yvetot" (Adam).  
Secrets (Ancliffe). Oriental Pro-  
cession (Ganne). Waltz, Mein  
Lebenslauf ist Lieb und Lust  
(Jos. Strauss). Perpetuum mobile  
(Joh. Strauss). Manœuvre March  
(Jul. Reesen).  
10.45—Dance Music from the Lod-  
berg Restaurant. In the interval at  
12 midnight—Time and Chimes from  
the Town Hall. 12.15 a.m. (Sunday)  
—Close Down.  
**DUBLIN (Ireland)**  
(2RN). 725 kc/s (413 m.); 1.2 kW.  
Relayed by Cork, 1,337 kc/s  
(224.4 m.).  
1.30—2.0 p.m.—Time Signal, Weather  
Forecast, Stock Report and Light  
Music on Gramophone Records.  
7.20—News Bulletin. 7.30—Time  
Signal. 7.31—Talk (to be an-  
nounced). 7.45—Gaedhlig. 8.0—  
R. O'Dwyer Concert by the Aug-  
mented Station Orchestra, conducted  
by the Composer.

8.30—Variety Programme. 8.50—  
Contralto Solos by Mairin Fenning.  
9.0—The Augmented Station Or-  
chestra. 9.30—Songs from "The  
Quaker Girl" (Lionel Monckton)  
by Hilda White (Soprano). 9.40—  
The Augmented Station Orchestra.  
10.30—Time Signal, News and  
Weather Forecast. 10.40—Weekly  
Sports Review, and Close Down.  
**FÉCAMP (France)**  
Radio Normandie. 1,293 kc/s  
(232 m.); 10 kW.  
12 noon—Light Music on Gramo-  
phone Records. 12.30 p.m.—Wireless  
News.  
12.45—Concert of Popular Music  
Gluhwürmchens Stelldichein (Siede).  
Un Mot d'Amour Heymann). Selection  
(Andolf). Ideale (Tosti).  
Because I love you (Sylviano).  
O Margarita (Elossas). Chinese  
Serenade (Siede). Chanson de  
Poupée (Heymann). The Garden  
of Remembrance (Gibbins). Les  
deux Coeurs (Fontenailles). Quand  
je suis loin de toi (Sylviano).  
Tu ris et je pleure (L'Enfant).  
7.30—Wireless News. 8.0—Spon-  
sored Programme. 8.45—Concert  
of Popular Music. 9.0—Concer-  
relayed from Havre. 11.0—Concert  
of Variety Music and Dance Music.  
3.0 a.m. (Sunday)—Close Down.  
**FLORENCE (Italy)**  
Ente Italiano Audizioni Radio-  
foniche. 599 kc/s (500.8 m.);  
20 kW.  
See Turin.  
**FRANKFURT-am-MAIN**  
(Germany)  
770 kc/s (390 m.); 1.5 kW. Re-  
layed by Cassel, 1,220 kc/s (246 m.).  
Transmits at intervals from 6.0 a.m.  
12 noon—Concert. Overture, "Eury-  
anthe" (Weber). Ballet Music  
from "Faust" (Gounod). Hun-  
garian Fantasia for Flute and  
Orchestra, (Dopples). Overture,  
"Indigo" (Joh. Strauss). Waltz,  
Die Hydropathen (Gung'l). Ge-  
schichten von Strauss (Korngold).  
12.50 p.m.—News and Weather.  
12.55—Time Signal.  
1.0—Gramophone Concert. Selection  
from "The Gipsy Baron" (Joh.  
Strauss). Waltz, Transaktionen  
(Jos. Strauss). Song from "The  
Arabian Nights" (Joh. Strauss).  
Waltz, Es war einmal ein Walzer

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Address.....



SATURDAY continued

(Lehar). Potpourri of Old Viennese Songs, Wiener Erinnerung. Song from "The Rose of Stamboul" (Fall). Duet from "Das Fürstentum" (Lehar). Two Pieces from "Liselott" (Künnecke-Gründgens-Liedke-Rebner). Hungarian Song from "Gitta entdeckt ihr Herz" (Brodzky). Two Songs from "The Czarevitch" (Lehar). Potpourri for Soloists, Choir and Orchestra, "White Horse Inn" (Benatzky). Funiculi-Funicula (Denza). 2.0 (in the interval)—News. 2.40—Sponsored Concert. 3.20—Weather Report. 3.25—Time and Economic Notes. 3.30—Programme for Children. 4.55—Economic Notes. 5.0—See Stuttgart. 6.15—Economic Notes. 6.25—A Discussion: The Stage and Dancing. 6.50—See Stuttgart. 7.15—Time and Announcements. 7.30—An Interview with Johannes Schlaf on the occasion of the Author's Seventieth Birthday. At the Microphone: Johannes Schlaf and Friedrich K. Roedemeyer. 8.0—Variety Programme from the Kurtheater, Bad Homburg, including a One-Act Comedy (Johann Nestroy), and a Radio Potpourri arranged and conducted by Eduard Künnecke. 10.20—Time and News. 10.45—Concert from Langenberg. 12 midnight (approx.)—Close Down. HAMBURG (Germany) Norag (ha, in Morse). 806 kc/s (172 m.); 1.5 kw. Relayed by Bremen, 1,112 kc/s (270 m.); Flensburg, 1,373 kc/s (218 m.); Hanover, 530 kc/s (566 m.) and Kiel, 1,292 kc/s (232.2 m.). Transmits at intervals from 5.45 a.m. 4.30 p.m. (from Hanover)—Concert from Bad Nenndorf. Overture, "The Barber of Bagdad" (Cornelius). Siegfried Idyll (Wagner). Selection from "Boris Godounov" (Moussorgsky). Selection from "The Czarevitch" (Lehar). Overture, "A Waltz Dream" (O. Straus). Selection from "Der Frauenfresser" (Eysler). Triumphant March from "Aida" (Verdi). 6.0—Talk for Country Women. 6.5—Talk for Antiquarians. 6.30—Dialogue: Mining in Malay. 7.0—Topical Talk. 7.15—Weather Report. 7.20—(from Kiel) Variety Concert by the "Grüss Gott" Double Quartet. Im Herbst, da muss man tanken (Marschner). Folk Melody, Das Mönchlein. Von den zwei Hasen (Othegraven). Lütt Matten, de Has (Solbrügge). Jägerslust (Astholtz). Folk Melody, Pappelmäulchen. Feuer her (Reinecke). Der Tauber und die Tauben (Kirchl). Heda, Wein her (Zöllner). Heiratsgalopp (Kuntze). 8.0—"Nebelhorn"—a New Cabaret with Willy Hagen. 10.0—Time and News. 10.20—Dance Music from the "Haus Sieglar". HEILSBURG (Germany) 1,085 kc/s (276.5 m.); 60 kw. Relayed by Danzig, 662 kc/s (453.2 m.). Transmits at intervals from 6.0 a.m. (Weather, Gymnastics and Concert). 11.30 a.m.—Concert by the Little Wireless Orchestra, conducted by Eugen Wilcken. Overture, "Maritana" (Wallace). Suite from "Peer Gynt" (Grieg). Niffenwulzer (Johann Strauss). Bizet Potpourri (Urback). Overture, "Boccaccio" (Suppe). Was Blumen träumen (Traditeur). Slavonic Rhapsody (Friedemann). Selection from "The Czarevitch" (Lehar). 7.5 p.m.—Gramophone Concert. Overture, "The Thieving Magpie" (Rossini). Liebesfeier (Weingartner). Mailed (Blume). Ballet Music (Popy). The Last Tango (Ruggieno). The Last Tango (Rudolph Valentino (Volkov). Selection from "White Horse Inn" (Benatzky). So im Vorübergehen (Meisel). Siboney (Lecuona). Three Little Times (Hajos). Mädi, in Wien wird es Frühling (Doelle). Stolz Potpourri. 2.30—3.30—Interval. 3.30—(from Danzig)—Handwork for Children. 4.0—Concert by the Königsberg Opera House Orchestra, conducted by Karl Hrubetz. March, Perpetuum mobile (von Blon). Overture, "Czar and Carpenter" (Lortzing). Ballet Music from "Rund um Wien" (Bayer). Potpourri of Hungarian Songs (Hrubetz). Overture, "The Hermit's Bell" (Maillart). Im Walzertrausch (Lincke). Der Spielmann (Sommer). Dutch Folk Songs. Intermezzo, Dünen-Geister (Flügge). Pizzicato-Walzer, Pavlova (Mever-Helmund). Con-

