



# WORLD-RADIO

## DOMINION & FOREIGN PROGRAMMES

A Radio Concert and the  
"Oulad-Nails."

Vol. VI. No. 135.

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

FRIDAY, FEBRUARY 24, 1928.

Two Pence.

### PRINCIPAL CONTENTS

Le Don Divin de la Radiophonie  
Par le R. P. Pierre Lhande, S.J.  
(In French)

Postage Stamps and Radio

Competition No. 6

Wireless Step by Step

### WORLD-RADIO

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(Revised)

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# WORLD-RADIO

Vol. 6. No. 135.

FRIDAY, FEBRUARY 24, 1928.

Two Pence.

## A Radio Concert and the "Oulad-Nails" The Dancing Girls of the Desert

By MICHEL RAINEAU

AT the invitation of a friend of mine, old Omar Bën Mohammed, I have just visited Tuggurt, the large Saharan town, where representatives of all the nomad tribes of the great African desert come together. When my native friend, who is a strict observer of the Prophet's law and, at the same time, the owner of a Moorish inn in Algiers, asked me to accompany him, I very willingly complied with his wish, as I knew

the cemetery for their weekly walk, or to the public baths. Each one was carefully veiled in a large white cloth, of silk or cotton, which made her look like a walking shroud; and behind these women came their little ones, dressed solely in the rays of the sun, playing at hide-and-seek and laughing heartily.

In the same street, which was a covered one, I was able leisurely to examine all the trades of the Sahara.

There I saw gold and silver smiths (most of them Jews), barbers, embroiderers, and weavers. The last-named are the makers of those heavy carpets which adorn the tents of the lords of the desert. I also saw saddlers, shoemakers, dyers. They, one and all—the majority seated cross-legged—worked steadily on the threshold of their very small shops, and used primitive tools.

Near the mosaic-tile stove, on which water was boiling for the tea and coffee, three negroes and one Arab were seated in a ring on a coarse carpet, playing at chess; in a corner of the room, a group of merchants were listening attentively to a tale-teller's stories which celebrated the speed of the horse or the courage of warriors of old; a little farther, a scholar read over, in between mouthfuls of burning coffee scented with mint, the dirty pages of a book; and by the scholar's side was seated a beggar, who recited aloud his long chaplet and very patiently waited for alms.

But Tuggurt is not only the town of coffee-houses, of the desert merchants, and of palm gardens; it is also the leading town in regard to



A group of dancing girls before their tents.



Native women of the Algerian south, busy embroidering.

that Tuggurt was really worth the trouble of a long trip. As to Omar himself, he was going there with a view to purchasing a coffee-house for his son-in-law.

Tuggurt is situated about one hundred and fifty miles south of Biskra, in the midst of ever-green palm gardens, the foliage of these tall trees stretching away for some sixty miles. The town constitutes the largest market to be found in the whole of the Sahara, and on this account it is called by Arabs "The Belly of the Desert."

As Biskra is connected with Algiers by rail, the journey to Tuggurt is neither long nor tiring, while, on the other hand, there is much that makes it most interesting.

During our journey across the endless stretches of sands and oases, we came upon innumerable camel caravans, for it was the time of the date crop; and we saw the beasts, heavily laden with the precious fruit, slowly proceeding along the numerous tracks, while, walking behind them, the camelmen, with a piece of jasmine in their nostrils, joyfully sang the praises of Allah, the beauty of the "houris," and the scented taste of their dates.

After that vision of the life of the desert, we had a view of another and quite different, though equally Biblical, one on entering Tuggurt. Here, the first persons we met were groups of women going to

We soon entered the coffee-house old Omar intended to purchase. A spacious and bare room, it was at the time of our visit filled with the usual customers, and while my friend spoke with the owner, I amused myself by looking at the others.

A coffee-house in Moslem countries, and more especially in the lands on the border of the desert, is a veritable public club, where all the male population of the town are wont to foregather; and there is, therefore, no better place where the foreigner can study the Mussulman soul. Generally speaking, it is from the coffee-houses that news—after being born there—flies, as quickly as the wind, to the hundred villages and oases around.

the Dancing-girls of the Sahara, who are known as the Oulad-Nails (the Children of the No. 1 tribe). In that tribe, the young women are allowed by their parents—in accordance with a custom dating back to probably immemorial times—to go and live in the towns, and earn their living there by dancing—and often by more evil ways. Many a merchant has, thanks to some of these "professional beauties," lost, in a single night, the fruit of a year's work! As soon as they have earned enough money, the young women return home and marry.

Djelfa, which lies about eighty-six miles to the south of Algiers, is the capital of the Oulad-Nails' homeland; but, while they are to be seen in every Saharan town, Tuggurt is the town they like most, and they have even founded there a Choreographic Conservatoire! In October and November of each year, a large number of them arrive in the town (known as "The Belly of the Desert"), and several times a week, during their short sojourn there, they perform public dances. These dances, given at an hour when the sun has sunk behind the red horizon of sand, take place in a small market-place, which is turned, for the occasion, into an open-air Conservatoire which, with the sky for its roof, has the numberless stars overhead for its lights.



"The Belly of the Desert."

(Continued on page 270.)

# Viâ Ether

AS I write these lines the Carnival season on the Continent is in full swing, and many are the late hours I have spent in the company of my superhet, in an endeavour to recall, by means of radio, the wild and noisy scenes I have witnessed personally in years gone by. Paris, Brussels, Cologne, Munich, and Vienna have all in turn been brought back to my memory. My seven-valver has proved a helpful friend; in the solitude of my wireless den it has taken me daily to distant cities; it has conveyed to me full and detailed descriptions of these mad processions of symbolical *tableaux vivants* dragged through the streets of an otherwise sane metropolis; if it has not actually placed them before my eyes—and this may become a reality within the next few years—it has enabled me to visualise the crowded thoroughfares, gaily bedecked with flags and multi-coloured paper streamers, the pavements and roadways strewn with bright-hued confetti, and teeming with a merry and irresponsible throng of devotees of Prince Carnival. The strains of the military and civic bands, the encouraging shouts of the populace, the blare of the weird instruments merely adopted for the sake of noise: all these sounds brought to my little room have helped me to stage the complete picture in my imagination. Without doubt, this compelling festival—not unwillingly, perhaps—has enrolled me in the Distinguished and Ancient Order of Night Birds. It has been a mad week, my friends, but one to which I shall look forward again in 1929.

Did you hear the Dresden Opera House Ball, one of the greatest events of the winter season in that delightful city? It was by mere chance I picked up this transmission on one night and held it from 9.30 p.m. until the early hours of the following morning. The fact that it would be relayed to both the Dresden and Leipzig transmitters was not mentioned in the programmes; it was a happy afterthought, which added considerably to the interesting broadcasts of the past ten days. At the time it appeared to me that more than one microphone was used, and that we were being personally conducted through the various ballrooms. It transpires that there were many pick-up points, one of which, at a late hour, provided us with a very lively and amusing cabaret show. The veriest tyro must have realised that at least three different orchestras were taking part in the revels.

In the entertainments to be broadcast over this week-end from the Continental stations, I find items which break away from the usual round of conventional programmes. Leipzig, for instance, at 7.15 p.m., favours us with a comic opera by Francois Boieldieu, namely, *Jean de Paris*, a work which I cannot recall having previously heard broadcast. It was produced in Paris in 1812, Boieldieu having written it on his return from Russia, where he had spent eight years in the service of the Czar; for some time, although a Frenchman, he was Conductor at the St. Petersburg Opera House. The plot deals

with a French Dauphin who, refusing to marry the Princesse de Navarre, chosen for him as a bride, meets her in a Pyrenees inn. Under the *incognito* of Jean de Paris he falls in love (operatically) with her, and all ends happily. To Radio Paris, at 8.30 p.m., we must necessarily turn for a transmission of *Snegourotchka*, by Rimsky-Korsakov; this opera is to be performed by soloists and members of Russian choirs. *The Snow Princess* is based on an old Russian folk legend: it is the story of the snow maiden, the daughter of King Frost and Spring; it was first produced at St. Petersburg in 1882.

To-night, also at 7 p.m., Frankfurt takes its entertainment from the Wiesbaden Kur-saal, which on the point of opening its annual season already boasts of a very large orchestra. At the same hour Stuttgart continues its series of radioviews entitled *Chasing Happiness*. To-night we reach Colombo on our quest round the world. Naples, at 7.50 p.m., as usual, takes us over to one of its many theatres for a relay of Rossini's opera, *The Barber of Seville*, which may also be captured from Bratislava to-morrow at 6.30 p.m. Radio-Lyon at 9.15 p.m. presents a studio version of *Gypsy Love*, and nearer home, "dear dhirty Dublin," at 8 p.m., gives us a lecture recital of Wagner's *Lohengrin* relayed from the Unitarian Church, St. Stephen's Green, in the Free State capital. By the way, it may also interest you to know that at 9.30 p.m. you may pick up from Kattowitz a talk in French by the station Director, Professor S. Tymieniecki; at that hour, weekly, he divulges by radio the contents of his mail bag.

To-morrow evening (Saturday, February 25) is replete with good transmissions. We find at Munich, at 6.30 p.m., a three-act opera buffa, *Don Pasquale*, relayed from the National Theatre. It is considered Donizetti's greatest work; produced on January 4, 1843, at the Théâtre des Italiens, Paris, it was based on Anelli's old opera, *Ser Marc Antonio*, of which the book was by Guannarano. Donizetti was a prolific composer, for he wrote in all sixty-six operas. On this evening Hamburg will most certainly appeal to most British listeners with its broadcast of Gilbert and Sullivan's *Mikado*. Whether it is the original version or that specially revised for its recent revival at Berlin, I do not know, but in the production you will find the melodies which in their time captivated all Europe. *The Mikado* first saw the light in London at the Savoy Theatre on May 14, 1885. The theatre, as a matter of fact, was specially built for the Gilbert and Sullivan productions. In 1907, I believe, the performance of this comic opera was forbidden in Great Britain by the Censor, as it was thought that it might wound the susceptibilities of the Japanese nation. For a liberal excerpt of *Madame Butterfly*, try for Rome at 8 p.m. or one hour later, travel to Dublin for a studio performance of Verdi's *La Traviata*. *Lysistrata*, a delightful operetta by Lincke, is to be found at Madrid at 10.15 p.m.

In the Frankfurt programme, advertised to begin at 7.15 p.m., I notice a studio demonstration by Dr. Guido Bagier of Berlin, on the talking film, *Tri Ergon*; it may be worth our while to devote a few minutes to this station. Radio Toulouse, at 8.45 p.m., gives us a Spanish Festival—another unit of its International Series—and Lille, at 8.30 p.m., takes us over to *Sous le Bois* for a local concert in which the Municipal Brass Band (of which no doubt the members of the Fire Brigade are members—a proverbial custom in France) will take a prominent part.

Sunday, February 26, brings us, at 6.30 p.m., from the New Theatre, Leipzig, via the local transmitter, a stage performance of Mascagni's *Cavalleria Rusticana*, followed by Leoncavallo's *I Pagliacci*, a combination which could be aptly termed the Operatic Heavenly Twins. Vienna, at 7.5 p.m., broadcasts one of Edmund Hysler's most popular operettas, *Kunstler Blut*—call it, if you like, *An Artist's Temperament*; it deals with theatrical life. I notice that Brussels for its dance music has now installed a microphone in the tea room of the well-known Taverne-Royale, at the corner of its very fascinating Galeries; for many years this has been a popular daily resort of the *bon bourgeois*, at the time of the *aperitif* and the *posse-café*. Regularly on Saturdays and Sundays, at 5 p.m., you may now hear the relay of the tea-time dance band, and an excellent one it is, too.

On Monday, February 27, at 8.15 p.m., tune in to Hilversum for a performance of Paer's amusing opera buffa, *Le Maître de Chapelle*, first heard in Paris in 1821, and later produced at New York as *Il Maestro di Cappella* in 1923. It is an amusing plot relating the story of one Barnaba, a music master who composed an opera *Cleopatra* and who, imitating various instruments, endeavoured to teach his pretty cook Gertrude to sing the score and make love to the hatstand in the hall, a piece of furniture which represented Mark Antony! The Dutch station also includes in its programme, at 9.50 p.m., Offenbach's sparkling one-act operetta *The Betrothal by Lantern Light*.

On Tuesday, February 28, you may take your weekly trip to Kattowitz or Posen at 6.20 p.m., with the assurance that you will be conducted to the local opera house; Stockholm also, at 6.15 p.m., will broadcast a stage performance of Bizet's *Carmen*, and at 6 p.m. Vienna rings up the curtain on Beethoven's *Fidelio*. Leipzig on the following evening (Wednesday, February 29) continuing its series of classical operatic works, promises, at 7.5 p.m., a studio rendering of Pergolesi's comic intermezzo *Il Maestro di Musica*, which, composed in 1731, when he was twenty-one years of age, was first performed by his fellow students at the Monastery of St. Agnello Maggiore. Poor Pergolesi died when he was but twenty-six years old; he is mainly remembered by his comic opera *La Serva Padrone* (The Maid as Mistress) so often broadcast by the Continental stations.

JAY COOTE.

# Dominion and Foreign Broadcasting Intelligence

## CANADA

(From our Montreal Correspondent.)  
The C.N.R.'s Newest Studio

Montreal's newest radio studio (CNRM), operated by the Canadian National Railways, was opened recently with a successful programme of vocal and instrumental music of varied character. This studio is on the 3rd floor of the Willis Building, St. Catherine Street West, and is a chamber 24 ft. by 30 ft. with a height of 15 ft.

From the Willis building wires lead to the central control point in the head office of the Canadian National Telegraphs. From this latter building, in St. Sacrament Street, telephone circuits connect with CNRO, at Ottawa, and CNRQ, at Quebec. From there it is also possible to connect with CNRT, at Toronto, and CNRW, at Winnipeg, for special broadcasts. During the present year it is planned to make these distant stations a constant part of the chain which thus offers the most extensive S.B. being operated in Canada.

## AUSTRIA

(From our Vienna Correspondent.)  
Vienna's "Harry Lauder"

The Alexander Girardi celebration on Saturday, February 25, in the studio of Radio Wien will be a particularly characteristic Vienna feature. It will begin at 4 p.m., and many of the leading Vienna stage artists will take part. Many of the songs he sang in the last decades of the nineteenth century will be given, and much Johann Strauss music also, for the two were contemporaries. He held, and holds, in Viennese hearts a place somewhat similar to that which Sir Harry Lauder holds in British hearts, and in appearance resembled Dan Leno.

### Important Events

Beethoven's opera *Fidelio* will be relayed from the Vienna State Opera on Tuesday, February 28, and Ibsen's *John Gabriel Borkman* will be given in the studio of the Ravag on Saturday, March 3, at 8 p.m., in celebration of the centenary of the dramatist's birth (March 20, 1828).

### International Relays

On the Belgian international programme day, Sunday, March 11, Ravag will broadcast at midday a Belgian concert by the Vienna Symphony Orchestra, conducted by Professor Nilius. On the following Thursday, March 15, a concert will be relayed by Vienna from Warsaw, these international exchanges being thus resumed after a long interval.

### Ravag's Reception

Ravag is much elated by the fact that an enquiry by a Zagreb Professor throughout Yugoslavia as to which stations are best heard has placed Vienna easily at the top of the list. Stuttgart and Prague

come next, and then Frankfurt, Rome, Breslau, and Milan. In the south and south-east, a few places find Constantinople the easiest to get.

## FRANCE

(From our Paris Correspondent.)  
"Radiolo-Laporte"

The original "Radiolo" at Radio-Paris, M. Marcel Laporte, is now in charge of the Radio Nice-Juan-les-Pins station, and he writes very hopefully of the future of the station in *Radio Nice et Méditerranée*. He says he has had reports of reception from most countries in Europe. It was "Radiolo-Laporte" who started the "wireless for hospitals" movement in Paris.

## Foreign Radio Humour

### FRANCE



"Well, Doctor, he has been trying to get into communication with Honolulu for the last week."

[Pelé Mele, Paris.]

### A "Best Workmen" Exhibition

The best in French wireless craftsmanship—and the cabinet making is of a very high order—will be seen at the "Best Workmen in France" exhibition which will be held at the Grand Palais from February 24 to March 11.

### Foreign Music from Radio-Toulouse

Radio-Toulouse is not on the land-line circuit that will bring the music of foreign countries to its crystal listeners, but an excellent series of foreign music concerts is now being broadcast from that station. Congratulations from Algeria and Morocco reached them following the recent broadcast of the Moroccan programme and there are to be Chinese, Turkish and Arabic transmissions. Interesting explanatory pamphlets of the concerts are circulated to their listeners.

### The Broadcasts to Schools Question

M. Herriot, the French Minister of Education, who is, to use a French phrase, "très à la page," recently appointed a committee to study the subject

of wireless in schools, with its concomitant questions of the most suitable receiving apparatus, programmes and hours, and a report is now being drawn up.

## GERMANY

(From our Berlin Correspondent.)  
A Non-Burlesque "Mikado"

Hamburg is transmitting the *Mikado* on Saturday, February 25, at 7.0 G.M.T. The "Norag" version will follow the original book fairly closely, and will thus differ widely from the recent production at the Grosses Schauspielhaus in Berlin, which was a new burlesque, founded on Gilbert's book and with Sullivan's music.

(From our Munich Correspondent.)

### The Kaiserslautern Station

Munich's new relay station, Kaiserslautern, is almost complete, but it is not anticipated that test transmissions will begin before the end of this month.

## POLAND

(From our Warsaw Correspondent.)

### The New Lvov (Lemberg) Station

The Polish broadcasting authorities in Warsaw confirm the report that notwithstanding financial difficulties, "Polskie Radio" have decided to begin the construction of a sixth transmitting station in Poland. The new station is to be erected at Lvov (Lemberg) the capital town of the south-eastern district of Poland. The work will start early this spring and is expected to be finished by next autumn.

### Polish-Lithuanian Radio Relations

That the Lithuanian Government's official organ, *Lietuva*, began recently to print, among other foreign broadcasting programmes, those of Warsaw, Kattowitz and Posen, is considered by the Polish Press as a good omen, preceding as it does negotiations to be shortly opened between the two States. In commenting the above fact some newspapers take an opportunity to point to the vast possibilities of radio as direct and mighty promoter of knowledge of what other people are like.

### Warsaw-Berlin Experimental Transmissions

"Polskie Radio" have recently carried, on several occasions, experimental exchange of programmes between their Warsaw station and transmitter at Koenigswusterhausen. For the first time Warsaw relayed some of the items of the Berlin programme at 11 o'clock p.m., while, an hour later, Berlin retransmitted some of the musical items produced at the Warsaw studio. The experiment having given very good results, this mutual exchange of programmes is being continued to the satisfaction of both sides. Both stations are linked up by special land lines.

## Radio and Education in Austria

The Authors' Association of Austria and the Ravag have made a complete agreement as to the fees to be paid for broadcasting copyright works. A time basis has been accepted by both parties.