cert Polka, Waldlercheri, Kuckuck und Frosch (Wagner). March, Hoch Wien (Hayer). In the interval at 5.0 (approx.)—Film Review from Danzig. 6.0—Programme Announcements. 6.10—Programme Announcements in Esperanto. 6.15—Agricultural Press Review. 6.30—Market Prices. 6.45—Talk: The Tercentenary of Rössel Grammar School. 7.0—Talk: Foreign Mails. 7.20—Weather Report. 7.30—See Frankfurt. 8.0 (from Danzig)—Variety Programme, arranged by Otto Normann. In the interval, Weather, News and Sports Notes. After the Programme Dance Music from Berlin (Witzleben). 12.30 a.m. (Sunday)—Close Down. HILVERSUM (Holland) 1,013 kc/s (296.1 m.); 20 kw. (7 kw. up to 4.40 p.m.). 6.25—9.40 a.m.—Programme of the Workers' Radio Society (VARA). 6.25—6.40 and 7.10—7.25—Physical Culture Lesson. 7.40—Variety Music on Gramophone Records. 8.40—Concert by the Drukker Trio. 9.40—Religious Programme by the Liberal Protestant Radio Society (VPRO). 9.55—Concert by the Drukker Trio. 11.40—Septet Concert, conducted by Is. Eyl, with Gramophone Interludes. 1.25—1.55—Interval. 1.55—Educational Talk for Workers. 2.10—Flute Recital, by J. Feltkamp. P. Tiggers at the Pianoforte. Sonata No. 8 (Mattheson). Joueurs de flüte (Roussel). 2.40—Popular Music on Gramophone Records. 3.10—Talk on Sports. 3.25—Concert by the "Hollanda Three" (Accordions). 3.40—Talk on Journalism. 4.0—Accordion Concert (continued). 4.10—Programme for Children. Selections by the "De Roodborstjes" Children's Choir, conducted by Leida Hulscher. Jo Kuckheer at the Pianoforte. 4.40—Programme for Children. 5.40—Chamber Music Concert, conducted by P. Tiggers. 6.10—Topical Talk. 6.25—Variety Music on Gramophone Records. 6.40—Variety Programme. The VARA Orchestra, conducted by Hugo de Groot, the VARA Dramatic Ensemble and Soloists: Mia Dorel (Songs), Johan Jong (Organ), A. Roodenburg (Violin), Daaf Wins (Pianoforte), Teun de Klepperman (Topical Talk) and Lou Bandy (Talk). In the interval at 10.40—News and Football Report. 11.40—(approx.)—Close Down. HUIZEN (Holland) 140 kc/s (1,875 m.); 8.5 kw. Programme of the Catholic Radio Society (K.R.O.). 7.40 a.m.—Gramophone Records of Variety Music. 8.55—9.40—Interval. 9.40—Instrumental Concert. 11.10—Religious Address. 11.40—Time and Police Notes. 11.55—Sextet Concert. 1.25—1.40—Interval. 1.40—Gramophone Records of Variety Music. 2.10—Programme for Children. 3.40—Swimming Lesson. 4.10—Gramophone Records of Variety Music. 5.10—Esperanto Notes. 6.0—Press Review. 6.20—Gramophone Records of Variety Music. 6.50—Talk. 7.10—Programme to be announced. 7.25—Sports Talk. 7.40—Concert by the K.R.O. Orchestra, conducted by Marinus van (Suppe). Selection from "The Girl in the Taxi" (Gilbert-Fetras). Overture, "Gri-Gri" (Lincke). Vilja Song from "The Merry Widow" (Lehar). Selection from "Der liebe Augustin" (Fall). Two Selections from "Das Veilchen vom Montmartre" (Kalman). Selection from "The Geisha" (Jones). Potpourri, Klänge aus Arkadien (Morena). The Caravan (Bayer). By the Blue Hawaiian Waters (Kettelbey). Old Dutch Dances (Siep). Niki-Marsch (Straus). Serenade (Heykens). Parade der Dickbauche (Aubert). The Clock and the Dresden Figures (Kettelbey). The Knight of the Hobby Horse (Evans). 8.55 (in an interval)—News. 10.40—Gramophone Records of Variety Music. 11.40 (approx.)—Close Down. KALUNDBORG (Denmark) Kalundborg Radio. 260 kc/s (1,153 m.); 7.5 kw. See Copenhagen. KATOWICE (Poland) 734 kc/s (408 m.); 16 kw. Transmits at intervals from 11.58 a.m. 8.15—Concert of Light Music. 10.10 Chopin Pianoforte Recital. 10.45—Weather Forecast. 10.55—Dance Music.

LAHTI (Finland) 167 kc/s (1,796 m.); 54 kw. Relayed by Helsinki, 815 kc/s (368.1 m.). Transmits at intervals from 7.10 a.m. 6.15 p.m.—Orchestral Selection: Suite, Caucasian Sketches (Ippolitov-Ivanov). 6.40—Talk. 7.5—Vocal Quartet Selections. 7.25—A Dialogue. 7.50—Finnish Songs. 8.10—Orchestral Concert of Waltzes, Donauweibchen (Strauss). Träume auf dem Ozean (Gung'l). Hofballtänze (Lanner). 8.45—News in Finnish and Swedish. 9.15—Military Music from the Kappeli Restaurant. 10.0 (approx.)—Close Down. LANGENBERG (Germany) Westdeutscher Rundfunk. 635 kc/s (473 m.); 60 kw. Transmits at intervals from 6.45 a.m. (Exercises, Weather, Time and Concert from Stuttgart). 12 noon—Concert from Frankfurt. 12.50 p.m.—Weather, Announcements and Time. 1.0—Concert conducted by Wolf March, Die Freundschaftsflagge (Blon). Overture, "The Black Domino" (Auber). Suite, Aus aller Herren Länder (Moszkovsky). Serenade, Dein Bild (Holland). Selections from "Stradella" (Flotow). Waltz, Gräfin Pepi (Strauss). Potpourri of Russian Folk Songs and Dance Music, Wolza-Klänge (Lindemann). Champagner-Galopp (Wiegand). 2.35—Gramophone Concert of Popular Music. 3.30—Economic Notes and Time. 3.50—Programme for Children. 4.20—Talk: Touring in the Rhineland and Westphalia—From the River Sieg to the River Lahn in Four Days. 4.40—English Lesson. 5.0—Concert. 6.15—Talk: Marriage in the Modern Novel. 6.40—Talk: The Formation of Character. 7.0—Weather, Time, Economic Notes and Sports Results. 7.15—Wireless Notes. 7.30—Talk: The Fiftieth Anniversary of the Evangelical Workers' Society. 7.55—News Bulletin. 8.0—Variety Programme by the Orchestra, conducted by Breuer. 10.25—News and Sports Notes. 10.20—Concert conducted by Wolf. 12 midnight—Dance Music. 1.0 a.m. (Sunday)—Close Down. LEIPZIG (Germany) 1,157 kc/s (259 m.); 2 kw. Relayed by Dresden, 941 kc/s (319 m.). Transmits at intervals from 6.0 a.m. 5.0 p.m.—Concert by the Leipzig Symphony Orchestra conducted by Theodor Blumer. Selection from "Der Kuberigen" (Kienzl). Waltz, Elegy and Finale from the Serenade for Strings Op. 48 (Tchaikovsky). Turkish March from the Sonata in A (Mozart). "Tone Pictures from "King Manfred" (Reinecke). Waltz, Aquarellen (Josef Strauss). Schlummerlied (Ries). Selection from "The Duchess of Chicago" (Kálmán). Waltz from "Der Schatzmeister" (Ziehrer). 6.30—Talk: Be Brief. 6.50—A Modern Dictionary. 7.0—Talk: The Extinction of Prehistoric Animals and the Future of Mankind. 7.30—Two Eastern Legends (Dorosevic), translated from the Russian by Johannes Dietrich. 8.0—"Lügen haben kurze Beine"—Children's Cantata in Two Parts (Dessau). The Dessau Children's Choir and the Orchestra of the Friedrich Theatre, Dessau, conducted by Erich Rex. 8.30—Variety Programme from Langenberg. 10.15 (approx.)—Concert relayed from the Castle in Belvedere Park, Weimar. The Weimar State Orchestra, conducted by Ernst Pretorius, and the Freundschafts-sängerbund conducted by Karl Fischer. Soloist: Grete Welz (Soprano). Nachtgesang im Walde Op. 139 (Schubert). Nocturne No. 3 for Orchestra (Haydn). Nachtmusik Op. 64 (Zilcher). LJUBLJANA (Yugoslavia) 522 kc/s (574.7 m.); 2.5 kw. Transmits at intervals from 12.15 p.m. 6.30 p.m.—Gymnastics Course. 7.0—English Lesson. 7.30—Talk: Radio Announcements. 8.0—Concert by a Military Band. 9.0—Concert by a Vocal Octet. 9.30—Concert of Light Music. 10.0—Time Signal and News Bulletin. 10.15—Concert of Light Music (contd.). LWÓW (Poland) 788 kc/s (381 m.); 16 kw. Transmits at intervals from 11.45 a.m. 4.10—4.55 p.m.—See Warsaw. 4.55—Programme for Children. 5.20—