When consideration is given to the programmes it will be noticed that the work of the Austrian Broadcasting Company with regard to adult education is impressive, and the trouble that is taken to make the talks something more than a mere pastime for the listener is well worthy of attention. For instance, the Austrian Radio magazine publishes illustrations which can be used in special magic lanterns in the home or at small gatherings, with the object of making the talks clearer.

With regard to these talks it is interesting to compare the relative popularity of various subjects. Travel, medicine, art and language lessons seem to

attract the greatest enthusiasm. So great, indeed, is the enthusiasm for travel talks that they are put on by special request on Sunday afternoons, and it is here that the illustrations published in the Radio magazine are especially helpful. The adult education authorities of Vienna have the same experience as the Radio authorities, namely, that in all branches of adult education the Austrian seems determined to get to know as much as he can of other countries. Given the popularity of travel talks, the desire to learn foreign languages may easily be understood. Great enthusiasm is shown for English, which, so far as the radio is concerned, may be accounted for by special popularity of Professor McCallum; for he has by his teaching of English through the wireless, become quite a "Viennese voice." The rich humour with which he enlivens his teaching has

endeared him to many thousands of listeners both in and outside Austria. Usually there are two courses in English, one for the advanced, the other elementary. French and Esperanto are also popular.

In conclusion, three facts ought to be mentioned: firstly, that in Austria listeners frequently write to the authorities and are only too willing to express their views; secondly, that the Radio has come as some sort of solace to those members of the middle class who used to be able to go to concerts, but now cannot afford the money—to them the broadcasting of special musical items has meant a big thing; thirdly, that the Vienna programme is not merely of Austrian interest, but is also of very great importance to listeners throughout the Near East. But that is another story.

E. J. P.

# Wireless Step by Step

By "DICTRON"

"WHY is it always said that only the detector valve rectifies, though every valve must do so or it would not be a valve?" This is the question which our correspondent has addressed to us and which we promised in last week's instalment to endeavour to elucidate.

It is evident at the outset that he has misunderstood the uses to which the three electrode valve may be put, and has not appreciated the fact that the valve operates in an entirely different manner for each of these uses. If the reader will cast his mind back to some earlier instalments of this series of articles, he will remember that in discussing the three electrode valve we came to the conclusion that it had three main uses. Firstly we discussed its use as an oscillator which has been dealt with elsewhere, and we are not now concerned with it, or should not be, since it is the duty of every listener in operating his broadcast receiver to ensure that the valves do not oscillate. However, there is one material point bearing upon our correspondent's query. He infers that a valve must rectify whatever the use to which it is put, or else it is not a valve. We can dispose of this suggestion at once by going back to the point where we discussed the operation of the three electrode valve as an oscillator and learnt that so far from being an essential rectifier the valve can, when properly connected and adjusted, do precisely the opposite, that is to say, convert a direct current into an alternating one.

Secondly, we discussed the valve as a rectifier, and in earlier instalments considered the principles and ways and means by which it can be made to achieve the desired results. In the last two instalments we have considered more closely and in greater detail the part played by the rectifier valve in the reception of modulated continuous waves, that is to say, in the reception of radio telephony. We have seen how the rectifier cuts off every other half-cycle of the carrier wave and registers the variations of carrier wave amplitude, in the form of variations of its own anode current. Having

recorded these variations of amplitude the carrier wave is of no use, and is by-passed to earth, the resultant anode current variations being left behind either to operate telephones or to be amplified. Now this is where, we think, our correspondent's difficulty really begins, namely, in the third use of the valve, which is amplification. He seems to be under the impression that a valve arranged as an amplifier must rectify the varying currents which pass through it, but just as the oscillator valve could be arranged so that it did the reverse of rectification, so can the amplifier valve be arranged so that rectification is avoided. There are, of course, two entirely different methods of amplification, namely, high-frequency amplification and low-frequency amplification. It would be better to treat the latter first, since it falls in a more logical sequence on what we have been discussing.

To understand the reason why the amplifier valve does not rectify, we must revert for a moment to the rectifier valve and consider the form of the current flowing in its anode circuit. We know that the carrier wave arrives in the receiving aerial

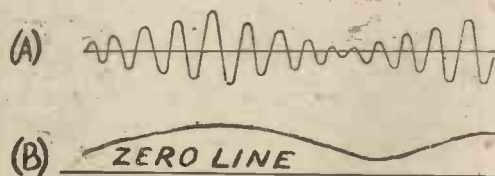


Fig. 43

in the form shown diagrammatically in Fig. 43A, which represents high frequency waves modulated at an audible frequency. Now, if these waves were not modulated every one would be of equal size in the diagram. We can see from the diagram that the modulation is taking place because of the

difference in amplitude which is illustrated by the varying depth of the waves through the zero line from peak to trough. Now the detector does its work, and everything below the zero line in Fig. 43A disappears, and we have left only the half cycles above the zero line. This then is the form of the detector anode current, which you may see as a diagram by taking a sheet of paper and laying it across the page so that its upper edge coincides with the zero line of Fig. 43A. It is obvious that it is no longer truly an alternating current, because it does not completely change its phase. It is rather unidirectional pulses all on one side of the zero line, that is to say, each successive pulse is travelling in the same direction, and there are none travelling in the opposite direction. If we should wish to show a curve representing the variations of amplitude due to modulation, the way to accomplish this would be to join up the peaks. Now, we have done with the carrier wave, and we give it a decent burial through a condenser to earth. The amplitude variations cannot go the same way, however much they want to, because of the resistance of the condenser to their particular frequency; therefore they get left behind in the anode circuit and have the form shown diagrammatically in Fig. 43B, which is nothing more nor less than a series of curves plotting the points where the peaks of the high-frequency unidirectional pulses were before their departure via the by-pass condenser to earth. We now have continuous unidirectional current varying in amplitude on one side of the zero line, and which will continue for so long as modulation is sustained at the transmitter. This is the important point, that what is left is only variation of the amplitude of a continuous current and is not in the true sense an alternating current, therefore there is no inducement to the next low-frequency amplifier valve to rectify. If properly arranged the variations of amplitude will be impressed in the form of amplified voltage variations on the grid of this amplifier valve (*World Radio*, November 4, 11, 18 and 25, 1927) producing exactly similar, but amplified variations in its anode current to those which are flowing in the detector anode, *vide* Fig. 43B. The only condition under which there will be any tendency for the amplifier valve to rectify is if so much negative grid bias is applied as to cause cut-off of part of the lower portions of the wave form of Fig. 43B.

## Last Week's Log

By "THE SEARCHER"

THE past fortnight has been rather mixed as regards reception conditions upon all wavelengths. During the first part of it matters were particularly favourable for long-distance work, but the second part produced a very variable period. Some nights were good, others bad, owing either to "ether deadness" or to the prevalence of atmospherics. The reception of American stations upon the medium waveband continues to be exceptionally good on all but unfavourable nights. A report upon the way in which medium-wave U.S.A. stations have been coming in appeared in *World-Radio* last week. In addition to the stations mentioned in it many others have been heard both at my station and in other parts of the South of England. Amongst these are WOK and WBAL. WIOD at Miami Beach, Florida, continues to be one of the best, whilst WPG, WGY, KDKA, WJZ, and WEAJ are all receivable with considerable strength in favourable circumstances.

### How Not to Tune

May I, whilst on the subject of American stations, mention that "squeal tuning" is just as reprehensible in the early hours of the morning as it is during broadcasting hours? Not only is it absolutely unnecessary, but it results in poor reception and small signal strength. If you find it necessary to pick up carrier waves, loosen the reaction coupling directly one is heard. When the set is just below the point of oscillation it is in its most sensitive condition and signal strength is at its greatest. A slight readjustment of the controls is necessary after the loosening of the reaction coupling.

Amongst the European stations on the upper and medium bands reception has been good except upon

nights when atmospherics were troublesome. Zeesen is now one of the best of the long-wave stations, and appears to be well received nearly everywhere. Of the others Kovno, Huizen, Radio-Paris, Motala, Kalundborg and at times Warsaw have been the pick. Hilversum has suffered not a little from interference. One of the most powerful of the medium-wave stations is now Cologne, which at my station is now more strongly received than Langenberg, Frankfurt, or Hamburg. Kattowitz is also wonderful when not interfered with by spark signals. Berne has never really got into form this winter, and now he is at times quite difficult to pick up. I have not been troubled much with fading, though reports from those who live further south show that it has been very bad in some places on the medium band.

On the short waves atmospherics have been very troublesome lately and fading has been a nuisance. Even 2XAF, who has not suffered much in this way for some time, has shown very pronounced fading of a slow character. 2XAD has been luckier in this respect than 2XAF, and there has been very little atmospheric interference with his transmissions. Radio Malabar is wonderful just now on the whole, though there are occasional short periods when his quality is not quite up to the mark. He is now broadcasting regularly, and in a letter just received from the Director of the station it is stated that transmissions are made every Monday, Wednesday, Friday and Saturday from 1 p.m. to 4 p.m. G.M.T. The power now used is given as from 30 to 40 kilowatts (this is the input and not the power in the aerial).

I wonder if any readers happened to tune in 2XG on the Sunday when he was carrying out preliminary tests for the meeting of Electrical Engineers held simultaneously in London and New York. With two note-magnifying stages the loudspeaker was overloaded, but when the volume had

been suitably reduced the quality was nothing short of marvellous.

Readers should note that 2XAD is transmitting now almost every evening between 6 p.m. and 7 p.m., or between 8 p.m. and 9 p.m.

(Continued from page 267.)

The dancers sit in groups of six or seven upon a carpet of esparto laid on the ground, and each has a lighted candle before her, which throws its weak light over her. Then, to the strains of an orchestra which includes some reed flutes and a tambourine, the girls rise to dance, one by one, in turn, each with the secret wish to excel the others.

As it happened, on the very night of the day of my arrival with my friend in Tuggurt, there was to be one of these performances, and I decided to go. I must admit that I found the whole thing more curious than I could ever have imagined, and, indeed, just like a fairy-tale. Thanks to a young officer of the "Tuggurt Territory," who was a great lover of "wireless," the usual musicians were replaced, on this particular night, by radio, so that, for over two hours, the "Oulad-Nails" danced to the accompaniment of an invisible orchestra, broadcast from the broadcasting station at Algiers!

Now slowly, and now quickly, all the very old dances of the desert were performed—dances so old that their origin dates back to beyond the memory of man; and the "Oulad-Nails," adorned with heavy silk cloths and silver or gold bracelets, like the priestesses of some ancient deity, danced and danced, as tireless as the invisible orchestra, whose sweet strains broke over the quiet night, a silence otherwise broken only by the jarring "You! you!" which, from time to time, came, in honour of some particular "Star," from the dancing-girls who were resting. Such dancing has really to be seen to be believed.

# Broadcasting and Languages

## FRENCH

(To be broadcast through Daventry from the London Station by M. E. M. Stéphan, on Monday, February 27, at 7.25 p.m.)

### LA LETTRE CHARGÉE,

Par EUGÈNE LABICHE

(Continued.)

#### SCENE V.

FOUGASSON, FRANCINE.

FRANCINE (à part, le regardant): Ah! c'est ça un fou!

FOUGASSON: Qu'est-ce que c'est que cette trésorière de l'œuvre qui attend Madame au salon?

FRANCINE: L'œuvre des Petits Orpélins, dont Madame est présidente.

FOUGASSON: Ah! c'est bien, ça... C'est une bonne note... Betsy aussi nourrissait des orphelins... mais c'étaient des oiseaux. (Tirant de sa poche un carnet de chèques.) Tiens, tu vas lui porter mon offrande. (L'interrogeant.) Dix mille francs, est-ce assez?

FRANCINE: Oh!

FOUGASSON: Vingt?

FRANCINE: Bah! mettez-en trente... Pour ce que ça vous coûte.

FOUGASSON: Tu as raison. (Déchirant un chèque sur lequel il a écrit et le remettant à Francine.) A toucher chez Rothschild.

FRANCINE (à part): Il a une folie douce.

FOUGASSON (la regardant): Mais, toi aussi, tu ressembles à Betsy. Mets-toi de profil.

FRANCINE: Voilà! (à part.) Il m'amuse.

FOUGASSON: Ah non!... ce n'est pas ça, tu n'es qu'un trompe l'œil.

FRANCINE (froissée): Un trompe l'œil!

FOUGASSON: Ecoute... tu viendras avec nous en Amérique... Veux-tu?

FRANCINE (complaisamment): Si ça vous fait plaisir!

FOUGASSON: Je te marierai là-bas... j'ai quelqu'un en vue pour toi.

FRANCINE: Un blond?

FOUGASSON: Non... il serait plutôt brun... C'est un nègre.

FRANCINE: Ah! merci! je n'en veux pas!

FOUGASSON: Ah! tu as des préjugés de couleur... mais un nègre... c'est un brun qui a eu la hardiesse de continuer son chemin.

FRANCINE: Ah bien! j'en aime mieux un qui soit resté en route... Monsieur veut-il que je le reconduise?

FOUGASSON: C'est juste... il faut que je retourne à l'hôtel... ta maîtresse m'a écrit ce matin.

FRANCINE: Une grande lettre... avec cinq cachets rouges... C'est moi-même qui l'ai portée à la poste.

FOUGASSON: Toi! tu as été le messenger de mon bonheur!... brave fille!... tiens, je vais te faire aussi un chèque! (Il tire son carnet.)

FRANCINE: Oh! ne vous donnez pas la peine... vous allez user tout votre papier.

FOUGASSON: Tu es désintéressée... C'est bien!... tu mourras sur la paille... Adieu, mais si tu crois que tu ressembles à Betsy, tu te trompes!

(Il sort vivement.)

#### SCENE VI.

FRANCINE, puis HORTENSE.

FRANCINE: En voilà un toqué!... mais il n'est pas méchant.

HORTENSE (passant sa tête à la porte): Eh bien?... est-il parti?

FRANCINE: Oui, madame... Ah! il est bien drôle, allez!... il a laissé un chèque de trente mille francs pour votre œuvre!

HORTENSE: Pauvre homme!

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FRANCINE: Le voici . . . il a un petit portefeuille qu'il déchire, et il offre des chèques à tout le monde, pif! paf! . . . il a voulu m'en faire un.  
HORTENSE: Il n'a donc pas de famille pour le faire soigner.

FRANCINE: Il m'a proposé de me marier . . . à un nègre . . . et puis il m'a dit: "Ah! tu ressembles à Betsy! mets-toi de profil!"

HORTENSE (riant): Toi aussi?

FRANCINE: Et après: Non, tu ne ressembles pas à Betsy . . . et il m'a appelée trompe-l'œil.

#### SCENE VII.

HORTENSE, FRANCINE, HECTOR.

HECTOR (entrant): Me voici . . . j'arrive de la Préfecture, je vous apporte des renseignements sur M. Fougasson.

HORTENSE: C'est inutile . . . nous l'avons vu.

HECTOR: Ici?

HORTENSE: Oui. (Avec compassion.) Hein? . . . quel malheur! . . .

HECTOR: Quoi?

HORTENSE: Il est complètement fou!

HECTOR: Lui . . . mais pas du tout!

HORTENSE: Ah! par exemple!

HECTOR: C'est au contraire un homme parfaitement équilibré, merveilleusement doué, étonnamment organisé! . . .

HORTENSE: Ah! voilà que ça vous reprend . . .

HECTOR: Quoi?

HORTENSE: Vos adverbess.

HECTOR: Oh! pardon . . . je suis venu vite. Enfin, c'est un de ces commerçants aventureux . . . et aventuriers . . . comme l'Amérique en produit . . . Parti de rien, il possède aujourd'hui une fortune de plus de quarante millions.

FRANCINE (à part): Ah bah! et moi qui ai refusé son chèque!

HORTENSE: Mais c'est impossible, je vous dis . . . Je l'ai vu, j'ai causé avec lui . . . il a voulu se pendre . . . avec une pelote de ficelle . . . qui ne le quitte jamais.

FRANCINE: Et à moi il m'a offert de me marier à un nègre.

HECTOR: Tout ce que vous voudrez . . . Mais la Préfecture ne peut pas se tromper.

HORTENSE: Oh!

HECTOR: On a sur lui des notes très exactes; ce n'est pas le premier venu . . . c'est presque un personnage . . . il a même été pendant quelque temps président d'une des petites républiques de l'Équateur. . . .

HORTENSE: Président! lui!

FRANCINE (s'oubliant): Dianthe! (Se reprenant.) Oh! pardon!

HECTOR: Enfin que vous a-t-il dit?

HORTENSE: Il m'a dit que je ressemblais à Betsy, sa première femme, et il m'a proposé de m'épouser . . . à cause de la ressemblance.

HECTOR: Et comment vous êtes-vous quittés?

HORTENSE: Oh! très bien . . . je lui ai dit que je lui avais écrit, qu'il trouverait ma réponse à son hôtel.

HECTOR: Que lui avez-vous écrit?

HORTENSE: Ah! voilà . . . si j'avais su . . . un président!

HECTOR: Mais quoi?

HORTENSE: Deux mots: "Vous m'ennuyez?"

HECTOR: Oh!

FRANCINE: C'est raide!

HECTOR: Et vous croyez en être quitte comme ça? . . . il reviendra.

HORTENSE: J'espère bien que non.

HECTOR: Vous ne connaissez pas sa ténacité.

FRANCINE (à part): Moi, s'il revient, je lui ouvre la porte à deux battants . . . 40 millions!

HECTOR: Je ne vois qu'un moyen . . . Je vais le trouver à son hôtel, je le raisonnerai, je lui dirai que cette prétendue ressemblance n'existe pas, qu'il vous a vue légèrement, superficiellement, incomplètement, et conséquemment . . .

HORTENSE: J'espère que vous vous régalez!

HECTOR: Oh! pardon. (A Francine.) Toi, tu vas te tenir dans l'antichambre . . . et, s'il se présente, tu défendras la porte . . .

FRANCINE (à part): Prends garde de le perdre!

HECTOR: Inexorablement! Viens!

(Il sort suivi de Francine.)

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

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

## GERMAN

### DICTATION

Ein Bauer, der von der Unsicherheit der Banken gelesen hatte, fuhr in die Stadt und liess sich auf der Bank sein Geld auszahlen. Als der Kassierer ihm sein Geld aushändigte, zählte er es sehr vorsichtig. Darauf gab er es dem erstaunten Bankbeamten mit der Bemerkung zurück: "Jetzt können Sie es wieder einzahlen. Es stimmt!"