Concert conducted by Seredynsky. 6.0—Divine Service relayed from Wilno, 533 kc/s (563 m.). 7.0—Miscellaneous Items. 7.25—Talk by Albert Casteilo. 7.40—10.50—See Warsaw. 10.50—Illustrated Talk on Music. 12 midnight (approx.)—Close Down. LYONS (France) La Doua (PTT) 644 kc/s (465.8 m.); 1.5 kw. Transmits at intervals from 8.0 a.m. 7.0 p.m.—Light Music on Gramophone Records. 7.30—Radio Gazette for Lyons and the South-East. 8.30—Programme, arranged by the Chamber of Commerce. MADRID (Spain) Union Radio (EAJ7). 707 kc/s (424.3 m.); 2 kw. Transmits at intervals from 9.0 a.m. 8.0 p.m.—Chimes, Market Prices, Technical Talk and Request Gramophone Concert. 9.15—9.30—News Bulletin. 10.0—Linguaphone French Lesson. 10.30—Chimes, Time Signal and Musical Comedy Selections: (a) "Gigantes y Cabezudos" (Caballero), (b) "La Generala" (Vives). 12.45 a.m. (Sunday)—News Bulletin. 1.0—Chimes and Close Down. MILAN (Italy) Ente Italiano Audizioni Radiofoniche. 905 kc/s (331.5 m.); 7 kw. See Turin. MORAVSKÁ-OSTRAVA (Czechoslovakia) 1,137 kc/s (263.8 m.); 11 kw. Transmits at intervals from 10.0 a.m. 7.0 p.m.—See Prague. 10.15—Programme Announcements and Theatre Notes. 10.20—"Caught"—Comedy in One Act (Schlegl and Marvan), followed by Vocal and Orchestral Concert. MUNICH (Germany) 563 kc/s (533 m.); 1.5 kw. Relayed by Augsburg and Kaiserslautern, 536 kc/s (560 m.); and Nürnberg, 1,256 kc/s (239 m.). Transmits at intervals from 6.45 a.m. 5.0 p.m.—Orchestral Concert conducted by Erich Kloss. 6.15—Programme for Children. 7.0—Piano Symphony for Violin and Pianoforte (Lalo). 7.25—Talk: The Racing Motorist. 7.45—Wireless Notes. 8.0—Bavarian Variety Programme. 9.15—See Breslau. 10.20—Time Signal, Weather Report, News Bulletin and Sports Notes. 10.45—Concert from Langenberg. 12 midnight (approx.)—Close Down. OSLO (Norway) Kringkastingsselskapet, 277 kc/s (1,083 m.); 60 kw. Relayed by Fredrikstad, 316 kc/s (367.6 m.); Hamar, 536 kc/s (560 m.); Notodden, 671 kc/s (447.1 m.); Porsgrund, 662 kc/s (453.2 m.); and Rjukan, 671 kc/s (447.1 m.). Transmits at intervals from 11.10 a.m. 5.15 p.m.—Programme for Children. 6.15—Norwegian Music on National Instruments. 6.45—Talk on Economics. 7.0—Announcements, Weather and News. 7.30—Talk. 8.0—Time Signal. 8.2—Orchestral Concert, conducted by Hugo Kramm. Soloists: John Neergaard and Axel Nicolayson (Vocalists). March, Hallo! Oslo calling (Grunstrom). Overture (Reissiger). Potpourri of Norwegian Melodies (Birkinnes). Chant de Veslemöy (Halvorsen). Waltz (Sinding). An den Frühling (Grieg). Persian Dance (Svendsen). Choral Selections. Suite, Caucasian Sketches (Ippolitov-Ivanov). In a Monastery Garden (Kettelbey). Spanish Dance (Glazounov). Waltz (Vinsnes). Selection (Eilenberg). Czardas (Grossman). March, Sonia (Jacobsen). 9.40—Weather and News. 10.0—Topical Talk. 10.15—Readings. 10.45—Dance Music. 12 midnight (approx.)—Close Down. PALERMO (Italy) Ente Italiano Audizioni Radiofoniche. 554 kc/s (542 m.); 3 kw. Transmits at intervals from 12.45 p.m. 5.30 p.m.—Light Music on Gramophone Records. 6.0—6.30—Programme for Children. 8.0—Announcements, Radio Giornale dell'Enit, Agricultural Notes and Giornale Radio. 8.20—Light Music on Gramophone Records. In the interval at 8.25—Sports Notes, Time Signal and Announcements. 8.45—"La Reginetta delle Rose" (The Little Queen of the Roses)—Operetta in Three Acts (Leoncavallo). In the intervals, Review of New Books and Miscellaneous Announcements. 10.55—News Bulletin and Close Down. PARIS (France) Eiffel Tower (F.I.E.). 207.5 kc/s (1,445.7 m.); 13 kW

Time Signals (on 2,650 metres) at 10.26 a.m. and 11.26 p.m. (preliminary and 6-dot signals). Transmits at intervals from 1.0 p.m. 6.45 p.m.—Musical Programme. 7.0—Le Journal Parlé. 8.20—Weather Report. 8.30—Dramatic Programme: (a) "Angoisses"—Comedy in Three Episodes (Caillas), (b) "Le Candidat"—Vaudeville in One Act (Monjardin), (c) "Yvette a de l'ordre"—One Act Play (Roudié). In the interval, Wireless Notes. 10.0 (approx.)—Close Down. PARIS (France) Poste Parisien. 914 kc/s (328.2 m.) 60 kw. Transmits at intervals from 12 noon: 7.0 p.m.—Light Music on Gramophone Records, News and Announcements. 7.30—Sponsored Gramophone Concert. 8.30—Gramophone Records, Talk and News. 8.45—Vocal and Orchestral Concert. Introduction to the Lyric Drama "L'Etranger" (d'Indy). Horn Solo: Pavane pour une Infante défunte (Ravel). Souvenir, Berceuse and Claironnerie from the Petite Suite (Ducasse). Cor anglais Solo: Nuages from "Nocturnes" (Debussy). Suite française (Casadesu). Ballet Suite from "Le Pavillon d'Armide" (Tcherepnin). The Swan of Tuonela (Sibelius). Little Suite (Borodin). Sérénade burlesque (Schmitt). Marche de fête (Büsser). PARIS (France) Radio-Paris (CFR). 174 kc/s (1,725 m.); 75 kw. 6.45 a.m.—Physical Culture. 7.30—Weather and Physical Culture (continued). 7.45—Gramophone Records. Valse des Musettes (Puig-Silberman). Waltz, Vienna City of my Dreams (Sieczyski). Pergandole al Cimarron (Torres Alanso). Fontane (Padilla). 8.0—News, Weather and Press Review. 12.30 p.m.—Gramophone Concert. Aïmons dans le mystère (Persiani-Bonnier-Charpentier). Marionettes (Glazounov). Vision de Salomé (Joyce). El Relicario (Padilla). Miami (Loyrau). Ginette (Paradis). Clair de lune (Kettelbey). Polka des As (Márquez). Ay, Ay, Ay (Perez Freire). Jack Baby (Loyrau). The Blue Waltz (Margis). Piccolo (Oscar Straus). Emma Livry (Pirouelle). Tesoro mio (Becuacci). Le Temps des Cerises (Renard). Romance (Svendsen). Circus Memories (Peter). Simple avec (Thomé). Glow-Worm Gavotte (Lincke). A Wedding Procession in Lilliput (Traditeur). In the interval, News and Weather. 3.0—Programme for Children. 3.45—Market Prices. 6.30—Market Prices, Weather, Agricultural Report, Agricultural Talk and Racing Results. 7.0—Talk arranged by the Union des Grandes Associations Françaises. 7.10—Technical Talk by Colonel Bourgain. 7.30—Elementary Book-keeping Lesson. 7.45—Press Review, Commercial Prices and News. 8.0—Literary Readings. 8.30—News, Sports Notes and Weather. 8.40—Report by René Dorin. 8.45—Humorous Programme. 9.15—Press Review and News. 9.30—Concert by Bela Rex and his Viennese Orchestra. Selection from "Countess Maritza" (Kálmán). Moonlight on the Alster (Fetras). Lehar Potpourri. Cigany Song. The Two Guitars. Das Lied ist aus (Stolz). PITTSBURGH (U.S.A.) Westinghouse Electric (KDICA) 980 kc/s (306 m.); 25 kw. Transmits at intervals from 12.30 p.m. 0.0 p.m.—Teaberry Baseball Scores. 0.5—Pebecco Weather Report. 0.7—Rhythmic Serenade from New York. 6.30—Tales of the Pennsylvania State Police: Behind the Law. 9.45—KDCA Kiddies Klub. 10.0—Teaberry Baseball Scores. 10.5—Dad Lawrence Dispatch. 10.10—KDCA Artist Bulletin. 10.12—Programme Announcements. 10.15—Roseyhits by A. K. Rowswell. 10.30—Stories for Children by Louise Guiraud. 10.45—Little Orphan Annie, from New York. 10.50—Temperature Report. 10.51—Weather Report. 11.0—Time Signal. 11.1—Temperature Report. 11.2—Who's News Today. 11.7—Teaberry Sport Review. 11.12—Press News-Reeler. 11.15—Programme to be announced. 11.30—Hotel William Penn Orchestra. 11.50—Time Signal. 12 midnight—3.0 a.m. (Sunday)—New York Relay. 12 midnight—Peppodent Amos 'n' Andy. 12.15—Tastyest Jesters. 12.30—Sacred Songs. 1.0—Danger Fighters. 1.30—Dance with the Countess D'Orsay. 2.0—Porto-Rican, American Tobacco Programme. 2.40—



SATURDAY continued

The First Nighter. 3.0—Programme to be announced. 3.15—Homey and Old Fashioned Quartet. 3.30—Twenty Fingers of Sweetness, from New York. 3.45—McCravy Brothers from New York. 4.0—Time Signal. 4.1—Terry Sport Review. 4.11—Temperature Report. 4.12—Weather Report. 4.15—Press Last Minute News. 4.20—Messages to Explorers and Missionaries.

PRAGUE (Czechoslovakia) 614 kc/s (488.6 m.); 120 kW. Transmits at intervals from 6.15 a.m. 6.0 p.m.—Talk on Infinity. 6.10—Agricultural Report. 6.15—Talk: Women in Business. 6.25—German Transmission: Announcements. 6.30—Talk: The Instruments of the Orchestra. 7.0—Mandoline and Guitar Concert. March, La Villanella (Sartori). Waltz, Tramoto (Sartori). March, Salve lucerna (Gargano). Popular Potpourri (Sartori). March, Al Brenere (Turati). 7.40—Popular Programme. 9.0—Announcements. 9.5 (approx.)—Brass Band Concert, conducted by Koleta. 10.0—Time and News. 10.15—Announcements. 10.20—See Moravská-Ostrava.

RADIO-SUISSE ROMANDE (SOTTENS) (Switzerland) 743 kc/s (403 m.); 25 kW.; Lausanne, 442 kc/s (680 m.); and Geneva, 395 kc/s (760 m.). 12.30 p.m.—Time Signal from Neuchâtel Observatory. 12.31—Weather Forecast and News Bulletin. 12.40 (from Lausanne)—Gramophone Concert of Light Music. 1.0—Exchange Quotations. 1.5—Gramophone Concert (contd.). 2.0—5.0—Interval. 5.0—Time Signal from Neuchâtel Observatory. 5.2 (from Vevey)—Thirty-third Festival of Swiss Music. Quartet for Two Violins, Viola and Cello, Op. 8 (Hans Joachim Schaeuble). Neues Hofen—Song Cycle for Mezzo-Soprano and Pianoforte, Op. 27 (Werner Wehrli). Suite for Cello and Pianoforte (Walter Lang) by Franz Hindermann and the Composer. Two Songs for Voice and Pianoforte (François Demierre) by Isabelle Bard and the Composer. Quartet for Two Violins, Viola and Cello (Binet), by the de Ribapierre Quartet. Quartet for Clarinet, Trumpet, Bassoon and Pianoforte (Rudolf Wittelsbach).

7.0—Weather Forecast. 7.1 (from Geneva)—Dance Music on Gramophone Records. 7.30—Talk: The Week in International Politics. 7.55—Announcements. 8.0—Orchestral Concert, conducted by Robert Echenard. 9.0 (from Geneva)—Two Stories, by Pencil. 9.20 (from Lausanne)—Concert of Country Music by the Orchestra "Les Vourzis" of Vevey. Humorous Anecdotes in the interval. 10.0—Weather Forecast and News Bulletin. 10.10 (from Montreux)—Dance Music, relayed from the Restaurant "Le Perroquet." 11.30 (approx.)—Close Down.

ROME (Italy) Ente Italiano Audizioni Radiofoniche (IRO). 680 kc/s (441 m.); 50 kW. Relayed by Naples, 941 kc/s (319 m.) and zRO, 637 1/2 kc/s (43 m.). 8.15—8.30 a.m.—Giornale Radio and Announcements. 12 noon—Gramophone Records of Variety Music. 12.35—Weather Forecast. 12.45—2.0—Sextet Concert with Walter Somme (Cello), I. Histoire d'un Pierrot (Costa). Serenade, To you (Czibulka). Intermezzo, Bambole Lenci (Marcello). Cello Solus: (a) Intermezzo, Goyescas (Granados-Cassado), (b) Hungarian Caprice (Dukker). Selection from "La Mascotte" (Audran). Pimpinella (Zucconi). Le baruffe trasteverine (Cardoni). In the intervals at 1.15—Giornale Radio and Exchange, and at 1.30—Time and Announcements. 5.0—Exchange, Report of the Royal Geographical Society, Giornale Radio and Announcements. 5.15—Reading. 5.30—Duets for Two Sopranos by Virginia Brunetti and Maria Soccorsi. Quando lo stral spezzai (Paisiello). La pesca (Rossini). Through the Leaves (Rubinstein). 5.45—Concert. Selection from "Semiramide" (Rossini). The Waltz you gave to me (King). Intermezzo, Mars and Venus (Ganne). Violin Solo: Tambourin chinois (Delibes). Nocturne from "Coppelia" (Delibes). You didn't have to tell me (Donaldson). 6.15—Giornale dell'Enit. 6.25—Talk: Bologna. 6.55 (Naples)—Shipping and Sports Notes. 7.0—Atmospheric Signals. Lesson in Morse, Agricultural Notes, Giornale Radio and

Press Review. 8.0—Time, Announcements and Gramophone Records of Variety Music. 8.30—Sports Notes and Announcements. 8.45—"I Puritani" (The Puritans)—Opera in Four Acts (Bellini). In the intervals—Review of Books and Talk: At Table with the Chinese. News after the Programme.