### GRAMMAR AIDS

#### Neuter Nouns

To-night we are going to discuss the declension of neuter nouns. Those of you who have not copied out the nouns will find a list in *World-Radio* of last Friday. I should also like you to compare the declension of the nouns discussed to-day with that of the masculine nouns we discussed four weeks ago. *Das Tor* has the same in the accusative, *des Tore* in the genitive, and *dem Tore*, in the dative. The plural is *Tore, Tore, Tore, Toren*. As you see, the declension is exactly the same as that of *Tag*. But whereas in the masculine nouns many show a mutated vowel in the plural, neuter nouns of this type never mutate. *Das Gitter* can be compared to the masculine *der Vater*, and *das Mädchen* to the masculine *der Esel*. "s" in the genitive singular, and "n" in the dative plural are the only endings which can occur. *Das Leben*, just as *der Spaten* or *der Garten* merely shows an s in the genitive singular. As these nouns end in an -n already there is no need to add another -n in the dative plural. So you see that so far the masculine and neuter declensions coincide. *Das Schloss* has a plural which we have not met up to now. The plural is *die Schlösser*, and in the dative plural the noun must, of course, take an -n: *den Schlössern*. There is a great number of neuter nouns which have a plural in -er. When we discussed the mutations I mentioned the rule that nouns which take -er in the plural *always* mutate. That rule applies here. It is impossible to tell when a neuter noun will take -er in the pl. and mutate, and when it will take -e and not mutate. The nouns can only be remembered by noting the usage carefully. Germans themselves are often quite undecided whether a neuter noun should take -e or -er in the plural, hence there are a number of double forms. These double forms often develop different meanings, i.e., *das Gesicht*: the face; *die Gesichter*: the faces; *die Gesichte*: the visions. This plural in -er has also invaded the masculine nouns, and there are about a dozen masculine nouns which have succumbed. The important ones are: *der Mann*: *die Männer*; *der Geist*: *die Geister*; *der Wald*: *die Wälder*.

Apart from the nouns which we have discussed to-day, there are five irregular substantives which take -en in the plural. They are: *das Bett* (the

bed): *die Betten*: *das Hemd* (the shirt): *die Hemden*: *das Ohr* (the ear): *die Ohren*: *das Auge* (the eye): *die Augen*: *das Ende* (the end): *die Enden*.

*Das Herz* (the heart) has a troublesome declension. If you compare it to such a simple declension as *das Leben* you will find that *das Herz* declines in the same way, only it does not show the -en ending in the nominative and accusative singular.

#### Remarks on German Text

Zuerst werde ich Ihnen die ersten Sätze der kleinen Erzählung "Missverständnis" in der Gegenwart vorlesen:

Ein deutscher Landmann, der an der württembergischen Grenze wohnt, muss einmal einer Truppe Franzosen den Weg über das Gebirge zeigen. Er weiss aber von ihrer Sprache kein Wort, ausser *oui*, welches so viel heisst wie ja, und *coquin*, welches ein Schimpfname ist. Diese zwei Worte hat er oft gehört, denn viele Franzosen ziehen damals durch sein Heimatdorf, und er lernt die Worte nachsagen, ohne ihren Sinn zu verstehen. Anfangs geht alles gut, solange die Franzosen nur unter sich sprechen. Er geht mit einer Laterne und drei Ranzeln voraus, und die Franzosen folgen. Da sie aber merken, dass er immer mitlacht, wenn sie über eine lustige Erzählung zu lachen haben, fragt ihn einer von ihnen auf französisch: Verstehen Sie denn, was wir miteinander reden?

Nun, das war nicht sehr schwer, und Sie haben es alle sicher richtig gemacht.

Ich möchte Ihnen für die nächste Stunde wieder eine kleine Aufgabe geben: schreiben Sie bitte, ohne im Wörterbuch nachzusehen, die Infinitive der Verben in dem ersten Paragraphen der Geschichte, die wir heute gelesen haben. Wenn ein Verbe mehr als einmal vorkommt, lassen Sie es bitte die folgenden Male aus. In der nächsten Stunde werde ich dann die Verben vorlesen und hoffe, dass Sie alles richtig machen werden.

## Le Don Divin de la Radiophonie

Par le R.P. PIERRE LHANDÉ, S.J.

(We print below the principal part of the text of an address by the Rev. Pierre Lhandé, S.J., which is to be broadcast, through Daventry 5XX and 5GB, by Father Martindale, S.J., on Sunday, February 26, at 5.30 p.m. It may be of interest to our readers to call their attention to the fact that Father Lhandé will broadcast a "causerie religieuse" from Radio Paris Station on the same day shortly after 12 o'clock. He was one of the first to see the possibilities of a "Radio Lent.")

VOICI donc, ô mes frères, que Londres, après Paris, vous adresse, ce soir, par mon ministère, le verbe de Dieu porté sur l'aile des grandes ondes par dessus les territoires et les océans britanniques. En vérité, je me sens vivement frappé par la grandeur de cette heure unique, où la vieille Angleterre accueillant la langue et la pensée religieuse de la France, va seconder, de toute la puissance de ses grands postes, Londres et Daventry, le bel effort de diffusion d'idéal chrétien, accompli déjà, chaque dimanche, par Radio-Paris. Jamais, peut-être, la Grande-Bretagne ne se sera trouvée aux côtés de la France pour collaborer avec elle à une oeuvre aussi noble dans sa simplicité: jamais n'aura été plus intime et plus étroit devant Dieu le lien spirituel qui unit à cette heure les âmes des deux nations.

Lorsque, le 2 janvier 1927, j'inaugurai, en France, par mandat de l'Archevêque de Paris, ces conférences religieuses par radio qui se pratiquaient déjà depuis plusieurs années, notamment ici, en Angleterre, un de mes correspondants m'exprima sa reconnaissance par un mot qui me frappa vivement: "La radiophonie," disait-il, "est un don divin."

Certes, toute invention nouvelle, toute conquête de la science est un don de Dieu à l'humanité; une parcelle qu'il nous communique de son inépuisable trésor de force, de bonté ou de beauté. Mais il est vrai de dire que la radiophonie semble toucher plus intimement, plus directement,

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en quelque sorte, aux attributs de l'Être dont l'immensité et la vie remplissent l'univers.

D'où lui vient, mes frères, ce privilège ? A mon sens, de trois éléments qui lui donnent un caractère tout particulier; son cachet *mystérieux*, son cachet *spiritualiste*, son cachet *religieux*.

C'est un fait bien digne d'être noté: que les hommes les plus dégagés d'impressions supranaturelles, frappés, dès le début, par le mélange de tangible et d'inconnu que nous présente la radiophonie, ont employé, à son endroit, des expressions empruntées au langage de l'au-delà: le "mystère" de la radiophonie, par exemple, ou le "miracle" de la T.S.F. Tandis qu'en simple télégraphie, en art cinématographique, en mécanique, l'ingénieur, le constructeur, le machiniste peuvent comme toucher du doigt les moindres rouages, les plus menus éléments physiques ou chimiques qui expliquent positivement tout l'effet obtenu, l'émetteur et le récepteur d'ondes hertziennes doivent compter avec la collaboration plus ou moins fidèle de nombreux *incognita*. Dans l'état actuel de nos découvertes, le sens humain de l'ouïe est le seul qui, grâce à la radiophonie, se soit évadé des frontières naturelles de son champ d'action, et de quel bond vertigineux! La télévision en est encore aux tâtonnements. Seule, l'oreille de l'homme dont les perceptions, pourtant, sont plus courtes et plus lentes que celles de nos prunelles, a atteint du premier coup à la rapidité et presque à la subtilité de l'esprit. Elle franchit les incommensurables espaces, elle perce l'épaisseur des murs, domine les ouragans, trompe le fracas du tonnerre; à travers ces distances et ces obstacles elle capte jusqu'au froissement d'un feuillet, au souffle d'une poitrine, au battement d'un cœur. Et, par quel "mystère," l'auditeur d'un poste à galène, dans la grande cité, peut-il atteindre, au moyen d'un fil plongé dans le sous-sol des avenues, la pensée ou la mélodie que le sans-filiste campagnard va saisir dans les airs, par une antenne posée au dessus de son toit? Il est donc naturel que, devant cette force fluide, intelligente et foudroyante, l'homme, frappé d'une émotion infinie, se prenne à scruter, par dessus le déconcertant spectacle de la terre, le mystère que nous cache le firmament.

Je dis, de plus, que la radiophonie ramène à la voie de Dieu, parce qu'elle est la plus "spiritualiste" de nos grandes découvertes: non pas qu'elle se refuse à transmettre les doctrines lourdement attachées à la matière - toute expression de pensées lui est accessible - mais parce que son triomphe est dans la transmission de ce qu'il y a de plus élevé et de plus pur parmi les communications de l'âme à l'âme: l'art, l'éloquence, la prière. C'est là qu'elle atteint son *summum* d'émotivité ou de charme et jusqu'à sa perfection technique, tant elle semble, par son essence même, liée à ce qui plane au dessus de la terre.

En France, on a pu noter clairement que l'inauguration des émissions de musique et de conférences religieuses a plus fait pour la diffusion des appareils de T.S.F. que celle des transmissions

de théâtre ou de musique de danse. Celles-ci répondaient à une commodité: celles-là à un besoin psychique: le besoin d'idéal.

Enfin la radiophonie semble posséder un dernier caractère inné: elle est, par elle-même, religieuse. Des milliers de mes correspondants, en France, ont relevé, dans leurs observations, l'impression de recueillement que produit, dans l'atmosphère toute intime du foyer, cette voix grave d'homme venue de l'infini, allant à l'infini... Seulement à l'entendre, pour la première fois, dans telle ferme perdue, dans telle hutte de bûcheron sur la montagne, des hommes, qui ne croyaient point, se sont découverts, et je sais des ouvriers, perdus au fond d'une mine, qui, après l'avoir écoutée, ont été demander, en une église lointaine, à connaître de plus près ce Dieu dont leur avait parlé la voix ailée qui venait du ciel; je sais des mourants qui, à la promesse suprême du Christ, transmise par le haut-parleur dans leur chambre d'agonie: *Aujourd'hui tu seras avec moi en paradis*, ont répondu: "Merci!" en un dernier sursaut de leur pauvre corps broyé et sont morts en paix.

Et ceci, mes frères, n'est pas un mirage. N'est-il pas vrai que Dieu remplit l'immensité, de sa vie une et multiple, de son intelligence, de son activité infatigable, sans repos et sans limite? N'est-il pas vrai qu'il est dans toutes les vibrations des ondes, dans toutes les fractions impondérables de l'éther, et au plus profond, au plus caché des replis de nos consciences et de nos volontés? "C'est en lui," nous dit Saint Paul, "que nous avons la vie, le mouvement et l'être!"

Bénie soit, mes frères, bénie mille fois, la dernière et la plus brillante des conquêtes de l'humanité, qui rend plus proche à nos pauvres sens blessés Dieu notre Créateur, notre Providence, notre Père! Bénie soit cette merveille qui nous permet de louer, de chanter, d'adorer, plus haut et plus loin et d'un hymne plus puissant, Celui qui a fait le ciel et la terre!

(Continued from column 3.)

- Feb. 7—(1) Excellent—quality and volume—excepting slight "swish," equal to local station.
- (2) Poor and weak.
- Feb. 8—(1) Signal strength poor to fair, atmospheric bad.
- (2) Could not pick up neither this station nor 2XAD.
- Feb. 9—(1) Excellent; very clear and strong; distortion, fading and atmospheric all absent.
- (2) Equally good, not quite so strong, and with slight slow fade. (The best transmissions ever received by me from America).
- Feb. 10—(1) Signals strong and clear, atmospheric bad.
- (2) Neither XAF nor XAD received.
- Feb. 11—(1) Poor signals and subject to quick fade.
- (2) Very poor, faint and erratic, but improving later.
- Feb. 12—(1) Exceedingly poor and distorted.
- (2) Not received.

Note.—All were received on 3 valve set with loud speaker. Taken as a whole, I consider that last week was the best for American S.W. reception since November. As a keen reader of your paper since No. 1 of the *Radio Supplement*, I consider that a world searcher without his *World-Radio* would be about as helpless as a ship without its rudder.

Yours truly,  
 GEORGE READMAN, junr.  
 9, Moray Place, Edinburgh.  
 February 14, 1928.

(Continued on page 274.)

## Correspondence

Has the Romance of Short Waves Departed?  
 To the Editor of WORLD-RADIO.

SIR,—I note with interest your correspondence in the issue of *World-Radio* for February 17, and I cannot help noticing with a smile how the rest of the world is at last "waking up" to short waves. I regret, however, to notice that a great number seem to labour under the illusion that they have constituted a record by putting 2XAD or 3LO through a loud speaker. The sooner this idea is banished the better. In the days when I started on short waves, and when one made all one's coils by guesswork, and when sets used swinging coils and had "dead spots," etc., that was the time to write about how well you got KDKA. To-day the romance of short-wave 'phone has gone just as has broadcast. Two years ago the amateur did all that Tom, Dick, and Harry think that they are just discovering.

I very much wonder sometimes where all this short-wave enthusiasm will lead to. It must get very boring listening to eternal 2XAF's, etc., surely? May I advise the learning of the Morse Code to some of our "phone gluttons?" They will get some real interest out of the short waves then, and they may eventually even go to swell the noble ranks of amateur transmitters—the men who have really discovered the secrets of long distance communication.

For the ears of our "record breakers" let me say that in August, 1926, for days and days on end, 2XAF used to come in on a loud speaker and each word and every note was perfect at 50 yards (measured). The set was a O-V-2 scrapped up in 30 minutes out of the "junk pile." The aerial was a 25-foot high Hertz voltage-fed transmitting aerial. No earth was used and the H.T. was only 80 volts. I also heard Australian, Brazilian, and S. American (Florida—Winter Park) short-wave stations in 1925.

I have a record of an Australian transmission heard in January, 1926, using no earth or aerial and 10 volts H.T. (the set was a good 10 feet from the lead in) at R5.—Yours truly,

A. E. LIVESEY.

EG-6LI, late 2BZT, ARRL, RSGB.

Pau, B.P., France,

February 18th, 1928.

### Short Wave Reception

To the Editor of WORLD-RADIO.

SIR,—Referring to your recent request for reports on short wave transmissions, I enclose copy of a reception log of the two most popular American S.W. stations which I have kept for one week from Monday, February 6, between the hours of 12 and 1 (midnight). As S.W. reception varies so greatly from time to time, it would be very interesting to hear if any of your readers' experiences for last week correspond to mine.

- 1928.
- Feb. 6—(1) KDKA (62.5 m.) poor.
- (2) 2XAF (32.77 m.) Strong and clear, slight atmospheric and slow fading, but no distortion.

(Continued in column 2.)

# RESULTS PROVE

## OVER-WHELMING SUPERIORITY OF 'NEGROLAC' AERIAL

*"Negrolac" Aerial will add astonishing volume to your set and bring in far distant stations hitherto unobtainable*

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Mr. W. R. F., Connaught Ave., Frinton-on-Sea, Jan. 25, 1928, writes:—


"Permit me to thank you for putting on the market your 'Negrolac' Aerial.

"On the advice of a friend of mine, who is, like myself, somewhat of a wireless fan, I recently installed a 'Negrolac,' and the results are simply wonderful. Previous to the installation, I had suspected in turn my set, my speaker and my earth. Now, thanks to your wonderful invention, my troubles are at an end.

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# Which Station Was That?

## ANSWERS TO CORRESPONDENTS

Kuzzon (Derby): Cassel relaying Frankfurt. Your wavelength is considerably overestimated. Osets (N. 10): Rjukan relaying Oslo programme. Short Aerial (Leeds): If you are sure of wavelength, probably 3LO which transmits gramophone records at this time. Rhonda: We cannot form an estimate of wavelength from your dial reading. Are you sure of the call heard? Can you give reading of known station near it? Bijou (Louth): Regret we cannot say without some indication of wavelength. Possibly an Italian station on 45 m. Ingham (Pinner): Leningrad. J. D. (Portsmouth): Cologne. Jan (Enfield): Possibly Copenhagen (337 m.) Alpha (Lianelly): Huizen. Calibration (Dalston): Only British station giving a service at that time was Belfast. Is that consistent with your dial reading? One Valve (Croydon): Leningrad. Haines Hill (Taunton): Either Bandoeng (Java) or Kootwijk (Holland). Barnard (Clapham): Copenhagen. Enoch (Glasgow): Regret, impossible to say without some idea of wavelength. Dial reading alone insufficient. Bulldog (Barton): Leningrad. Mikado 2 (Tottenham): Probably an amateur. J. F. S. (Tidworth): If wavelength certain, Salamanca (Spain). Rose (Thurso): Yes, Moscow. Golden Bay (Glovelly): (1) Nürnberg relaying Munich; (2) Leipzig relaying Dresden; (3) Oslo. Belliss (Goring): Kalundborg relaying chimes 0 strokes (5 p.m. G.M.T.). If reading is below Koenigswusterhausen, cannot trace the transmission. Two Valves (Eltham): Kattowitz. Pilgrim (Bronesbury Park): Croydon. Basil Faulds (Louth): Details point to Warsaw, but programme does not tally. H. S. K. (Dunstable): Estimate of wavelength too vague to enable us to identify. Can you give dial readings of some known stations near it? Wanderer (W. Harborough): Surely wavelength higher—Leningrad. Three Valves (Chatham): Cannot trace. Are you certain of wavelength estimate? Three Valves (Colwyn Bay): Radio Toulouse. Tyro (Radnor): (1) Leningrad; (2) Wire Beacon Station. Melody-Maker (S.E.4): Wavelength wrong. Probably either Cassel (236.2 m.) or Stuttgart (379.7 m.). Gridleak (Null): Radio Toulouse. G. M. F. (Wimbleton): The stations referred to are Leipzig and Dresden. Quest (London 15): Items named not traceable on estimated wavelengths. Milliam (Notts): Madrid (E.A.J.7). Old Bill: Vienna. English lesson. G. Kern (Southsea): We do not understand your question. Were you using short-wave dials? Errant Three (Croydon): Muenster tallies with your dial reading, but was advertised to relay Hamburg. Log Book (Hockley): WPG (Atlantic City). Straight Three (Godalming): Leningrad. Nobby (Llandudno): Transmission not advertised. Wymme (Belfast): Motala relaying Stockholm. J. W. B. (Wylta): Kootwijk in communication with station which we cannot trace. Hello America (Bristol): If your wavelength is approximately correct, it was Rjukan relaying Oslo. It was not Radio Barcelona. J. C. W. K. (Halstead): Huizen, which transmits on 1,950 m. on Sunday. An oversight of ours. Keppel Bay: (1) Probably Berlin relaying foreign stations (we have no record which they were); (2) not sufficient evidence of wavelength. This must be indicated as precisely as possible. Pointer (Kidderminster): Budapest. Cobble (Preston): Your dial readings alone do not help us. Solodyne 3 (Addlestone): Kovno. D. F. (Brighton): Without some clue to the wavelength, impossible for us to reply. Pullover (Bucks): Leningrad. Gov. try: Wavelength 425 m. or 300 m. Which do you mean? No such transmission on either. Three Valves (Callington): (1) Kalundborg giving Copenhagen programme; (2) WHO, Des Moines (Iowa). Barber (Wick): Regret details too uncertain to trace. A. E. J. (Guildford): (1) Aeroplane communication; (2) are you sure of language? If so, probably an amateur; (3) one of the Swedish relay stations within that band. Alpha (N. 22): Wavelength estimate vague, but probably Posen. Ambrose (Bexhill): Leningrad. L. G. J. 5 (Dartford): We have no information on this point. Disclose (Wandsworth): Not Radio Barcelona, but Radio Catalana. Acme (Woodford Green): Regret cannot trace. Radio Rupert: Kalundborg. BM/ORTM (Westcliff): Wavelength estimate vague. Likely to have been San Sebastian. S. B. B. (Hale): Moscow. Nomad (Peterborough): Helsingborg. S.W.4: Cannot trace on this wavelength. Aldtona (Dublin): Regret cannot form an estimate of wavelength from your information. Black Eagle (Hastings): Boundbrook (N.J.). WJZ. Burt (Canterbury): Motala. Snooked (Cardiff): Wavelength much over-estimated. Motala. Mac (Porto): (3) No; (4) Kalundborg; (5) too vague. Inquisitive Bill (Leicester): Kalundborg. Puzzled (Uverston): We do not understand your reference to Koenigswusterhausen on 1,980. Reflex (Brighton): Hamburg. Tony (Swindon): Hilversum playing "Zampa" at 5.15 p.m. Learning (Cornwall): We think your wavelength is wrongly estimated. Gong: (1) Motala; (2) Copenhagen; (3) Nürnberg relaying Munich; (4) Motala; (5) are you sure of your wavelength? Short Wave (Teignmouth): Cannot trace on this wavelength. Call was probably "Radiophonie." A. E. (Liverpool): We doubt your wavelength. Can you name a known station near the unknown? J. F. S. (Tidworth): San Sebastian. Links (Edinburgh): (1) Oslo; (2) Points to Madrid (E.A.J.7) with altered programme; (3) Cannot trace such a transmission. A. R. M. (Hford): Kalundborg. Candida Gaze (Carlisle): We have no information on this point and cannot trace in programmes. Alaskan (Frodsham): Leningrad. Twin (Forest Gate): (1) KDKA (62.5 m.); (2) PCJJ or Bergen according to wavelength. 4/JERS: (1) Leningrad; (2) Wavelength estimate too vague. Hilversum or Warsaw; (3) Kalundborg (Prof. Dr. Lorentzen); (4) If wavelength certain, Kharkov; (5) Koenigswusterhausen; (6) Motala; (7) Huizen. Rex (Bournemouth): Kalundborg relaying Copenhagen from restaurant Nimb. 4 Valve (Pembrokeshire): Motala. Jim-Jam (Birmingham): Surely, Brussels. Eldee (Luton): Kattowitz. Baxter (Walsall): Oslo gave this talk on February 6 at 8.30-9 p.m. (through Rjukan). Forest (Epping): Likely to be 3LO, but wavelength of Short Wave stations must be definite. Night Hawk 5 (Cannington): (1) WPG; (2) KDKA. Searcher (Shalford): Air Ministry Station. North Pole (Inverness): Wilno, relaying Warsaw. Constable (Warrington): (1) Not near that wavelength; (2) Hamburg. Loftus (S.W. 18): Leipzig relaying Dresden. Morse Martyr (Weymouth): Barcelona. Arcadia (Thornton Heath): Perhaps Madrid (E.A.J.7), but some idea of wavelength should be given. Pizzicato (Northants): Kalundborg relaying Copenhagen. Angus (Newport): If wavelength certain, KJR (Seattle). Wave. Trap (Northampton): Madrid (E.A.J.7). A. J. S. (Small Heath): Berlin. Fladyne Three (Norbury): Copenhagen. B. A. (Stourbridge): Direct. G. S. C. (Westgate): Radio Beziars. Dalton (Airdrie): Frankfurt. Radio

(France): (1) and (2) Kalundborg. Etherman (Glossop): (1) Saeffle, relaying Stockholm (Lecture on forthcoming opera); (2) Breslau; (3) Almeria; (4) If transmission consistent with the Marriage of Figaro then Koenigsberg. Wharfedale (Leeds): WEA (N.Y.). Dials (Edinburgh): (1) Dundee and Cupar-Elfe amateurs; (2) Notodden, relaying Oslo; (3) Almeria. BM/CNMR: Time and wavelength inconsistent with the items. N. A. (Wigan): Kalundborg relaying Copen-

### SHORT WAVE STATIONS

| M.    | Kc.    | Station  |
|-------|--------|--|
| 90    | 3333   | Bournbrook (New Jersey) 3XL.   |
| 85    | 3529   | Zürich (Radio Club) EH9XD.   |
| 70    | 4285   | Springfield (Mass.) WBZ.   |
| 70    | 4285   | Vienna (OHK2). (Transmits on Sunday for 15 minutes after each hour from 5 p.m. till midnight.)   |
| 66.34 | 4542   | Inglewood (California) 6XAL.   |
| 65.18 | 4600   | Newark (U.S.A.) WAAM.  |
| 65.18 | 4600   | Newark (New Jersey), 0.25 kw. 2XBA (S.W. of WAAM). Transmits between 12 midnt. and 5 a.m. TUESDAYS, THURSDAYS and SATURDAYS.   |
| 65.18 | 4600   | San Diego (KFBC).  |
| 64    | 4687   | Richmond Hill (New York) WABC, 0.5 kw.   |
| 62.5  | 4800   | Pittsburgh East (Westinghouse Electric) KDKA (U.S.A.).   |
| 61.06 | 4913   | Council Bluffs (Iowa) 9XU.   |
| 61    | 4918   | Paris (Radio LL) 8GC   |
| 60    | 5000   | Russia, RFN (irregular).   |
| 56.7  | 5291   | Nauen (Germany) AGJ.   |
| 54.02 | 5553   | Columbus (Ohio) WEAO.  |
| 54    | 5555   | Brooklyn (New York) WCGU, 0.5 kw.  |
| 52.02 | 5767   | Cincinnati (Ohio) WLW. Relays medium wave transmissions from 11.50 p.m. G.M.T. Except SUN. and FRI.  |
| 50    | 6000   | Karlsborg (Sweden).  |
| 50    | 6000   | Russia, RFN. TUES., THURS. and SAT., 12.0 noon and 1 p.m.  |
| 45    | 6668   | Rome (Italy) IAX.  |
| 44.4  | 6696   | Vienna, 0.24 kw.   |
| 43.35 | 6920   | New Brunswick (N.J.) WJZ. Experiments occasionally.  |
| 43    | 6976   | Pittsburgh East (Westinghouse Electric) KDKA.  |
| 40.20 | 7463   | Radio Lyon (Rhône) YR. Daily except Sundays from 4.30 to 5.30 p.m.   |
| 37.8  | 7936   | Doberitz (AFK) 5 kw.   |
| 37.5  | 8000   | Ibarakiken (Japan) JHBB.   |
| 37    | 8108   | Radio Vitus (Paris).   |
| 33    | 9090   | San Francisco (Cal.) 6XAR.   |
| 32.9  | 9118   | Perth (W.A.) 8AG. 11.0-11.30 a.m.  |
| 32.77 | 9155   | Schenectady (General Electric Co.) N.Y. 2XAF, 10 kw (Aer.). SUN., WED. and FRI., No transmission. MON., 11.0 p.m. to 4.0 a.m. TUES., 11.0 p.m. to 6.0 a.m. THURS., 11.0 p.m. to 5.30 a.m. SAT., 11.25 p.m. to 5.0 a.m.   |
| 32    | 9375   | Zürich (Radio Club) EH9XD.   |
| 32    | 9375   | Melbourne (3LO). SUNDAYS, 6.30 p.m. to 8.30 p.m. G.M.T.  |
| 32    | 9375   | Johannesburg (JB).   |
| 32    | 9375   | Berne (Switzerland) EH900.   |
| 32    | 9375   | Bandoeng, Java (Radio Service) ANE. Transmits irregularly from 6.0 p.m. (G.M.T.).  |
| 32    | 9375   | Paris, Eiffel Tower. Time Signal 7.56 a.m. and 7.56 p.m.   |
| 31.25 | 9600   | Bergen.  |
| 31.5  | 9523   | Helsingfors, 0.3 kw.   |
| 30.91 | 9706   | New York (2XAL). TUES., 12.0 midnight to 5 a.m. (WED.). WED. 12.0 midnight to 2.0 a.m. (THURS.). FRI., 12.0 midnight to 4.0 a.m. (SAT.). SAT., 12 midnight to 3.0 a.m. (SUN.).   |
| 30.2  | 9934   | Hilversum, Holland, PCJJ.  |
| 30    | 10,000 | Bergen (Norway) LGN.   |
| 28.5  | 10,526 | Sydney (2ME).  |
| 26.92 | 11,144 | New York (2XAG).   |
| 26.8  | 11,194 | Pittsburgh (8XK).  |
| 24    | 12,500 | New York (2XAB).   |
| 24    | 12,500 | Chelmsford (58W, 15 kw. Aer.). DAILY (except Sat. and Sun.) from 12.30-1.30 p.m. and from 7 p.m.   |
| 22.99 | 13,049 | Houlton (Maine) 2XAA.  |
| 22.8  | 13,158 | Fort Wayne (Indiana) WOWO, 1 kw.   |
| 22.2  | 13,392 | Vienna, 0.24 kw.   |
| 22.1  | 13,574 | Richmond Hill (N.Y.) 2XE (S.W. of WABC).   |
| 21.96 | 13,661 | Schenectady (General Electric Co.) 2XAD SUN., 11.30 p.m. to 3.30 a.m. MON., 8.0 p.m. to 9.0 p.m. TUES., 6.0 p.m. to 7.0 p.m. WED., 11.0 p.m. to 3.30 a.m. THURS., 8.0 p.m. to 9.0 p.m. FRI., 8.0 p.m. to 7.0 p.m., 11.0 p.m. to 4.0 a.m. SAT. No transmission. |
| 18    | 16,666 | Kootwijk (Holland) HOLL, 40 kw.  |
| 17    | 17,647 | Bandoeng (Java) ANH. (Radio Malabar) 30 kw. MON., WED. and FRI., 7.0 a.m. to 12.0 noon. TUES., THURS. and SAT., 12.0 noon to 5.0 p.m.  |
| 16.02 | 18,726 | Rocky Point (California) 2XG. MON. and FRI., after 5.0 p.m.  |
| 15.5  | 19,354 | Nancy (France).  |

hagen. Proprietary names must not be used as *noms de plume*. Verb Sap (Oxford): WEA (N.Y.) unless wavelength quite certain. Quizzing (Chipping): (1) Radio Paris (wavelength wrongly estimated); (2) Koenigswusterhausen (wavelength 1,250 m.). Peter (N. Devon): Yes, Toulouse, and many German stations as well as other stations. Megohm (Manchester): (4) Leningrad; (5) EAJ 13 and Cadiz (E.A.J. 3); (6) Radio beacon. Nobby Clark (Maidenhead): (1) WEA (New York); (2) WBZ (Springfield, Mass.). J. G. S. (N. 1): 3LO Melbourne. Night Hawk (Barry): (1) Warsaw; (2) Kovno, Neutrodyne (Leeds); (1) Amateur station playing

gramophone records; (2) WGY (Schenectady). Pen Bryn (Neasden): WPG (Atlantic City). Ixiom (Bayswater): Frankfurt. Transformor (Waddon): (1) Leipzig relaying Frankfurt; (2) Breslau relaying Frankfurt; (3) Brussels; (4) Vienna (Operetta); (5) Posen. WHP29 (Pudsey): Leningrad. D. F. (Kille) Leningrad. Tinkle (Tottington): (1) Moscow; (2) Motala 8 S. M. (Liverpool): Leningrad. R. N. V. R. (Leicester): Moscow. O. V. I. (Birmingham): (1) Vienna; (2) Moscow. Bonzo (Siccup): (1) Leningrad; (2) Cologne, dance music; (3) Nürnberg relaying Munich. Hopeful (Finchley): Leningrad. A. T. C. (Dalston): Dresden, relaying Berlin (if wavelength approximately accurate). Solodyne 5 (Wood Green): San Sebastian relaying Madrid (E.A.J.7). Girl Enthusiast (Bristol): Warsaw. Tim (Port-cawl): In spite of your estimate, it was probably Koenigs-wusterhausen. Elstree (Selly Oak): Copenhagen. Searcher (Wellesley): Porsgrund, relaying Oslo. Donegal: (1) Angola, if particulars are correct; (2) Kalundborg; (3) Motala. Kalinkin (Aikrington): Muenster, relaying Cologne. Screened Grid (Helsby): Surely 24 m. (SSW). Screened Four (Grimsby): Air Ministry Station. Acme (Woodford Green): Details very vague; likely to be Vienna 43.4 m. Mac (Porto): Motala. Rosio (Malton): Cannot estimate wavelength by these particulars. A close estimate particularly necessary for short waves. Clotted Cream (Exmouth): If you cannot estimate wavelength, please give dial readings of nearest known stations, as a rough guide. A. D. B. (Cornwall): (1) Angola; (2) Warsaw; (3) Novosibirsk, in Siberia (4 kw.). Riviera (Blackburn): 37.8 m. Vernier (W.C.1): Rjukan (relaying Oslo). Norseman (Lerwick): Cannot estimate wavelength from these particulars. Call suggests Moscow (1,450). Dole (Stoke): Glasgow relaying service from Edinburgh. A. D. P. (Bristol): If wavelength approximately accurate, Hamburg. H. I. (Rumney) 2XAD Moonraker (Wilts): (1) The particulars would fit many German stations between the wavelengths you mention; (2) Toulouse (Rad. du Midi). Leather-head SNY: Radio Toulouse. Clarence (Tottenham): Leningrad. Barber (Wick): Impossible to estimate accurately by your dial readings, but Barcelona (E.A.J.1) and San Sebastian both relay EAJ7. Battery (Poplar): Wavelength surely wrong. Can you confirm? Winkley (Preston): (1) A wireless beacon; (2) no coupon. W. H. S. (Dalston): Dial readings alone are no indication of wavelength. E. F. S. (King's Lynn): WPG. W. T. T. (Bristol): Cork relaying Dublin.

A considerable number of correspondents sent us enquiries about a very late transmission (up to 3 a.m.) which they heard on Saturday night, February 4/5. This was a relay by Leipzig and other German stations of dance music at the Opera Ball, taking place at Dresden. The late transmission was not indicated in the Leipzig programme.

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

### WORLD-RADIO (No. 135)

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

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

### The Alternative Postal Service

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

(Continued from page 273.)

### Distant Reception by Crystal

To the Editor of *WORLD-RADIO*.

SIR,—I was listening on a crystal set, on Sunday evening, February 12, using a 35 loading coil. After Liverpool and Manchester had closed down at 10.45 p.m. I received the "Silent Fellowship" from Cardiff through Daventry. I heard the Irish National Anthem from Dublin just before they closed, also Frankfurt-am-Main and another German station of which I did not get the call-sign. In addition, I had another foreign station which was giving an opera, but did not get its call-sign.

Can any of your readers beat this crystal set reception?—Yours truly,

W. S. FENTRESS.

Liverpool, February 14, 1928.

Radio loud speakers are being introduced into some of the Austrian prisons, notably at the convict prison at Stein, on the Danube, at an early date, in order that the convicts may enjoy the elevating influences which good music and noble literature can furnish, brought to them from the outside world. The principle proposed is to have a good loud speaker placed in the central well of each prison, so that its programme may be audible in every cell. Music of the lighter kinds will only be given on exceptional occasions, and popular songs which might incite the convicts to join in will be avoided. Much care will be required.

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## Postage Stamps and Radio

By a Collector

It has lately been said that "it is a sheer impossibility to enjoy listening while you are otherwise engaged." For myself, I find that enjoyment of my stamps is not incompatible with enjoyment of "listening." In describing five stamps, I hope to show a connection between them.

Guatemala appears to have been the first country to introduce wireless into its stamps, by issuing, in 1918, the thirty-cent stamp, printed in black and red, and depicting wireless masts, a railway train, buildings, trees, water, and pedestrians walking towards the station. The stamp appears to have been issued in 1919.



The Russian Soviet Republic presents us with another example; two stamps of similar design, but different denominations—7 kopek blue and 14 k. green (issued in 1925) representing "Popoff Wireless Pioneer," issued in 1925. Both these stamps were reproduced in *World Radio* (then the *Radio Supplement*) two years ago.



In the current issue of Greek stamps (1927), we find on the three-drachmai (black

and violet) the cruiser *Averoff* portrayed, with the wireless aerial well displayed.



The British Empire does not appear to have been the first in the field (of ether) with stamps appertaining to wireless.

The only two examples I have discovered in the British Empire are both from Newfoundland, which to the philatelist is one of the most fascinating countries by reason of the large number of pictorial stamps that have been issued since 1857. The two stamps referred to are to be found in the pictorial set issued to the public as recently as January 3, 1928. The whole set is most



interesting, but in this article upon wireless and philately, I am treating only of the two that concern us—namely, the 2 cents (red) and the 9 cents slate green. Regarding the former, inscribed "S.S. *Caribou*, 9 hours to Sydney, N.S.," I understand that the *Caribou* is fitted with very efficient wireless apparatus and the aerial is clearly visible on the stamp. The nine cent stamp portrays a fine old solid building and tower, over which is a mast supporting an aerial, and above flies the Union Jack; the inscription tells its own story: "Cabot Tower, Signal Hill; St. John's First Trans-Atlantic Wireless Signal Received 1901." The message was transmitted from Poldhu, Cornwall.



From the same station the first wireless telephonic message was sent, and received, 1,200 miles away at sea by the R.M.S. *Victorian*, in September, 1920.

In numerous cases the wireless apparatus, e.g., aerials, appears to have been omitted by the engraver.

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# Competition

## RESULT OF COMPETITION No. 3

The winner of the prize of £5 offered in the crossword competition is:—

Mr. J. M. CHILD,  
Sedgley Bank, Bramhall Lane, Cheshire.

Other competitors whose problems are worthy of special mention are:—

Miss K. L. A. WILSON, Latrigg, Prestbury, Glos.  
Mr. E. HANDSCOMB, 12, Pickwick Road, London, S.E. 21.

Mr. W. H. HOLMES, "Carnarvon," Welholme Avenue, Grimsby.

In this connection we may mention that among the original solutions sent in, one competitor failed to send his name and address, while several others whose crosswords were otherwise correct omitted to complete certain words where the first or last letter was blocked on either side, e.g., the "m" in the first word "Mysia."

## RESULT OF COMPETITION No. 4

"WHICH STATION WAS THAT?"

The prizes of £3, £2, and £1 respectively have been won by the following competitors, whose solutions were the first three correct ones opened:—

(1) Mrs. D. M. SMITH, Thornton House, Childer Thornton, Cheshire.

(2) M. MARCEL HULLOT, 9, rue des Perchamps, Paris, XVI<sup>me</sup>.