SCHENECTADY (U.S.A.) General Electric Company (WGY). 790 kc/s (379.5 m.); 50 kW. Relayed at intervals by W2XAF on 9,530 kc/s (31.48 m.) and by W2XAD on 15,340 kc/s (19.56 m.). Transmits at intervals from 11.45 a.m. 9.0 p.m.—Alex Drassein's Orchestra from New York. 9.45—The Studio Ensemble. 10.15—11.0—New York Relay. 10.15—Skippy. 10.30—Soloist. 10.45—Lundt Trio. 11.0—Joe and Eddie. 11.15—Waldorf Orchestra from New York. 11.30—American Trio. 11.45—De Witt Clinton Orchestra. 11.55—Baseball Scores. 12 midnight (WGY only)—De Witt Clinton Orchestra. 12 midnight (W2XAF only)—Stock Reports and News Items. 12.15 a.m. (Sunday)—Weather Report. 12.16—1.15—New York Relay. 12.16—Laws that Safeguard Society. 12.30—June Pursell in Popular Ballads. 12.45—Trials of the Goldbergs. 1.0—Bridge Lesson. 1.15—Bernard Silberg (Cello). 1.30—4.0—New York Relay. 1.30—National Advisory Council in Radio on Education. 2.0—Drama K-7. 2.30—Club Valspar. 3.0—Lucky Strike Dance Hour. 4.0—De Witt Clinton Orchestra. 4.30—5.30—New York Relay. 4.30—Hotel New Yorker Orchestra. 5.0—Ralph Kirbyer (Dream Singer). 5.5—Buddy Rogers and his California Cavaliers. 5.30—New Kenmore Orchestra. 6.0 (approx.)—Close Down.

SCHWEIZERISCHER LANDESSENDER (BEROMÜNSTER) (Switzerland) 653 kc/s (459 m.); 60 kW.; Basle, 1,229 kc/s (244.1 m.); and Berne, 1,220 kc/s (246 m.). 12.28 p.m.—Time Signal from Neuchâtel Observatory. 12.30—Weather Report and News Bulletin. 12.40—Variety Programme on Gramophone Records. 1.15 (approx.)—Surprise Item, followed by Variety Programme (contd.). 1.50—Interval. 3.30—Popular Music on Gramophone Records. 4.30 (from Basle)—Talk for Workless: The Basle Municipal Labour Market. 5.0 (from Basle)—Accordion Concert by the Meister Accordion Club. 5.30 (from Basle)—Health Talk. 6.0—Variety Music on Gramophone Records. 6.15 (from Basle)—Listeners' Quarter of an Hour. 6.30 (from Zürich)—Technical Talk. 7.0 (from Zürich)—Chimes and Market Prices. 7.30—Musical Programme. 8.0 (from Basle)—Swiss Programme for Foreigners. Programme by the Basle Orchestra, conducted by Gottfried Becker; Swiss Songs by the Basle Revue; Choir and Readings by Werner Hausmann, Otto Kluth, and Alois Rüchli from the Works of Swiss Authors in German, French and Italian. 9.30—Weather Forecast and News Bulletin. 9.45—Old and New Dance Music on Gramophone Records. 11.0 (approx.)—Close Down.

STOCKHOLM (Sweden) Radiotjänst (SASA). 689 kc/s (436 m.); 55 kW. Relayed by Baden, 244 kc/s (1,229.5 m.); Göteborg, 932 kc/s (322 m.); Hörby, 1,166 kc/s (257 m.); Motala, 222.5 kc/s (1,348 m.); Östersund, 389 kc/s (770 m.); and Sundsvall, 554 kc/s (542 m.). Transmits at intervals from 7.20 a.m. 5.30 p.m.—Gramophone Concert of Popular Music. 6.30—Variety Programme. 7.15—Weather Forecast and News Bulletin. 7.30—Talk: Sweden as a Country for Tourists. 7.50—(from Östersund)—Military Band Concert. 8.50—Talk. 9.45—Weather Forecast and News Bulletin. 10.0—Dance Music by the Helge Lindbergs Orchestra. 11.0 (approx.)—Close Down.

STRASBOURG (France) Radio-Strasbourg (PTT). 869 kc/s (345 m.); 11.5 kW. 11.30 a.m.—Gramophone Concert of Operatic and Light Music. 12.45—News in French and German. 1.0—Time Signal. 1.2—Gramophone Concert (continued). 2.0—Talk in French. 2.15—Dance Music on Gramophone Records. 3.15—3.45—Interval. 3.45—Music Talk in French with Illustrations: J. S. Bach. 4.0—Dance Music on Gramophone Records. 4.45—Talk in French: The Place of the Cinema in Social Life. 5.0—Orchestral Concert, conducted

by Roskam. March, The Honey-moon (Rosey). Waltz, Fin de siècle (Waldteufel). "Le Maçon" (Auber). Andalusian Romance (Sarasate). Selection from "Tristan und Isolde" (Wagner). Ballet Music from "Hérodiade" (Massenet). Nuits d'étoiles (Debussy). Spanish Caprice (Volkmann). 6.0—French Lesson in German. 6.15—Horticultural Talk in French. 6.30—Gramophone Concert. Selection from "Benvenuto Cellini" (Berlioz). Hungarian March (Berlioz). Potpourri Fortissimo (Kálmán). Selection from "Zampa" (Hérold). Künstlerleben (Joh. Strauss). Selection from "The Daughter of the Regiment" (Donizetti). Aie pitie! (Bakaleimkov). Moscow Bells (Karnavalov). Le tango des mimosas (Rawson). La vraie valse de Minuit. 7.30—Time Signal. 7.32—News in French and German. 7.45—Gramophone Records of Light Music. 8.30—"The Grand Mogul"—Opera in Four Acts (Audran). 10.30—Dance Music from the Savoy. 12 midnight (approx.)—Close Down.