(3) Mr. G. G. ROBERTS, 9, Mona Avenue, Cave Street, Hull.

The correct list of stations is as follows:—

- (1) Fredriksstad (434.8 m.)
- (2) Melbourne (3LO) (32 m.)
- (3) Radio-Toulouse (391 m.)
- (4) Milan (541 m.)
- (5) Warsaw (1,111.1 m.)
- (6) Kiel (256 m.)
- (7) Posen (342.8 m.)
- (8) Radio-Barcelona (344.8 m.)

## COMPETITION No. 5

In accordance with the note in our last issue, we hoped to be able to print this week the winning crossword puzzle. Owing to pressure of space, however, we must hold it over until next week, and have substituted a competition of special interest to those who have been following the German course.

Prizes of £3, £2, and £1 are again offered for the first three correct solutions to be opened; closing date Wednesday, February 29 (foreign entries, Friday, March 2).

The competition this week is divided into two parts, the first taking the form of a number of general questions, and the second a "syllable riddle" (Silbenrätsel).

### WIEVIELE FRAGEN KÖNNEN SIE BEANTWORTEN?

1. An welchem Flusse liegt Berlin?
2. Wie heisst die Hauptstadt von Bayern?
3. Welcher Berg ist der höchste in Deutschland?
4. Wieviele Hanse-städte bestehen noch?
5. Wie heissen sie?
6. Wer schrieb "Die Leiden des jungen Werther"?
7. Wer schrieb die Oper "Rienzi"?
8. Welche Stadt nennt man "das deutsche Sheffield"?
9. Wo ist die Glyptothek?
10. In welcher Stadt ist die Sistineische Madonna?

### SILBENRÄTSEL.

— a — a — a — bel — bes — burg — de — den — des — di — di — do — don — en — en — in — le — lon — lum — ni — mo — mu — na — ner — ni — ni — ol — or — ra — ro — ru — säu — si — the — wir.

These are the syllables of ten words (some exclusively German). The clues are:—

- 1, Name. 2, Old English poem. 3, A great city.
- 4, Main support of mammals. 5, Shakespearean

heroine. 6, Popular everywhere. 7, European country. 8, Race. 9, In Africa. 10, German town.

If these ten words are arranged properly the first letters will give the name of a widely-read weekly paper.

Entries, accompanied by the special weekly coupon, must be received, addressed to the Editor, *World-Radio*, B.B.C., Savoy Hill, W.C., not later than the first post on Wednesday morning (foreign entries on Friday morning) next. The results will be published in the issue of the following week. Envelopes must be marked "Competition."

The Editor's decision is final.

## "World-Radio" Competition Coupon

No. 6

February 24, 1928

## Continental Programme Events

Sunday, February 26.

- 6.0 p.m. Frankfurt, Stuttgart.—"Il Seraglio."
- 6.40 " Langenberg.—"Don Juan" (Mozart).
- 7.0 " Koenigsberg.—"The Last Waltz" (Oscar Strauss).
- 7.0 " Munich.—"The Oberammergau Passion Players" (Manz; music by Horak).
- 10.0 " Union-Madrid.—"The Pearl Fishers."

Monday, February 27.

- 7.0 p.m.—Copenhagen.—Hungarian Music.
- 7.0 " Hanover.—Organ Recital.
- 8.15 " Hilversum.—"The Bandmaster" (Päer).
- 8.30 " Radio-Paris.—"Carmen" (Bizet).
- 9.50 " Hilversum.—"The Betrothal by Lantern Light" (Offenbach).

Tuesday, February 28.

- 6.0 p.m.—Vienna.—"Fidelio" (Mozart).
- 6.15 " Stockholm.—"Carmen" (Bizet).
- 6.30 " Kattowitz.—"Hrabina" (Moniuszko).
- 7.0 " Bergen.—"The Bartered Bride."
- 7.0 " Copenhagen.—"Three Little Girls."
- 7.0 " Hamburg.—"Cavalleria Rusticana."
- 7.15 " Frankfurt, Stuttgart.—"The Geisha."
- 7.15 " Leipzig.—"The Fatal Egg" (Schütt).
- 10.0 " Union Madrid.—Modern Spanish Music.

Wednesday, February 29.

- 6.30 p.m.—Breslau.—"Don Carlos" (Verdi).
- 7.5 " Koenigsberg.—"The Spendthrift."
- 7.15 " Leipzig.—"The Trusty Musicmaster."

Thursday, March 1.

- 7.0 p.m.—Langenberg.—"Pelleas and Melisande."
- 7.15 " Leipzig.—"Phædra" (Racine, translated by Schiller).
- 9.0 " Copenhagen.—Folk Music of all Countries.

Friday, March 2.

- 6.0 p.m.—Prague.—"The Brandenburgs in Bohemia" (Smetana).
- 7.0 " Munich.—"Euryanthe" (Weber).
- 7.50 " Naples.—"Lucrecia Borgia" (Donizetti).
- 8.10 " Brussels.—"Aida" (Verdi).
- 10.5 " Barcelona.—Lenten Concert.

Saturday, March 3.

- 3.0 p.m.—Berlin, Frankfurt, Hamburg, Langenberg, Stuttgart.—Mahler's Eighth Symphony.
- 7.0 " Hamburg.—"The Lady of the Rose."
- 7.0 " Vienna.—"John Gabriel Borkman" (Ibsen).
- 7.10 " Berlin.—"The Sleep Walker" (Bellini).
- 7.45 " Rome.—"The Elixir of Love."

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

DAVENTRY PROGRAMME

(Feb. 26—Mar. 3) (25 kw.)

SUNDAY

- 10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
3.30 p.m.—A Symphony Concert: Sapellnikov (Pianoforte), The Wireless Symphony Orchestra, (Leader, S. Kneale Kelley). Conducted by Talich. The Orchestra: A Shakespeare Overture (Jirak).
3.45 p.m.—Sapellnikov and Orchestra. Concerto in G Major for Pianoforte and Orchestra, Op. 44 (Tchaikovsky).
4.15 p.m.—Orchestra: Introduction and Allegro (Bliss).
4.30 p.m.—Sapellnikov: Nocturne in D Flat. Scherzo in C Sharp Minor (Chopin).
4.40 p.m.—Orchestra: Symphony No. 5 in E Minor ("from the New World") (Dvorak).
5.20 p.m.—Readings from the Old Testament: "The Safeguard of Wisdom" Proverbs II, verses 1-20.
5.30—5.45 p.m.—A Religious Address: Written by Father Pierre Lhonde, read by Father Martindale.
8.0 p.m.—A Religious Service. From the Parish Church, Stoke-on-Trent. Conducted by the Rev. D. H. Crick.
8.45 p.m.—The Week's Good Cause: Appeal on behalf of the Royal Hospital and Home for Incurables, Putney, by the Lord Chancellor (Viscount Cave).
8.50 p.m.—Weather Forecast, General News Bulletin; Local Announcements; Shipping Forecast.
9.5 p.m.—Albert Sandler and the Grand Hotel, Eastbourne, Orchestra. Leonard Gowings (Tenor). Relayed from the Grand Hotel, Eastbourne. Orchestra: Finlandia (Sibelius). In a Monastery Garden (Ketelbey). Leonard Gowings: Where'er you walk (Handel), O Vision Entrancing (from "Esmeralda") (Goring Thomas). Albert Sandler: Suite, "Othello" (Colebridge-Taylor), Violin Solo. "Rondo Capriccioso" (Saint-Saens). Leonard Gowings: An Eriskay Love Lilt (Songs of the Hebrides) (Marjory Kennedy Fraser), Ninetta (Breverly), Down in the Forest (Ronald). Orchestra: Fantasia on Leoncavallo's "Pagliacci."

MONDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
11.0 a.m.—The Gershom Parkington Quintet. Mollie Myers (Pianoforte).
12.0 noon.—The Gershom Parkington Quintet: Ben. Millett (Alto), Eileen Wright (Violin).
1.0-2.0 p.m.—An Organ Recital, by Edgar T. Cook. Relayed from Southwark Cathedral: Marian Carew, Selected Songs.
2.30 p.m.—Miss Rhoda Power: "Boys and Girls of Other Days—VII. Stolen for the Stage."
3.0 p.m.—Musical Interlude.
3.5 p.m.—Great Stories from History and Mythology—Sir Galahad."
3.20 p.m.—Musical Interlude.
3.30 p.m.—A Pianoforte Recital by Niedzielski.
4.0 p.m.—Frank Ashworth's Park Lane Hotel Dance Band.
5.0 p.m.—Household Talk: Mrs. Cottingham-Taylor, "Spring Cleaning."
5.15 p.m.—The Children's Hour.
6.0 p.m.—The London Radio Dance Band. Directed by Sidney Firman.
6.20 p.m.—Girls' and Boys' Clubs Bulletins.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—Band (cont).
7.0 p.m.—Mr. Desmond MacCarthy: Literary Criticism.
7.15 p.m.—The Foundations of Music: Schumann's Songs, sung by Helen Henschel (Soprano).
7.25 p.m.—M. E. M. Stephan: French Talk, including a reading from "La Lettre Chargee," Scenes V, VI and VII.
7.45 p.m.—Stuart Robertson (Bass-Baritone): Ethiopia saluting the Colours (Charles Wood), A Soft Day (Stanford), Skye Boat Song (arr. Somervell), The Blue Hills of Antrim (arr. Hartly), The Two Grenadiers (Schumann).
8.0 p.m.—Ellen Terry: A Programme in Honour of Her Eightieth Birthday. Coronation March from Henry VIII. (Edward German), Mamilius (April 28, 1856, with

- Charles Kean). The Winter's Tale (Act II, Scene 1): Hermione (Mabel Terry Lewis), 1st Lady (Minnie Terry), 2nd Lady (May Whitty), Mamilius (Virginia Parsons), Leontes (Ben Webster), 1st Lord (Tom Healewood). Puck (October 15, 1856, with Charles Kean). "A Midsummer Night's Dream" (Act II, Scene 1), music by Mendelssohn: Puck (Mary Casson), Fairy (Virginia Parsons), Oberon (John Gielgud), Titania (Elizabeth Irving), Portia (April 17, 1875, with Squire Bancroft). "The Merchant of Venice" (Act III, Scene 2), music by Sullivan; "Ding Dong Bell," sung by Lilian Davies; Portia (Mabel Terry Lewis), Bassanio (John Gielgud), Oscar Wilde's Sonnet to Ellen Terry as Portia, spoken by Henry Ainley. Ophelia (December 30, 1878, with Henry Irving). "Hamlet" (Act IV, Scene 5), music by Henschel: Queen (Mabel Terry Lewis), Horatio (John Gielgud), Ophelia (Fay Compton), King (Charles Terry), Laertes (Ben Webster). Mistress Page (June 10, 1902, with Beerholm Tree). "The Merry Wives of Windsor" (Act II, Scene 1), music by Nicolai: Mistress Page (Minnie Terry), Mistress Ford (Mabel Terry Lewis). Bourree from "Much Ado About Nothing" (Edward German). Our Birthday Greetings, spoken by Sir Johnston Forbes-Robertson. March from Henry VIII. (Sullivan). A message from Ellen Terry. The music by the Wireless Orchestra, conducted by John Ansell.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mrs. Sydney Webb: Reminiscences of Herbert Spencer.
9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—A Light Orchestral Concert. Gertrude Johnson (Soprano), Angus Morrison (Pianoforte). The Wireless Chorus (Chorus-Master, Stanford Robinson). The Wireless Orchestra, conducted by John Ansell. Orchestra: Overture to "La Tonelli" (Ambrose Thomas).
9.45 p.m.—Gertrude Johnson and Orchestra: Ah fors' è lui (Ah, perhaps 'tis he, from "La Traviata") (Verdi).
9.50 p.m.—Angus Morrison, Chorus and Orchestra: Rio Grande (Constant Lambert). First Performance. (Conducted by the Composer.)
10.10 p.m.—Orchestra: Suite No. 3, from "La Source (The Fountain) (Delibes): Incantation, Romance, Introduction and Mazurka, Finale.
10.25 p.m.—Gertrude Johnson: The Rose enslaves the Nightingale, Hindu Song, Gathering Berries (from "The Snow Maiden") (Rimsky-Korsakov).
10.35 p.m.—Angus Morrison: Three Spanish Dances, Nos. 5, 2 and 7 (Granados).
10.45 p.m.—Orchestra: Valse, "The News from Belgrade" (Komzak), Overture to "The Bat" (Johann Strauss).
11.0 p.m.—12.0 midnight.—Dance Music.

TUESDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
11.0 a.m.—The Gershom Parkington Quintet, Stanley Vaughan-Williams (Light Baritone).
12.0 noon.—The Gershom Parkington Quintet: Marie Ambrose (Soprano) D'Arny Woolven (Baritone).
1.0-2.0 p.m.—The London Radio Dance Band: directed by Sidney Firman, Doris Palmer.
2.30 p.m.—Sir H. Walford Davies: "Elementary Music—VII, Thirds."
3.15 p.m.—Musical Interlude.
3.20 p.m.—M. E. M. Stephan: "Elementary French."
3.50 p.m.—Musical Interlude.
4.0 p.m.—William Hodgson's Marble Arch Pavilion Orchestra.
4.15 p.m.—Mr. J. H. Dribarg: "The Proper Study of Mankind: An Introduction to Anthropology."
4.30 p.m.—Orchestra (continued).
5.0 p.m.—Miss Ann Spice: "A Bookshelf of Old Favourites: 'The Tower of London,' by Harrison Ainsworth."
5.15 p.m.—The Children's Hour.
6.0 p.m.—Gramophone Records arranged by Mr. Christopher Stone.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.

- 6.45 p.m.—Gramophone Records.
7.0 p.m.—Sir Percival Wilkinson: "The Road Scheme of the Joint Committee."
7.15 p.m.—The Foundation of Music: Schumann's Songs, sung by Helen Henschel (Soprano).
7.25 p.m.—Professor A. V. Campbell: "Greek Plays for Modern Listeners—I, The General Character of a Greek Tragedy." (S.B. from Liverpool)
7.45 p.m.—A Military Band Concert. The Wireless Military Band, conducted by B. Walton O'Donnell. The St. George's Singers. Band: Heroic March (Saint-Saens), Overture to "Don Juan" (Mozart).
7.58 p.m.—St. George's Singers: Sing we and chant it (Morley), In going to my naked bed (Edwards), Fair Phyllis I saw (Farmer), To shorten winter's sadness (Weelkes).
8.0 p.m.—Mrs. Mary Adams: "Problems of Heredity—I, Nature and Nurture."
8.30 p.m.—Band: Suite of Four Flemish Dances (Blockx, arr. Godfrey).
8.37 p.m.—St. George's Singers: I call I call (Charles Wood), Bushes and Briars (Essex Folk Song) (arr. Vaughan Williams), Choral Dance, "Pan" (Boughton).
8.46 p.m.—Band: Three Dances from "Henry VIII" (German). Morris Dance, Shepherds' Dance, Torch Dance.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Sir H. Walford Davies: "Form and Phrase in Music."
9.35 p.m.—Local Announcements, Shipping Forecast.
9.40 p.m.—Chamber Music: Benno Schonberger (Pianoforte); The Entente String Quartet; Cecil Bonvalot (1st Violin), Dorothy Churton (2nd Violin), James Lockyer (Viola), Edith Churton (Violoncello). The Quartet: Quartet in E Flat (Carl von Dittersdorf).
9.55 p.m.—Benno Schonberger: Three Fantasies (Schumann).
10.5 p.m.—The Quartet: Serenade for String Quartet (Hugo Wolf).
10.12 p.m.—Benno Schonberger: Moment Militaire (Schubert, arr. Liszt), Moment Musical (Schubert).
10.20 p.m.—The Quartet: Quartet (Germaine Tailleferre).
10.30 p.m.—12 midnight.—Dance Music.

WEDNESDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
11.0 a.m.—The Gershom Parkington Quintet: Barbara Frewing (Mezzo-Soprano).
12.0 noon.—The Gershom Parkington Quintet: Leonora Brown (Soprano), Jacques Serres (Cello).
1.0 p.m.—2.0 p.m.—Frascati's Orchestra, directed by George Haec.
2.30 p.m.—Mr. A. Lloyd James, "Speech and Language."
2.50 p.m.—Musical Interlude.
3.0 p.m.—Mr. J. C. Stobart and Miss Mary Somerville, "Stories in Poetry—VII, New Ballads."
3.30 p.m.—Musical Interlude.
3.45 p.m.—Captain L. F. Ellis, "Our Interest in Good Government—I, What would happen if all government suddenly stopped."
4.0 p.m.—A Light Classical Concert: Phyllis Carey Foster (Soprano), The Gershom Parkington String Quartet: David Wise (1st Violin), Tate Gilder (2nd Violin), Frank Howard (Viola), Gershom Parkington (Violoncello). The Quartet: String Quartet in E Flat (Mozart).
4.25 p.m.—Phyllis Carey Foster: Der Fischerweise, Im Frühling, An die Laute (Schubert).
4.34 p.m.—Quartet: Three Noctettes (Glazunov).
4.44 p.m.—Phyllis Carey Foster: Absence (Gerrard Williams), The Ballif's Daughter (arr. Gerrard Williams). When I was one and twenty (Armstrong Gibbs). To Phyllis, milking her flock (Arthur Benjamin).
4.52 p.m.—Quartet: String Quartet in B Flat (Haydn).
5.15 p.m.—The Children's Hour.
6.0 p.m.—The London Radio Dance Band, directed by Sidney Firman.
6.20 p.m.—This Week's Work in the Garden.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—The London Radio Dance Band, directed by Sidney Firman.

- 7.0 p.m.—Sir Richard Luce, "Malmesbury Abbey."
7.15 p.m.—The Foundations of Music: Schumann's Songs, sung by Helen Henschel (Soprano).
7.25 p.m.—Professor A. V. Mill, "Speed, Strength and Endurance in Sport—I, Muscles and Nerves."
7.45 p.m.—Old Favourites: Jack Payne and his Band.
8.15 p.m.—New Museums Club Concert: In aid of the Cambridge University Assistants' Benevolent Fund, relayed from the Guildhall, Cambridge. Concert directed by Mr. B. Dennis Jones (Trinity): Joseph Reed, with Organ: Lohengrin's Narration ("Lohengrin") (Wagner). At the Organ—C. V. Allen. Polusha Ellis: Serenade (Richard Strauss), A Granada (Alvarez). The Trinity Madrigal Club in Madrigals: O sleep fond fancy, Though Philomela lost her love (Morley). In the merry month of May (Youll). Folk Songs: The Turtle Dove, The Seeds of Love (arr. Vaughan Williams). The Trinity String Quartet: Quartet in C (Mozart). 1st Violin—W. C. G. Knowles; 2nd Violin, L. D. Stewart; Viola, J. D. Solomon; Cello, K. Kurosawa.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mr. Vernon Bartlett, "The Way of the World."
9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—Variety: Yvette Darnac (French Songs), Muriel George and Ernest Butcher (Folk Songs and Duets), Clare Harris (In Irish Poetry), Clapham and Dwyer, A Spot of Bother.
10.30 p.m.—A Leap Year Programme. —Tally Ho! Spring Meet of the Fair Sex. Bachelors—to your burrows!
11.0 p.m.—12.0 midnight.—Dance Music.

THURSDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
11.0 a.m.—The Gershom Parkington Quintet: Ward-Jackson (Baritone).
12.0 noon.—The Gershom Parkington Quintet: Muriel Middleton (Soprano), Sylvia de Gay (Violin).
1.0-2.0 p.m.—New Gramophone Records.
2.30 p.m.—Mr. Eric Parker: "Out of Doors from Week to Week—VII, Splines and Thorns."
3.0 p.m.—Evensong, Relayed from Westminster Abbey.
3.30 p.m.—Lenten Address: The Rev. W. H. Elliott: "The Seamy Side of Life."
3.45 p.m.—Miss V. Brand: "Something New from Something Old—Mothers' and Daughters' Jumpers and Blouses."
4.0 p.m.—The Astoria Orchestra. Directed by Fred Kitchen.
5.0 p.m.—An Organ Recital by Patman, from the Astoria Cinema.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Dance Music. The London Radio Dance Band, directed by Sidney Firman.
6.15 p.m.—Market Prices for Farmers.
6.20 p.m.—Band (Continued).
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—Boy Scouts' Programme: A competition arranged by the Editor of the Scout.
7.0 p.m.—Mr. Francis Toye: "Music in the Theatre."
7.15 p.m.—The Foundations of Music: Schumann's Songs. Sung by Helen Henschel (Soprano).
7.25 p.m.—Mr. R. S. Lambert: "Pioneers of Social Progress—I, John Howard and the Cleansing of the Prisons."
7.45 p.m.—A Military Band Programme. The Wireless Military Band, conducted by B. Walton O'Donnell. Lola Vasilkovska and her Two Guitarists. Band: Overture, "The Merry-makers" (Eric Coates); Rigaudon (Raff).
7.55 p.m.—Lola Vasilkovska and her Two Guitarists: Russian Gipsy Songs.
8.0 p.m.—Cymantfa Ganu (Welsh Community Singing Festival). Relayed from Plas Mynyw (the Miners' Institute), Rhoslanerchrugog, nr. Wrexham: Solo Harp, Sioned Roberts. The Singing directed by W. S. Gwynn Williams. Songs taken from "Caneuon y Gymantfa" (The Welsh Community

- Song Book). S.B. from Liverpool.
9.0 p.m.—Weather Forecast, Second General News Bulletin, Shipping Forecast.
9.20 p.m.—The Welsh National Dinner of the Cardiff Cymrodorian Society. In Honour of St. David. "Ein Gwestai" (Our Guest): Proposed by the President, Mr. Gwilym Hughes, responded to by the Rt. Hon. David Lloyd George, M.P. "Wales To-day and Tomorrow," proposed by The Lord Mayor of Cardiff, responded to by Mr. John Rowland, C.B. Music by the Herbert Ware Orchestra. Artists: Glyn Hopkins (Tenor), Jennie Ellis (Soprano), Gwladys Williams, will sing "Penillion," accompanied by Glyn Davies on the Harp. Elsie Thomas (Telenores Tawe). (From Cardiff.)
10.30 p.m.—Dance Music.

FRIDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
11.0 a.m.—The Parkington Quintet, Evelyn Wix (Soprano).
12.0 noon.—A Sonata Recital by Anton Tschalkov (Violin) and David Box (Pianoforte).
12.30 p.m.—An Organ Recital.
1.0 p.m.—2.0 p.m.—Lunch-Time Music.
3.0 p.m.—Mr. Ernest Young and Dr. J. A. Williamson: "Empire History and Geography."
3.25 p.m.—Musical Interlude.
3.30 p.m.—Mr. Allen Walker: "London's Great Buildings—VII, Westminster Abbey: The Cloisters."
3.45 p.m.—Musical Interlude.
3.50 p.m.—Concerts for School Children, relayed from The People's Palace, Mile End. The Audrey Chapman Orchestra, conducted by Frank-Bridge, Principal Violin: Beatrice Fformby.
4.45 p.m.—Musical Interlude.
5.0 p.m.—Miss Mary Elphinstone: Rabbit Breeding—A profitable pleasure.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Frank Westfield's Orchestra.
6.30 p.m.—Time Signal (Greenwich), Weather Forecast, First General News Bulletin.
6.45 p.m.—Orchestra (Continued).
7.0 p.m.—Mr. Percy Scholes, the B.B.C. Music Critic.
7.15 p.m.—The Foundations of Music: Schumann's Songs, Sung by Helen Henschel (Soprano).
7.25 p.m.—Professor C. H. Desch, "Metals in the use of Man—I, The Dawn of Metals."
7.45 p.m.—Vaudeville: Irene Russell (Revie Star), Leslie Sarony (in Syncoated Songs), Patricia Rossborough and Ivor Dennis (Syncoated on two Pianos), Enid Cruickshank (Contralto), Julian Rose (Hebrew Comedian), George Garner (Tenor).
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Major Walter Elliot, M.P., "Twenty Million Africans."
9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—Moiseiwitsch: A Pianoforte Recital: Playing Fountains (Jeux d'eau) (Ravel), The Cathedral under the Waves (La cathedrale engloutie) (Debussy), Study in F sharp minor (Stravinsky), Hark, hark, the Lark (Schubert, arr. Liszt), Scherzo in C sharp minor (Chopin).
10.0 p.m.—Two Plays: Presented by the Scottish National Players: "Campbell of Kilmhor." A Highland Play by J. A. Ferguson. "A Valuable Rival." A Lowland Comedy by Neil F. Grant.
11.0 p.m.—12.0 midnight.—Dance Music.

SATURDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich), Weather Forecast.
1.0 p.m.—2.0 p.m.—The Carlton Hotel Octet, directed by René Tapponnier, from the Carlton Hotel.
3.30 p.m.—The Dansant.
3.45 p.m.—(Approx.)—The Sixth Round of the F.A. Cup. A Running Commentary by George F. Allison on the Second Half of a Match Relayed from the Ground.
4.45 p.m.—(Approx.)—The Dansant.
5.15 p.m.—The Children's Hour.
(Continued on page 278.)

(5GB)

(491.8 metres: 610 kc.)

## DAVENTRY (EXPERIMENTAL) PROGRAMME

(Feb. 26—Mar. 3)  
(25 kw.)

## SUNDAY

- 3.30 p.m.—An Orchestral and Vocal Concert: The Birmingham Studio Chorus and Augmented Orchestra (Leader, Frank Cantell). Conducted by Joseph Lewis. Vocal Quartet, Chorus, and Orchestra: "The Golden Threshold" (Liza Lehmann). An Indian Song Garland for Solo Voices, Chorus, and Orchestra. Poems by Naidu.
- 4.20 p.m.—Orchestra: Suite from "Le roi s'amuse" ("The King's Diversion") (Delibes). Emilie Waldron (Soprano). The Knight of Bethlehem (Cleghorn Thomson). Slumber Song of the Madonna (Reger).
- 4.40 p.m.—Orchestra: Andantino in D Flat (Lemare). James Howell (Bass): Absent yet Present (M. V. White). Orchestra: Gavotte in D (Rameau).
- 5.0 p.m.—Alice Vaughan (Contralto): Still as the Night (Bohm). Geoffrey Dams (Tenor): Ah! moon of my delight (Lehmann). Orchestra: Suite of Three Dances from "Nell Gwyn" (German).
- 6.20 p.m.—Readings from the Old Testament. (See 5XX.)
- 5.30—5.45 p.m.—A Religious Address (See 5XX.)
- 8.0 p.m.—A Religious Service: From the Parish Church, Stoke-on-Trent. (See 5XX.)
- 8.45 p.m.—The Week's Good Cause (From Birmingham): Appeal on behalf of the Birmingham Police Aided Association by Sir Charles Rafter.
- 8.50 p.m.—Weather Forecast, General News Bulletin.
- 9.0 p.m.—Chamber Music: Adolphe Hallis (Pianoforte). The Poltronieri String Quartet. Alberto Poltronieri (1st Violin). Florenzo Mora (Viola). Guido Ferrari (2nd Violin). Antonio Valisi (Cello). Quartet: Quartet in D Minor, K. 421 (Mozart).
- 9.20 p.m.—Adolphe Hallis: Le Rossignol (The Nightingale) (Couperin).
- 9.30 p.m.—Quartet in C minor (Boccherini).
- 9.45 p.m.—Adolphe Hallis: Le Tic-toc-choc (Couperin). Alborada (Ravel).
- 9.55 p.m.—Quartet: Quartet in F, Op. 96 (Dvorak).
- 10.30 p.m.—Epilogue.

## MONDAY

- 3.0 p.m.—Dance Music: The London Radio Dance Band. Directed by Sidney Firman. Winnie Victoria (Entertainer).
- 4.0 p.m.—Lozels Picture House Organ. (From Birmingham.) Frank Newman (Organ). Charles Harrison (Baritone).
- 5.0 p.m.—A Ballad Concert: Nancy Royle (Soprano). Austin Carnegie (Baritone). Olive Cloke (Pianoforte).
- 5.45 p.m.—The Children's Hour. (From Birmingham.)
- 6.30 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Light Music. (From Birmingham.): The Birmingham Studio Orchestra, conducted by Joseph Lewis. John Armstrong (Tenor).
- 8.0 p.m.—Vaudeville. (From Birmingham): Ivell and Worth (Entertainers with a Piano). Denis O'Neil (The Irish Entertainer). Zachary Tan (Novelty Instrumentalist). Rex Burchell (Entertainer at the Piano). Philip Brown's Dominoes Band.
- 9.0 p.m.—Nicholas Medtner: A Recital of his own Compositions, assisted by Tatiana Makushina (Soprano). Nicholas Medtner: Sonata in C from Triad-Sonata, Op. 11 (In one Movement). Novel in G, Op. 17, No. 1. Fairy Tale, March of Paladins, Op. 14, No. 2.
- 9.30 p.m.—Tatiana Makushina: The Muse, Op. 29; Valse, Op. 32 (Poems by Pushkin). O'er thee I bend, Op. 24 (Poem by Fet). Verzweiflung (Despair), Op. 19A (Poem by Nietzsche). Die Quelle (The Well), Op. 46 (Poem by Chamisso). Frisch gesungen (Gaily sing), Op. 46 (Poem by Chamisso).
- 9.45 p.m.—Nicholas Medtner: Fairy Tales: The Magic Fiddle, Op. 35, No. 1; Fairy Tale in B minor, Op. 20, No. 2; Fairy Tale in E minor, Op. 34, No. 2; Dance Fairy Tale, Op. 48, No. 1.
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15—11.15 p.m.—Dance Music.

## TUESDAY

- 3.0 p.m.—Paul Moulder's Rivoli Theatre Orchestra.
- 4.0 p.m.—A Military Band Concert (From Birmingham)—The City of Birmingham Police Band, Conducted by Richard Wassell. Walter Glynn (Tenor); Helen Alston (Songs at the Piano).
- 5.45 p.m.—The Children's Hour (From Birmingham.)
- 6.30 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.45 p.m.—The London Radio Dance Band: Directed by Sidney Firman. Margaret O'Callaghan.
- 8.0 p.m.—"Master Wayfarer" (From Birmingham). A happening of long ago, by J. E. Harold Terry. With songs by Arthur Scott Craven, and music by Howard Carr. Presented by Stuart Vinden.—The Maid (Ida Gilbert). The Man (Henry Butlin). The Villain (Edwin Turner). The Wayfarer (Cuthbert Ford). Incidental Music played by the Midland Sextet (Leader, Frank Cantell), directed by Yonosuke Mutsumi.
- 9.0 p.m.—Variety: Pete Mandell (Banjoist), Fred Lewis (Impersonator), Leslie Paget (Comedian), Vivien Lambelet (Soprano).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15—11.15 p.m.—The Open Road (From Birmingham): Arthur Cranmer (Baritone): The Vagabond, The Roadside Fire (from "Songs of Travel") (Vaughan Williams). White in the moon the long road lies ("A Shropshire Lad") (Somervell). Benediction (Tchaikovsky); Gordon Bryan (Pianoforte). On the Road in various Countries: Russia: March from "Miniature Suite" (Tcherepnin). Finland: En Route (Palmgren). Norway: Peasants' March (Grieg). Spain: The Road to Alhambra (Turina). England: Procession (Howells). Vincent Curran (Recitals): The Rolling English Road (Chester). The Crowning of Dreaming John (Drinkwater). Roundabouts and Swings (P. R. Chalmers). Arthur Cranmer: The Challenge (Peel). The Vagrant (Mullinar). Wayfarer's Night Song (Easthope Martin). Song of the Road (Stanton Jefferies). Vincent Curran: A Day's Companion (from "The Autobiography of a Super Tramp") (W. H. Davies). Gordon Bryan: On the Road in France: Old Coach on the road to Muzillac (from Suite, "In Brittany") (Rhené-Baton). Promenades (Journeys) (Poulenc).

## WEDNESDAY

- 3.0 p.m.—Chamber Music. (From Birmingham.) The Harold Mills Trio: Harold Mills (Violin), Frank Venton (Viola), Herbert Stephen (Violoncello). String Trio in E Flat (Op. 3) (Beethoven). Winifred Davis (Soprano).
- 4.0 p.m.—The London Radio Dance Band. Directed by Sidney Firman. Lawrence Baskcomb (Songs and Humorous Verse). Dickie Dixon (Syncopated Songs).
- 5.45 p.m.—The Children's Hour. (From Birmingham.)
- 6.30 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Light Music: Andrew Brown's Quintet: Gwen Knight and Mildred Watson (in Duets). The Quintet: Rhapsodic Slave (Volpatti). Serenade from "Student Prince" (Romberg). Elfentraum (Lautenschlager).
- 7.0 p.m.—Gwen Knight and Mildred Watson: Chassant dans nos forêts, La Musette, Ronde Villageoise (J. B. Weckerlin).
- 7.8 p.m.—Quintet: Rondo capriccioso (Mendelssohn, arr. Mulder). Berceuse (Fauré).
- 7.20 p.m.—Gwen Knight and Mildred Watson: Menuet Tendre, Ah, Mon Berger, Chantons les amours de Jean (J. B. Weckerlin).
- 7.28 p.m.—Quintet: Serenade in B Flat (Widor). Divertissement from "Sylvia" (Delibes, arr. Jungnickel).
- 7.40 p.m.—Gwen Knight and Mildred Watson: Menuet de Martini (J. B. Weckerlin). Chanson de Clement Marot (Julien Tiersot). La Chanson du Tambourineur (J. B. Weckerlin).
- 7.48 p.m.—Quintet: Dreams (Wagner). Handel in the Strand (Grainger).

- 8.0 p.m.—An Orchestral Concert. (From Birmingham.) The Birmingham Studio Orchestra, conducted by Joseph Lewis. Overture to "Peter Schmol" (Weber). Norwegian Rhapsody (Svendsen).
- 8.25 p.m.—Dennis Noble (Baritone): Thou art risen, my beloved (Coleridge-Taylor). A Prayer to our Lady (Donald Ford). Orchestra: Intermezzo, "Fairy Feet" (Finck). Longing (Haydn Wood). Olette de Forvas (Soprano) and Orchestra: Le Tasse (Godard). Aria, "One Fine Day" (from "Madame Butterfly") (Puccini). Orchestra: Entr'acte in Gavotte Style (Eric Coates). Dennis Noble and Orchestra: Mirror Song from "Tales of Hoffmann" (Offenbach). While from the wine cup, from "Don Giovanni" (Mozart).
- 9.5 p.m.—Orchestra: Scherzo from "A Midsummer Night's Dream" (Mendelssohn). Olette de Forvas: The Odalisque (Carpenter). Soft Day (Stanford). Five Eyes (Gibbs). The Merry Month of May (Mocran). Orchestra: Selection from Suite of Ballet Music to "La Source" (The Fountain) (Delibes).
- 9.30 p.m.—A Pianoforte Recital by Mrs. Norman O'Neill: No. 20, Presto in E major; No. 31, Allegretto in A major; No. 14, Presto in G major Study: Allegro in C major; No. 55, Andante in D minor; No. 42, Allegro in C major (Scarlatini). Le Coucou (The Cuckoo) (Daquin). The Cuckoo Prelude (Mathias Van den Gheyn) (originally written for Carillon). Le Coucou (The Cuckoo) (Pasquini). Soirée dans Grenade (Evening in Granada). L'Isle Joyeuse (The Isle of Joy) (Debussy).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15—11.15 p.m.—Dance Music.

## THURSDAY

- 1.10—1.50 p.m.—Dinner-Hour Service. Relayed from St. Martin's Parish Church, Birmingham. Speaker, Rev. Pat McCormick.
- 3.0 p.m.—A Symphony Concert: The Symphony Orchestra (50 Performers). Conducted by Sir Dan Godfrey. Concert No. 22 of the Thirty-Third Winter Series. Relayed from The Winter Gardens, Bournemouth.
- 4.30 p.m.—An Afternoon Concert (From Birmingham). Relayed from Lozels Picture House. Frank Newman (Organ), Robert Chadcock (Tenor).
- 5.45 p.m.—The Children's Hour (From Birmingham.)
- 6.30 p.m.—Time Signal, Greenwich; Weather Forecast, First General News Bulletin.
- 6.45 p.m.—The London Radio Dance Band, directed by Sidney Firman. George Barker (Entertainer at the Piano).
- 7.30 p.m.—Halle Concert. Relayed from the Free Trade Hall, Manchester. (S.B. from Manchester). "The Kingdom," an Oratorio by Sir Edward Elgar. Dorothy Silk (Soprano); Muriel Brunsell (Contralto); John Coates (Tenor); Harold Williams (Baritone). The Halle Chorus: Chorus Master, Harold Dawber, The Halle Orchestra, conducted by Sir Hamilton Harty.
- 8.30 p.m. (approx.)—A Reading from Plato's "Apology" (translated by F. J. Church). Socrates' Speech to The Athenians after being condemned to Death. (S.B. from Manchester).
- 8.45 p.m. (approx.)—"The Kingdom" (continued). Followed by Coronation Anthem, "The King shall Rejoice" (Handel). (S.B. from Manchester).
- 9.40 p.m. (approx.)—Charles Ellam (Pianoforte). A Short Recital from the Words of Arensky. (S.B. from Manchester).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15—11.15 p.m.—The History of Broadcasting. By the Chief Engineer.

## FRIDAY

- 3.0 p.m.—An Organ Recital by Walter R. P. K. Mason, relayed from St. Mary-le-Bow Church. Dorothy Smithard (Contralto).
- 4.0 p.m.—The London Radio Dance Band, directed by Sidney Firman: George Grogie (Comedian) and Gladys Merredew (Entertainer).
- 5.45 p.m.—The Children's Hour (From Birmingham.)