STUTTGART (MÜHLACKER) (Germany) Süddeutscher Rundfunk. 832 kc/s (360.5 m.); 60 kW. Relayed by Freiburg, 527 kc/s (570 m.). Transmits at intervals from 6.0 a.m. 10.0 a.m.—Song Recital by Hermann Lingor. Two Songs (Grieg): (a) Eros, (b) Ein Traum. Two Songs (Liszt): (a) Du bist wie eine Blume, (b) Es muss ein Wunderbares sein. Two Songs (Mendelssohn): (a) Durch den Wald, (b) In dem Walde. 10.20 (from Freiburg)—Talk for Schools. 11.0—Time and News, followed by Concert of Chamber Music in connexion with the Fifteenth German Bach Festival, relayed from the University, Heidelberg. 12 noon—Weather Report. 12.5—Sponsored Music. 12.15 (approx.)—Concert from Frankfurt. 12.50—Time, Weather, News and Programme Announcements. 1.0—Gramophone Concert. Heinrich Schlusnus: (a) Aria from "Czar and Carpenter" (Lortzing), (b) Aria from "Zaza" (Leoncavallo). Martin Abendrott: (a) Odins Meeresritt (Löwe), (b) Heinrich der Vogler (Löwe). Frits Soot: Brindisi from "Cavalleria Rusticana" (Mascagni). Helge Roswaenge: Aria from "Il Trovatore" (Verdi). The Berlin State Opera Orchestra: (a) Intermezzo from "Cavalleria Rusticana" (Mascagni), (b) Ballet Music from "Aida" (Verdi). Marguerite Perzas: Two Arias from "Madame Butterfly" (Puccini). Theodor Scheidl: (a) Aria from "A Masked Ball" (Verdi), (b) Aria from "Orbello" (Verdi). The State Opera House Choir: Selection from "Aida" (Verdi). Herbert Janssen: Two Arias from "Tannhäuser" (Wagner). Karin Branzell: (a) Aria from "Der Evangelimann" (Kienzl), (b) Aria from "The Rhinegold" (Wagner). Marcell Wittrich: (a) Uebers Meer (Krome and Rotter), (b) Schlaf ein, mein Blondengelein (Perez Freire). Vera Schwarz: O schöner Mai; from "Eine Nacht in Venedig" (Johann Strauss).

2.30—Choral Concert, conducted by Otto Alt. Male Voice Choir: Du fernes Land (Uthmann). Women's Choir: Der Freiheit Mäienritt (Uthmann). Mixed Choir: Frühlingsbotschaft (Uthmann). Mixed Choir: Ostern am Tiberstrom (Vierling). Mixed Choir: Erlöse dich (Lendvai). 3.0—Reading from the Works of Theodor Storm. 3.30—See Frankfurt. 4.30 (from Mannheim)—Concert by the Riehl Schrammel Quintet. Erzherzog-Albrecht-Marsch (Komzak). Tölzer Schützenmarsch (Kretzner). Konzert-Ländler (Riehl-Kastl). Wiener Weisen (Schmidt). Gaitaler Jägermarsch (Koschat). 5.0—Orchestral Concert, conducted by Gustav Görlich. Soloist: Oskar Wolf (Flute). Selection from "Pique Dame" (Tchaikovsky). Selection from "Don Carlos" (Verdi). Romance for Flute (Saint-Saëns). Overture, "Nakisir Hochzeit" (Lincke). Waltz, Goldregen (Waldteufel). Volksliedchen und Märchen (Komzak). Maritana Waltz (Dellinger). Potpourri of Marches (Komzak). 6.15—Time and Sports Notes. 6.25—Talk: Goethe and Technique. 6.50—Talk: Problems of the Future Career of University Students. 7.15

—Time and Weather. 7.30—See Frankfurt. 10.20—Time, Weather, News and Programme Announcements. 10.45—Concert from Langenberg. 12 midnight (approx.)—Close Down.

TOULOUSE (France) Radiophonie du Midi. 779 kc/s (385 m.); 8 kW. Transmits at intervals from 12.30 p.m. 5.0 p.m.—Transmission of Pictures. 5.15—Exchange Quotations. 5.30—Orchestral Selections. Fête polonoise (Chabrier). Pastorale d'été (Honegger). 5.45—Songs from "Werther" (Massenet). 6.0—Accordion Solos. 6.15—Orchestral Selection: Ballet égyptien (Luigini). 6.30—Exchange Quotations and Racing Results. 6.45—Sound Film Music. 7.0—Orchestral Selections. 7.15—Songs from (a) "The Gipsy Baron" (Joh. Strauss), (b) "Ciboulette" (Hahn) and (c) "La Mascotte" (Audran). 7.30—News Bulletin. 7.45—Orchestral Selections. 8.15—Songs (Massenet) from (a) "Manon" and (b) "Le Roi de Lahore." 8.45—Military Music. A Hunting Scene (Bucalossi). The Mill in the Black Forest (Eilenberg). Overture, Morning, Noon and Night (Suppe). 8.45—Accordion Solos. 9.0—Concert. Desire (Manfred). Le proennoir des deux amants (Debussy). J'ai compris (Lenoir). Solveig's Song (Grieg). Dance Music. 9.30—Orchestral Selections. 9.45—Songs from (a) "Ciboulette" (Hahn) and (b) "My Wife" (Irving). 10.0—Orchestral Selections. 10.30—North African News. 10.45—Orchestral Selections from (a) "The Thieving Magpie" (Rossini) and (b) "The Magic Flute" (Mozart). 11.0—Concert of Light Music. 12 midnight—Weather and Announcements. 12.5 a.m. (Sunday)—English Music. 12.30 a.m. (approx.)—Close Down.

TRIESTE (Italy) Ente Italiano Audizioni Radiofoniche. 1,211 kc/s (247.7 m.); 10 kW. Transmits at intervals from 8.15 a.m. 7.5 p.m.—Quintet Concert. In the interval at 7.25—French Lesson on Gramophone Records. 8.0 till Close Down—See Turin.

TURIN (Italy) Ente Italiano Audizioni Radiofoniche. 1,096 kc/s (273.7 m.); 7 kW. Relayed by Milan, 905 kc/s (331.5 m.), and Genoa, 959 kc/s (312.8 m.), and Florence, 599 kc/s (500.8 m.). Transmits at intervals from 8.15 a.m. 6.45 p.m.—Agricultural Notes. 7.0—Announcements. 7.5—Musical Selections. Stars and Stripes (Souza). Serenata fiorentina (Castagnoli). Selection (Katscher). Selection from "Lilac Time" (Schubert-Berté). 7.30—Time, Announcements and Gramophone Records of Variety Music. 8.0—Giornale Radio and Weather. 8.15—Musical Selections. Pulcinella (de Nardis). Chants russes (Lalo). Intermezzo, Punch and Judy (Herbert). Cupido in ronda (Fiorini). 8.45—Talk: Events and Problems. 9.0—Programme to be announced. In the interval: Review of New Books. 11.0—Giornale Radio, and Dance Music from the Fiaschetteria Toscana, Milan. 11.55—News Bulletin.