- 6.30 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.45 p.m.—Light Music: The Ernest Leggett London Octet, Lesley Duff (Soprano), Franklyn Kelsey (Baritone). Octet: Overture to "Ruslan and Ludmilla" (Glinka, arr. Artok). Idylle: "Pendant la Cueillette" (Wachs).
- 6.55 p.m.—Leslie Duff: Three Scotch Folk Songs: Smile again, my bonnie lassie (Trad., arr. A.L.), Here awa', there awa' (arr. Herbert Bedford), O whistle and I'll come tae ye, my lad! (arr. A.L.).
- 7.2 p.m.—Octet: Manx Scenes—Three Impressions (George Tootel), Craig and Sea; At the Trysting Place; A Manx Wedding.
- 7.12 p.m.—Franklyn Kelsey: My Old Shako (Trottere), Jest her Way (Aitken).
- 7.18 p.m.—Octet: Valse Caprice, "On a Woodland Glade" (Ray, arr. Sereby), Irish Folk Song, "Gentle Maiden" (arr. Adlington), By the Waters of Minnetonka (Laurance), Marionettes Espagnoles (Cui, arr. Adlington).
- 7.28 p.m.—Leslie Duff: The Wren, The Starlings, The Owl (Liza Lehmann).
- 7.34 p.m.—Franklyn Kelsey: Three for Jack (W. H. Squire), Nini, Ninette, Ninon (Monckton).
- 7.40 p.m.—Octet: Minuet in A (Mozart, arr. Adlington), Divertissement from "Muguette" (Missa).
- 7.45 p.m.—A Symphony Concert. (From Birmingham.) The Birmingham Studio Symphony Orchestra: (Leader, Frank Cantell), conducted by Sir Henry Wood. Elsie Suddaby (Soprano); Maurice Cole (Pianoforte). Orchestra: Sixth Suite (Bach, arr. Sir Henry Wood). Elsie Suddaby and Orchestra: Air, "Tatiana's Letter Scene" ("Eugene Onegin") (Tchaikovsky). Orchestra: Fortieth Symphony, in G minor (K. 550) (Mozart). Second Rumanian Rhapsody (Enesco).
- 8.55 p.m. (approx.)—Interval, during which Doris Russell Richards will read an extract from "Sesame and Lilies" (John Ruskin) (Lecture II—line 93 to the end).
- 9.5 p.m.—Orchestra: "Nutcracker" Suite ("Casse Noisette") (Tchaikovsky). Maurice Cole and Orchestra: Second Pianoforte Concerto (Saint-Saens). Elsie Suddaby: Oh, sleep, why dost thou leave me? ("Semele"), Tomami a vaghgia (Come to love me again) from "Arlina" (Handel). Orchestra: Second Hungarian Rhapsody (Liszt).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15 p.m.—11.15 p.m.—Dance Music.

## SATURDAY

- 3.30 p.m.—A Ballad Concert. (From Birmingham.) Douglas Pemberton (Baritone). Hope the Hornblower (Ireland). Hame (Walford Davies). Onaway, awake, beloved (Cowan). Edna Willoughby (Pianoforte). Russian Rustic Scene, "Doumka" (Tchaikovsky). Alice Moxon (Soprano): Fair House of Joy (Quilter). Fairy Song (Boughton). Love Went a-riding (Frank Bridge). Douglas Pemberton: La Partita (Alvarez). Jota, El Pano Moruno (De Falla). Las Ojos Negros (Alvarez). Edna Willoughby: L'Alouette (Glinka, arr. Balakirev). March-Jig (Stanford, arr. Grainger). Alice Moxon: Songs my Mother taught me (Dvorak). Down in the Forest (Ronald).
- 4.30 p.m.—Chamber Music. (From Birmingham.) The Beatrice Hewitt Trio: Arthur Catterall (Violin); Johan Hock (Cello); Beatrice Hewitt (Pianoforte). Trio in A minor (Tchaikovsky). (In memory of a great Artist).
- 5.10 p.m.—Olive Sturgess (Contralto). Spring Sorrow (John Ireland): Ecstasy (Morse Rummel). Revery (Arensky). The Lilacs, Spring Waters (Rachmaninov).
- 5.20 p.m.—Trio: Trio in B Flat (in one Movement) (Posthumous Work) (Beethoven).
- 5.35 p.m.—Olive Sturgess: Die Forelle (The Trout), Das Wandern (The Wanderer), Gretchen am Spinnrade (Gretchen at the Spinning Wheel) (Schubert).
- 5.45 p.m.—The Children's Hour. (From Birmingham.)
- 6.30 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.

- 6.50 p.m.—Some Birthday Music (From Birmingham.) The Birmingham Studio Orchestra, conducted by Joseph Lewis: A Birthday Overture (Ronald). Miranda Sudden (Soprano): A Birthday Song (Cowan). A Birthday Song (Novello).
- 7.10 p.m.—Orchestra: Birthday Serenade (Lincke). Interlude, "The Drummer's Birthday" (Elliott Smith). The Birmingham Studio Chorus: Part Song, "A Birthday Serenade" (Elvey).
- 7.25 p.m.—Orchestra: Cake Walk, "The Nigger's Birthday" (Lincke). Miranda Sudden: A Birthday Greeting (King). The Birthday Morn (Ronald). A Birthday Song (Coningsby Clarke).
- 7.45 p.m.—Orchestra: Selection from "Musical Honours" (Desmond).
- 8.0 p.m.—Dancing Time: The London Radio Dance Band, directed by Sidney Firman and Haworth and Wesley (Entertainers). Tom Clare (at the Piano).
- 10.0 p.m.—Weather Forecast, Second General News Bulletin.
- 10.15 p.m.—Sports Bulletin. (From Birmingham.)
- 10.20 p.m.—A Military Band Concert: The Wireless Military Band, conducted by B. Walton O'Donnell. Norman Venner (Baritone). Band: Overture to "Euryanthe" (Weber).
- 10.28 p.m.—Norman Venner: The Golden Vanity (Folk Song) (arr. L. Broadwood). To the Moon (Monk Gould).
- 10.34 p.m.—Band: First Hungarian Rhapsody (Liszt).
- 10.48 p.m.—Norman Venner: Eleazar, Life and Death (Coleridge-Taylor).
- 10.54 p.m.—Band: Ballet Suite, "The Swan Lake" (Tchaikovsky). Valse: Dance of the Swans; Hungarian Dance.
- 11.5 p.m.—Norman Venner: A Sailor's Prayer, Cape Horn Gospel (Keel).
- 11.10—11.15 p.m.—Band: Two Slavonic Dances, Nos. 10 and 11 (Dvorak).

(Continued from page 277.)

- 6.0 p.m.—A Ballad Concert: Betsy de la Porto (Contralto), Murray Brown (Tenor).
- 6.30 p.m.—Time Signal (Greenwich). Weather Forecast, First General News Bulletin.
- 6.50 p.m.—Ballad Concert (Cont.).
- 7.0 p.m.—Mr. Basil Maine: "Next Week's Broadcast Music."
- 7.15 p.m.—The Foundations of Music. Schumann's Songs, Sung by Helen Helenschel (Soprano).
- 7.25 p.m.—Mr. H. P. Marshall: "Eye-Witness Account of the Royal Navy's Army Rugby Football Match."
- 7.45 p.m.—Cyril Liddington (Entertainer).
- 8.0 p.m.—Leicester Brass Band Festival Massed Band Concert, relayed from the De Montfort Hall, Leicester (S.B. from Nottingham). Conductor, Lieut. J. Ord Hume, Hon. Director of Music to the Festival. Organist, Mr. Walter Grocock. Grand Ensemble, The National Anthem (Special Band arr. by Ord Hume). Massed Bands: Organ, and Fanfare of Trumpets, Elogy, "Solemn Melody" (Walford Davies), Hymn, "Rimington" (Duckworth), Military March, "Grove House" (J. Ord Hume), Popular Number, "Leonora" (Silver), Danac Russe, "Trepak" (Tchaikovsky), Intermezzo, "Bells o' Somerset" (Hurst) (with Tubular Bells Obligato). Popular Number, "Persian Rosebud" (Horatio Nicholls). Andante, "Romance" (Op. 44, No. 1) (Rubinstein). Descriptive Fantasia, "A Drum-Head Church Service" (Ord Hume).
- 9.0 p.m.—Weather Forecast, Second General News Bulletin.
- 9.15 p.m.—Writers of To-day. Mr. James Stephens reading from his own Works.
- 9.30 p.m.—Local Announcements. Shipping Forecast.
- 9.35 p.m.—Morris Harvey in "Peaches": A Review. Sketches by L. du Garde Peach. Numbers by Various Composers. The Wireless Chorus and Review Orchestra, conducted by J. Louis Arthur. Arranged by Gordon McConnel, with Ewart Scott, Alma Vane, Jean Harley, George Barker, Dorothy McBlain, Kitty Beresford.
- 10.30 p.m.—12 midnight—Dance Music.

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# PROGRAMMES FOR SUNDAY (February 26)

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

**BARCELONA.** Radio Barcelona (EAJL). W.L. 344.8 m. (870 kc.); 1.5 kw.  
 11.0 a.m.—Chimes and Weather.  
 1.30 p.m.—Concert: Selections by the Iberia Trio, Gramophone Records, and Recitations.  
 6.0 p.m.—Market Prices.  
 6.10 p.m.—Quintet Selections.  
 6.50 p.m.—Tenor Song Recital: La de los ojos azules (Padilla). 2. Ay ay ay (Perez). 2. "La Bohème"—Selection (Puccini). 3. Manon-Romance (Massenet).  
 7.20 p.m.—Quintet Selections: 1. "Carmen"—Mazurka (Coto). 2. La Marsellesa—Selection (Caballero). 3. La última lacrima (Coto). 4. Mariposa de fuego (Sime Tomas).  
 7.50 p.m.—Soprano Song Recital: 1. Endressa (De Grignon). 2. Serenade (Strauss). 3. Madame Butterfly—Romance (Puccini). 4. L'Armour des roses (Frank).  
 8.20 p.m.—Quintet Selections: 1. Moorish Serenade (Chau). 2. The Merry Widow—Selection (Lehár). 3. The Liberty Bell March (Souza).  
 8.40 p.m.—Sports Notes.  
 9.0 p.m.—(approx.)—Close Down.  
**BERGEN.** Kringkastingselskap. W.L. 370.4 m. (810 kc.); 1.5 kw.  
 9.30 a.m.—Divine Service.  
 4.30 p.m.—Orchestral Concert.  
 7.0 p.m.—The Wireless Orchestra.  
 8.0 p.m.—Talk from Oslo.  
 8.30 p.m.—Choral Music.  
 9.0 p.m.—Weather, News and Time.  
 9.15 p.m.—Dance Music.  
 11.0 p.m.—(approx.)—Close Down.  
**BERLIN.** Koeningstheaterhaus. W.L. 1,250 m. (240 kc.); 8 kw.  
 8.0 a.m.—1.20 p.m.—Programme from Voxhaus.  
 1.0 p.m.—Chess Lesson.  
 1.30—5.0 p.m.—Programme from Voxhaus.  
 5.0 p.m.—Technical Talk.  
 6.0 p.m.—Talk on "The Dramatic Life of Classical Works."  
 6.30 p.m.—Talk.  
 7.0 p.m.—Programme relayed from Voxhaus on 1,250 m. (240 kc.) and 35 kw.  
**BERLIN.** Voxhaus. W.L. 484.6 m. (619 kc.); 4 kw.  
 8.0 a.m.—Morning Recital.  
 10.30 a.m.—Orchestral Concert relayed from the Playhouse.  
 3.30 p.m.—Orchestral Concert. 1. "Mignon"—Overture (Thomas). 2. Luxembourg Waltz (Lehár). 3. Selection from "Cavalleria Rusticana" (Mascagni). 4. Nocturne No. 3 (Liszt). 5. Sonata for Violin and Pianoforte in G major (Haydn). 6. Trio for Violin, Cello and Pianoforte in G major (Mozart). 7. "La Finta Semplice"—Overture (Mozart). 8. Rhapsody No. 14 (Liszt).  
 5.40 p.m.—Electrola Programme.  
 6.0 p.m.—Talk on "Journalism."  
 6.30 p.m.—Talk, "My Expedition to the Tobas Indians in Northern Argentina."  
 7.0 p.m.—Talk, "Problems of the League of Nations Politics."  
 7.30 p.m.—Concert. 1. (a) Viennese Waltz. (b) Sag' mir's beim Tanz, (c) Adeu Mimi (Benatzky). 2. Cosma Selim in his Repertoire. 3. (a) Einmal kommt der Tag, (b) Ein bleschen Feuer, (c) Abends in dem kleinen Städtchen (Benatzky). 4. Cosma Selim. 5. (a) Glocken der Liebe, (b) Sehnsucht, (c) Fur Dich (Benatzky). 6. Recitations.  
 9.15 p.m.—(approx.)—Weather, News, Time and Sports Notes.  
 9.30 p.m.—Dance Music.  
 11.30 p.m.—(approx.)—Close Down.  
**BERNE.** Radio-Berne. W.L. 411 m. (730 kc.); 1.5 kw.  
 10.0 a.m.—Protestant Address.  
 12.0 (noon)—Time and Weather.  
 12.5 p.m.—Orchestral Concert.  
 1.30 p.m.—Dialect Programme.  
 2.30 p.m.—Kursaal Orchestra.  
 6.30 p.m.—Time and Weather.  
 6.35 p.m.—Sports Talk.  
 7.0 p.m.—Cello Recital with Interludes by the Kursaal Orchestra.  
 8.50 p.m.—Sports Notes, News and Weather.  
 9.5 p.m.—Kursaal Orchestra.  
 9.30 p.m.—(approx.)—Close Down.  
**BRESLAU.** Schlesische Funkstunde. W.L. 322.6 m. (930 kc.); 4 kw.  
 Programme relayed by Gleiwitz on 250 m. (1,200 kc.).  
 8.15 a.m.—Chimes.  
 10.0 a.m.—Morning Recital with Baritone Solos.  
 11.0 a.m.—Orchestral Concert.  
 3.0 p.m.—Orchestral Concert.  
 5.0 p.m.—Gramophone Records.  
 7.10 p.m.—Chamber Music.  
 8.30 p.m.—Song Recital.

8.30 p.m.—Richard Strauss Song Recital for Gleiwitz only.  
 9.30 p.m.—Gramophone Records.  
 11.0 p.m.—(approx.)—Close Down.  
**BRUENN.** Komarov. W.L. 443 m. (676.8 m.); 3 kw.  
 4.30 p.m.—Programme from Prague.  
 7.30 p.m.—Beethoven Quartet.  
 8.0 p.m.—Orchestral Concert.  
 9.0 p.m.—Programme from Prague.  
**BRUSSELS.** Radio Belgique. W.L. 508.5 m. (590 kc.); 1.5 kw.  
 5.0 p.m.—Dance Music relayed from the "Taverne Royale."  
 7.45 p.m.—"Radio Chronique."  
 8.15 p.m.—Orchestral and Vocal Concert. 1. "Light Cavalry"—Overture (Suppé). 2. "Corcorico"—Selection (Ganne). 3. Song. 4. "España"—Suite (Albeniz). 5. Song. 6. "Madame Butterfly"—Selection (Puccini). 7. Song. 8. Romance for Violin (Beethoven). 10. Tarantelle for Flute and Clarinet (Saint-Saëns). 11. Le Rouet d'Omphale (Saint-Saëns). 12. Song. 13. Scènes bretonnes (Roppaerts).  
 10.15 p.m.—News.  
 10.30 p.m.—(approx.)—Close Down.  
**BUDAPEST.** Magyar Radio Ujsag. W.L. 555.6 m. (540 kc.); 3 kw.  
 9.0 a.m.—Mass from the University Church.  
 11.0 a.m.—Military Concert.  
 2.30 p.m.—Agricultural Report.  
 3.0 p.m.—Children's Corner.  
 4.0 p.m.—"Nani" Play (Follinus).  
 6.30 p.m.—Time and Sports Notes.  
 7.15 p.m.—Orchestral Concert from the works of Johann Strauss. 1. "Methusalem"—Overture. 2. Selection from "Der Fledermaus." 3. Geschichten aus dem Wiener Wald. 4. "The Gipsy Baron"—Overture. 5. Roses of the South-Waltz.  
 9.0 p.m.—Concert of Tzigane Music from the Hotel Britannia.  
**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc.); 1 kw.  
 Programme relayed by Kalundborg on 1,153.8 m. (260 kc.).  
 9.0 a.m.—Divine Service.  
 10.30 a.m.—German Lesson.  
 11.0 a.m.—Chimes.  
 2.0 p.m.—Concert.  
 4.0 p.m.—Divine Service.  
 5.30 p.m.—Children's Corner.  
 6.0 p.m.—News and Time.  
 6.30 p.m.—Talk for Tourists.  
 7.0 p.m.—"Holger Drachmann"—Recital.  
 8.30 p.m.—News.  
 8.45 p.m.—Concert: 1. De amerikanske Piger—March (Duganne). 2. "Traeskodans" (Fétras). 3. Aria from "The Dance Queen" (Lehár). 4. Polka Concerto for two trumpets (Kling). 5. Little Nisses Wedding (Köpping). 6. Song from "The Chocolate Soldier" (Oscar Strauss). 7. Kneip Polka (Fahrbach). 8. March (Blangennois). 9. Gallop (Eilenberg).  
 9.45 p.m.—Dance Music from Nimb's Restaurant.  
 11.30 p.m.—(approx.)—Close Down.  
**CORK.** Cork Broadcasting Station (CKK). W.L. 400 m. (730 kc.); 1.5 kw.  
 8.30 p.m.—Station Quintet.  
 8.45 p.m.—Percy Bilsbury (Tenor).  
 9.0 p.m.—Organ Recital by J. T. Horne, Mus. B.A.R.C.O., relayed from St. Fin Barre's Cathedral, Cork.  
 9.30 p.m.—Maureen Cashman (Mezzo-soprano).  
 9.45 p.m.—Pianoforte Solos by Frau T. Fleischmann.  
 10.15 p.m.—Percy Bilsbury (Tenor).  
 10.30 p.m.—Maureen Cashman (Songs).  
 10.45 p.m.—The Station Quintet.  
 11.0 p.m.—Close Down.  
**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc.); 1.5 kw.  
 8.30 p.m.—11.0 p.m.—Programme relayed from Cork.  
**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc.); 4 kw.  
 Programme relayed by Cassel, 252.1 m. (1,190 kc.).  
 7.30 a.m.—Morning Recital.  
 10.0 a.m.—Talk for Parents.  
 11.0 a.m.—Concert by the Harmony Orchestra of the Frankfurt Orchestral Association.  
 12.0 noon.—Children's Corner.  
 1.15 p.m.—Relay of Football Match "Eintracht," Frankfurt e. "Wormatia," Worms, from the Stadium.  
 4.0 p.m.—Talk and Reading: "The New Housing Problem."  
 5.0 p.m.—Programme from Berlin.