VIENNA (Austria) Radio-Wien, 581 kc/s (517 m.); 15 kW. Relayed by Graz, 852 kc/s (352.1 m.); Innsbruck, 1,058 kc/s (283 m.); Klagenfurt, 662 kc/s (453.2 m.); Linz, 1,220 kc/s (246 m.); and Salzburg, 1,373 kc/s (218 m.). Transmits at intervals from 9.30 a.m. 4.0 p.m.—Opening of the International Workers' Dwellings Exhibition, relayed from Lainz. 4.30—Martina Wied reads from her own Works. 5.0—Orchestral Concert. Overture, "The Land of Smiles" (Lehár). Lagoon Waltz from "A Night in Venice" (Johann Strauss). Dance of the Waves from "The Loreley" (Catalini). Violin Solo: Ave Maria (Hummer). Intermezzo from the Third Act of "L'Amico Fritz" (Mascagni). Selection from "Boccaccio" (Suppé). Mezzanotte a Venezia (Ranzato). Potpourri, Von Wien durch die Welt (Hruby). Tango: Du darfst nicht glauben, dass du der einzige bist (Sieczynsky). 6.35—Music of the Streets"—Talk with Gramophone Illustrations. 7.5—Topical Programme.

7.35—Recital for Two Violins. Sonata in D for two Violins, Op. 23 (Arthur Willner). Canon and Fugue Op. 131 b (Bach). Duet in E Flat, Op. 39 (Spohr). Passacaglia for two Violins (Handel). 8.10—Time, Weather and Programme Announcements. 8.25—"John Law"—a Radio Play (Paul Frischauer). 10.0—News and Weather. 10.15—Concert by the Adolf Pauscher Orchestra with Viktor Sternau (Vocalist). Marching Song, Ein bischen Freude (Michael Krausz). Slow Foxrot, Es gibt noch Märchen (Lehár). Foxrot, Joszi (Böhm-Sobotka). Waltz: Nur um dich zu lieben, möcht ich ewig leben (Stolz). A Life Story in Melody and Verse (Petra-Krausz). Foxrot, Täglich Musik (Mackeben). Tango, Willst du nicht was Liebes mir sagen (Kálmán). Tango from "The Song of Love" (Johann Strauss-Korngold). Foxrot, Es ist so wunderschön aufzusteigen (Michael Krausz). Jazzinfonietta in D (Adolf Pauscher). Paso doble (Sylvio Ricardo). Rumba, Wienerwald (Abraham). Third Waltz Potpourri (Robrecht). Foxrot, Schlagertrepp (Damberg). Tango, Wie gern möcht ich dich verwöhnen (Jurmank-Kaper). Tango: Süßer, süßer (Wiga). Foxrot, Ausgeschlossen (Emil Schaele). Rumba: Sag, was sagt der Don zur Donna in Sevilla (Stolz). Foxrot, Wenn im Mai in der Kriemut (Max Pfeffer). Foxrot, Ist das dein Glas? (Peter Kreuder). Onestep, Trink mit mir auf Du und Du (Fenster).

WARSAW (Poland) Polskie Radio, 212.5 kc/s (1,411 m.); 120 kW. 11.20 a.m.—Aviation Weather Report. 11.25—Interval. 11.45—Press Review. 11.58—Time Signal and Bugle Call from the Tower of St. Mary's Church, Cracow. 12.5 p.m.—Programme Announcements. 12.10—Educational Programme from Luców. 12.45—Light Music on Gramophone Records. 1.20—Weather Report. 1.25—Popular Music on Gramophone Records. 1.35—Interval. 2.45—Variety Music on Gramophone Records. 3.5—Economic Report and Exchange Quotations. 3.15—Answers to Correspondents on Military Questions. 3.25—Review of Periodicals. 3.45—Hydrographic Report. 3.50—Light Music on Gramophone Records. 4.10—Answers to Correspondents. 4.30—Talk: The World Crisis and Technics. 4.55—Programme for Children relayed from Luców. 5.20—Talk on Stanislas Moniuszko. 5.30—Moniuszko Song Recital by M. Janovsky. 5.55—Interval. 6.0—Religious Service relayed from Wilno, 533 kc/s (563 m.). 7.0—Miscellaneous Items. 7.25—Agricultural Report. 7.35—Programme Announcements. 7.40—Sports Notes. 7.45—Radio Journal. 8.0—On the Horizon. 8.15—Concert of Light Music by the Station Orchestra, conducted by S. Navrot. Soloist: G. Banasz-kiewicz (Tenor). Overture, "Gri-gri" (Lincke). Birthday Serenade (Lincke). Waltz, Gold and Silver (Lehár). Gang durch den Märchenwald (Meyer-Helmond). Habanera (Filippucci). Three Songs from "Les Cloches de Corneville" (Planquette). Potpourri, From Vienna through the World (Hruby). Serenade, Lissonja (Armandola). Tenor Solos: (a) Still wie die Nacht (Böhm), (b) Air (Mikulsky), (c) Réverie (Schir), (d) Air from "Countess Maritza" (Kálmán). Czardas from "Der Geist des Wojewoden" (Grossmann). Waltz, Abendsterne (Lanner). Italian Serenade (Helm-burg-Holmes). Gavotte, Clementine (Czibulka). Polka from "Gasparone" (Millocker). Mazurka (Vronsky). 9.55—Feuilleton. 10.10—Chopin Pianoforte Recital by Mme. Robovska. Polonoise in B Flat Minor. Sonata in C Minor, Op. 4. 10.40—Radio Journal. 10.45—Weather and Police Notes. 10.50—Dance Music.

ZAGREB (Yugoslavia) Radio-klub-Zagreb. 977 kc/s (307 m.); 0.75 kW. Transmits at intervals from 12.20 p.m. 8.15 p.m.—Educational Programme. 8.30—Chamber Music Concert by the Weidenhoffer Quartet. Quartet, Op. 76, No. 4 (Haydn). Quartet, Op. 34 (Dvorák). 9.45—Dance Music by the Bingo Boys Orchestra, relayed from the Hotel Esplanade. 10.30—News and Weather. 10.40—Dance Music (contd.). 11.30 (approx.)—Close Down.



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— writes Norfolk user

### Read this letter:

Sheringham,  
Norfolk.  
May 4th. 1932

Dear Sirs,

Some time ago I bought one of your Model 732 battery operated Receivers with variable Mu valves, and am simply delighted with its performance, I don't think there is any battery Set to compare with it for selectivity and ease of working.

I have given it every conceivable test, and there is no interference from any station providing one knows how to handle the volume and reaction controls. Conditions in this district are most difficult, the German, Dutch and Danish stations being so powerful. I use a Cossor Pentode as well which brings up the weak stations in an amazing manner.

Everyone at all interested in Wireless ought to know of this wonderful Set, and you can use this letter as a testimonial in any way you like as the Receiver is really a triumph of the British Wireless Manufacturer.

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Yours truly,  
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