6.0 p.m.—"Il Seraglio"—Opera (Mozart), from the Municipal Theatre, Cassel, followed by Sports Notes and Dance Music.  
 11.30 p.m.—(approx.)—Close Down.  
**HAMBURG.** Norag (ha, in Morse). W.L. 396 m. (757 kc.); 4 kw.  
 Programme relayed by Bremen on 252.1 m. (1,190 kc.); Hanover, 297 m. (1,009 kc.); and Kiel, 256 m. (1,172 kc.).  
 Transmits at intervals from 7.25 a.m. 6.15 a.m.—Morning Recital.  
 10.30 a.m.—Concert from Restaurant Ostermann.  
 11.30 a.m.—Talk, "German Foreign Trade."  
 3.30 p.m.—Talk, "Old Berlin Streets and Buildings."  
 4.0 p.m.—Afternoon Concert.  
 5.30 p.m.—Talk, "Strindberg."  
 6.0 p.m.—Talk, "The First Aviation Week in Hamburg."  
 6.30 p.m.—Talk, "Cycling."  
 6.40 p.m.—Sports Notes and Weather.  
 7.0 p.m.—"That is Berlin"—a Mark Folk Evening.  
 9.0 p.m.—(approx.)—Topical Talk and News, followed by Cabaret Concert.  
**HILVERSUM.** Algemeene Vereeniging Radio-Omroep. W.L. 1,069 m. (280.5 kc.); 5 kw.  
 10.10 a.m.—Divine Service.  
 12.40 p.m.—Trio Concert.  
 2.10 p.m.—Talk, "Classical and Modern Dancing."  
 2.40 p.m.—Concert. 1. "Nachtlager von Granada"—Overture ("Kreutzer"). 2. Ballet Music from "Faust" (Gounod). 3. Dutch Fisher Girls (Fraser). 4. The Second Hungarian Rhapsody (Liszt). 5. Selection from "The Magic Flute" (Mozart). 6. Melody (Rubinstein). 7. Selection from "La Fille de Madame Angot" (Lecocq). 8. The Doll Dance (Brown). 9. Gammel-March (Morena).  
 4.40 p.m.—Hawaiian Music by the "Hawaiian Radió Five."  
 5.40 p.m.—Trio Concert.  
 7.40 p.m.—Weather and News.  
 7.50 p.m.—Symphony Concert. 1. Symphony in C major, No. 97 (Haydn). 2. Chaconne for Violin (Vitali). 3. Mother Goose (Ravel). 4. Reading. 5. Shéhérazade—Symphonie Suite Op. 35 (Rimsky-Korsakoff). 6. "Rienzi"—Overture (Wagner).  
 10.20 p.m.—(approx.)—Close Down.  
**HUIZEN.** W.L. 1,950 m. (154 kc.); 4 kw.  
 8.40 a.m.—Catholic Service from the Seminary at Hoeven.  
 12.10 p.m.—Time, and Trio Concert.  
 1.10 p.m.—Religious Address.  
 2.10 p.m.—Concert relayed from the "Salle de Concert," Amsterdam.  
 3.40 p.m.—Programme for Hospitals.  
 5.20 p.m.—Divine Service from the Reform Church at Thamen.  
 7.10 p.m.—Bible Reading.  
 7.40 p.m.—Vocal and Instrumental Concert. In the Interval: Talk from Maastricht.  
 10.10 p.m.—News.  
 10.25 p.m.—Épilogue.  
**KOENIGSBERG.** Ostmarken Rundfunk. W.L. 330.3 m. (908 kc.); 1 kw.  
 Programme relayed by Danzig on 272.7 m. (1,100 kc).  
 Transmits at intervals from 8.0 a.m. 3.0 p.m.—Request Concert (Danzig only).  
 3.20 p.m.—Military Concert (Koenigsberg only).  
 5.0 p.m.—Children's Corner.  
 5.30 p.m.—Esperanto Lesson.  
 6.0 p.m.—Talk, "From Street Singer to Famous Tenor."  
 7.0 p.m.—"The Last Waltz"—Operetta (Oscar Strauss), followed by News and Sports Notes.  
**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc.); 25 kw.  
 Programme relayed by Aix-la-Chapelle on 401 m. (748 kc.), Cologne 283 m. (1,060 kc.) and Muenster 241.9 m. (1,240 kc.).  
 8.0 a.m.—Morning Recital from Elberfeld. Miserere Mei—for Choir (di Lasso). 2. Solo, "I love Jesu..." (Bach). 3. Reading. 4. Choral Selection. 5. Happy He who on Jesu thinks—Solo (Bach). 6. Address. 7. Choral Selection. 8. Chimes from the Church of St. Sophie.  
 10.0 a.m.—Talk on "Goethe" from Cologne.  
 10.15 a.m.—Agricultural Talk from Cologne.  
 10.40 a.m.—Recitations from Cologne.  
 11.10 a.m.—Talk on Mozart's "Don Juan" from Cologne.

11.30 a.m.—Beethoven Pianoforte Sonata from Cologne.  
 12 noon.—Concert from Cologne: 1. "Freut euch des Lebens March" (Palm). 2. Liebe in Schnee (Benatzky). 3. "La Muette de Portici"—Overture (Auber). 4. Tenor Solo, Leonardo Arnesco. 5. Erotic (Grieg). 6. Offenbachiana Potpourri (Couradi). 7. Die Spieluhr (Blauw).  
 1.30 p.m.—Literary Talk from Cologne.  
 2.0 p.m.—Chess Talk from Dortmund.  
 2.30 p.m.—Spanish Lesson from Cologne.  
 3.0 p.m.—Guitar and Mandoline Concert from Osabruck: 1. Weiheguss (Huber). 2. Mozart Potpourri. 3. Folk Song Potpourri (Ragotzky jr.). 4. Guitar Solos: (a) Minuet in D. Op. 11 (Sor); (b) Fantasia (Mertz). 5. Melodies from "Rigoletto" (Verdi) for Mandoline and Lute. 6. Mandoline Solo. Frühlingswachen (E. Bach). 7. Carnival March No. 2. (Schuppe). 8. Die Schmiede in Walde (Eilenberg). 9. Mignonette—Overture (Baumann). 10. In Treue allezeit March (Pöhlend Jr.).  
 4.35 p.m.—Talk on "The Life of Diurer from Duesseldorf."  
 5.0 p.m.—Recital of Sacred Choral Music from Cologne: 1. Christus factus est (Anerio). 2. Tristis est anima mea (Lassus). 3. Crucifixus (Lotti). 4. In stiller Nacht (Brahme).  
 6.0 p.m.—Dancing Lesson from Cologne.  
 6.25 p.m.—Sports Notes from Cologne.  
 6.45 p.m.—"Don Juan"—Opera (Mozart) from Cologne. Followed by Sports Notes, Concert and Dance Music.  
 11.0 p.m.—(approx.)—Close Down.  
**LEIPZIG.** Mitteldeutscher Rundfunk. W.L. 366.3 m. (819 kc.); 4 kw.  
 Programme relayed by Dresden on 275.2 m. (1,090 kc).  
 7.30 a.m.—Organ Recital.  
 8.0 a.m.—Morning Recital—Vocal and Instrumental Selections.  
 10.0 a.m.—Talk, "Educational Organisation for Workers."  
 10.30 a.m.—Talk, "The Spirit of the 19th Century."  
 11.0 a.m.—Recital. 1. String Quartet, Op. 9 (Winkler). 2. String Quartet in C minor, Op. 13 (Kietzki). 2.45 p.m.—Talk arranged by the "German Language Society."  
 5.0 p.m.—Talk, "Folklore."  
 5.30 p.m.—Talk, "Ten Years of French Rule in the Saar District."  
 6.30 p.m.—Popular Orchestral Concert. 1. The Black Domino—Overture (Auber). 2. International Suite (Tchalkovsky). 3. "The Tales of Hoffmann"—Arias (Offenbach). 4. "Rienzi"—Overture (Wagner). 5. Scènes pittoresques (Massenet). 6. Polka Concerto for two trumpets (Hoch). 7. "The Bird Fancier"—Arias (Zeller). 8. "The Last Waltz" (Strauss).  
 8.0 p.m.—Reading.  
 9.0 p.m.—Sports News.  
 9.30 p.m.—Dance Music.  
 11.30 p.m.—(approx.)—Close Down.  
**MADRID.** Union Radio (EAJ7). W.L. 375 m. (800 kc.); 1.5 kw.; 2.0 p.m.—Orchestral Concert.  
 7.0 p.m.—Children's Corner.  
 7.30 p.m.—Dance Music relayed from the Hotel Nacional.  
 10.0 m.—Programme relayed by San Sebastian (335 m., 895 kc.) Time  
 10.2 p.m.—Selection from "The Pearl Fishers"—Opera (Bizet).  
 12.30 a.m.—(approx) (Monday)—Close Down.  
**MILAN.** Unione Radiofonica Italiana (IMI). W.L. 541 m. (554 kc.); 7 kw.  
 9.30 a.m.—Concert of Sacred Music.  
 12 (noon)—Government Report.  
 3.0 p.m.—Concert: 1. Songs, (a) Aria from "Le Mariage de Figaro" (Mozart), (b) Who is Sylvia?—(In English) (Schubert), (c) Two Old English Airs. 2. Tenor Solos, (a) Aria from "Ruy Blas" (Mar-chetti), (b) Aria from "Turandot" (Puccini). 3. Songs, (a) Aria from "Hérodiade" (Massenet), (b) Aria from "A Masked Ball" (Verdi). 4. (a) "Si j'étais roi"—Overture (Adam), (b) Selection from "Sœur Angélique" (Puccini), (c) Valse triste (Ferroni), (d) A te sola (Giuliani), (e) Italia bella (Curtopassi).  
 4.30 p.m.—Children's Corner.  
 7.45 p.m.—Lesson in Wireless Technology.

8.0 p.m.—"Mignon"—Opera (Thomas).  
 8.30 p.m.—(In the interval) Sports News.  
 9.55 p.m.—News, Sports Notes and Close Down.  
**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc); 4 kw.  
 Programme relayed by Nuernberg on 303 m. (990 kc); and Augsburg 566 m. (530 kc).  
 10.0 a.m.—Chimes.  
 10.15 a.m.—Weather.  
 11.0 a.m.—Exhibition relay.  
 12 noon—Time and Weather.  
 12.5 p.m.—Programme Notes.  
 2.0 p.m.—Reading.  
 2.30 p.m.—Trio Selections.  
 3.30 p.m.—Talk on "Semiramus."  
 4.0 p.m.—Orchestral Concert. 1. Concertino for Pianoforte and Orchestra. 2. Four Songs for Tenor. 3. Soprano Solos with Orchestral Accompaniment. 4. Das letzte Märchen—Tone Picture (Grinn).  
 5.45 p.m.—Legal Talk.  
 6.20 p.m.—Talk for Motorists.  
 6.45 p.m.—Sports Notes.  
 7.0 p.m.—"The Oberammergau Passion Play" (Mainz) in Commemoration of the 70th Birthday of the Writer.  
 9.5 p.m.—News.  
 9.20 p.m.—Gramophone Records from Nuernberg.  
 10.20 p.m.—(approx.)—Close Down.  
**NAPLES.** Unione Radiofonica Italiana (INA). W.L. 407 m. (737 kc); 1.5 kw.  
 9.0 a.m.—Concert of Sacred Music.  
 3.45 p.m.—Children's Corner.  
 4.0 p.m.—Concert. 1. Mignonette—Gavotte (Billi). 2. Serenata gelata—Mezzo Soprano Solo (Buzzi-Peccia). 3. Barcarolle and Tarantelle from "Sicilian Vespers" (Verdi). 4. Dopo—Mezzo-Soprano Solo (Tosti). 5. Bacco, in Toscana (Broggi). 6. Anare, soffrire—Mezzo-Soprano Solo (Trintelli). 7. Ritorno dai prati (Cattedra). 8. Schianto (Frontini). 9. L'avvessi tu compreso—Mezzo-Soprano Solo (Denza). 10. Pas d'arlequin (Wask). 11. Sorrento (de Sena).  
 6.30 p.m.—Government Report.  
 7.40 p.m.—Lesson in Wireless Technology.  
 7.50 p.m.—"La Piccola cioccolattaia"—Operetta (Schinelli).  
 8.30 p.m.—In the Interval: Time.  
 9.55 p.m.—Calendar, Programme Announcements.  
 10.0 p.m.—(approx.)—Close Down.  
**OSLO.** Kringkastingselskapet. W.L. 401.5 m. (650 kc); 1.5 kw.  
 Programme relayed by Hamar on 566 m. (530 kc); Porsgrund, 524 m. (572 kc); Fredrikstad, 434.8 m. (690 kc); Notodden, 423 m. (709 kc); and Rjukan, 448 m. (670 kc).  
 9.20 a.m.—Chimes and Divine Service, followed by Recital for Violin and Organ.  
 4.50 p.m.—Chimes and Divine Service from the St. Saviour's Church.  
 6.15 p.m.—News.  
 6.30 p.m.—Reading.  
 7.0 p.m.—Time and Orchestral Concert. 1. Violin Dance (Jessel). 2. Pa krykker—Foxtro (Hauger). 3. Pa nåtøttere—Waltz (Gog). 4. Two Brown Eyes—Foxtro (Lacame). 5. Hollywood—Foxtro (Rust). 6. Russian Lullaby (Irving Berlin). 7. Hoopla vi danser (Geisler).  
 8.0 p.m.—Recitations.  
 8.30 p.m.—Song Recital.  
 9.0 p.m.—News and Weather.  
 9.15 p.m.—Topical Talk, and Dance Music from the Hotel-Bristol.  
 11.0 p.m.—(approx.)—Close Down.  
**PARIS.** Eiffel Tower (FL). W.L. 2650 m. (113 kc); 5 kw.  
 7.56 a.m.—Time Signal (on 32 m., 9.375 kc).  
 9.26 a.m.—Time Signal.  
 5.0 p.m.—Pasdeloup Concert.  
 7.0 p.m.—Weather.  
 7.40 p.m.—Le Journal Parlé. Talks on "Health," "Sport," etc.  
 7.56 p.m.—Time Signal (on 32 m., 9.375 kc).  
 8.30 p.m.—Educational Programme. Talks on "Law and the Family," etc.  
 11.26 p.m.—Time Signal.  
**PARIS.** Petit Parisien. W.L. 340.9m. (880 kc); 0.5 kw.  
 9.0 p.m.—Concert: 1. "Le Roi d'Ys"—Overture (Lalo). 2. Réverie—Violin and Orchestra (Vieuxtemps). 3. "Cinderella" (Massenet). 4. Selection from "Sigurd" (Reyer). 5. Ballet from "The Queen of Sheba" (Gounod). 6. Gavotte (Boell-



**PROGRAMMES FOR SUNDAY—(Cont.)**

mann). 7. March from "Henry VIII" (Saint-Saëns).  
**PARIS.** Radio-Paris (CFR). *W.L.* 1,750 m. (171 kc); 3 kw.  
 8.0 a.m.—News.  
 12 (noon)—Sacred Music and Address.  
 12.45 p.m.—Concert. 1. Andra Chulona (Ferrete). 2. Mimosa Waltz (Margis). 3. "La Fille de Madame Angot" (Lecocq). 4. (a) Miniature (Smet). 5. Romance en Granada (Seras). 6. Romance (Svendsen). 7. "Mireille" (Gounod). 8. Menuet Antoinette (Raucci). 9. Aquel dia (Seras). 10. Sous l'Ombrelle (Chaura).  
 4.30 p.m.—Dance Music.  
 7.0 p.m.—Agricultural Report.  
 8.0 p.m.—News.  
 8.30 p.m.—Radio-Paris Circus, followed by Dance Music. News in the interval.  
**PITTSBURGH.** Westinghouse Electric (KDKA). *W.L.* 315.6 m. (950 kc); 50 kw.  
 Transmits at intervals from 3.45 p.m. 11.15 p.m.—Symphony Concert from "William Penn Hotel," Pittsburgh.  
 11.30 p.m.—Travelogue, from WJZ, New York.  
 12 midnight.—Time, followed by Divine Service.  
 1.15 a.m. (Monday).—Programme relayed from WJZ. Colliers Radio Hour.  
 2.15 a.m.—Talk by James Gerard.  
 2.30 a.m.—"Vibrant Melodies."  
 2.45 a.m.—"The Utica Jubilee Singers."  
 3.0 a.m.—Time and Selections by the Utica Jubilee Singers (Contd.).  
 3.15 a.m.—"Don Amazo" the Wizard.  
**PRAGUE.** Strasznee. *W.L.* 348.9 m. (860 kc); 5 kw.  
 Transmits at intervals from 7.55 a.m. 6.15 p.m.—Concert.  
 8.0 p.m.—Literary Review.  
 8.15 p.m.—Orchestral Concert.  
 9.0 p.m.—News and Orchestra.  
**POSEN.** Polskie-Radio. *W.L.* 344 m. (872 kc); 1.5 kw.  
 11.0 a.m.—Agricultural Talks.  
 11.50 a.m.—Programme from Warsaw.  
 2.15 p.m.—Programme from Warsaw.

4.20 p.m.—Variety.  
 4.50 p.m.—Children's Corner.  
 5.30 p.m.—French Talk on "Poland."  
 5.50 p.m.—Topical Talk.  
 6.10 p.m.—Talk, "The Struggle between Carnival and Lent."  
 6.35 p.m.—Programme from Warsaw.  
 7.30 p.m.—Concert for Posen and Warsaw.  
 9.0 p.m.—Time and Weather.  
 9.20 p.m.—Variety.  
 9.30 p.m.—Dance Music from the Palais Royal.  
 11.0 p.m. (approx.).—Close Down.  
**ROME.** Unione Radlofonica Italiana (IRO). *W.L.* 451 m. (665 kc); 3 kw.  
 9.15 a.m.—Concert of Sacred Music.  
 12.0 noon.—Government Report.  
 4.0 p.m.—Quartet Concert.  
 5.0 p.m.—Dance Music.  
 6.30 p.m.—Government Report.  
 7.30 p.m.—Time and News.  
 7.45 p.m.—Instrumental Concert. 1. Symphony in D major (Haydn). 2. (a) Le cena delle beffe (Benelli). (b) Pierino (Pascoli). (c) Romantichissimo (Rovetta). 3. Arias and Old Italian Dances for Lute. 4. Fashion Review. 5. Violin Solos: (a) Dance in G major (Dvorak). (b) Tambourin chinois (Kreisler). 6. Leonora Overture No. 3 (Beethoven). 7. Pastorale (Bach). 8. March from "The Twilight of the Gods" (Wagner).  
 9.30 p.m.—Dance Music.  
 9.50 p.m.—News.  
 10.0 p.m.—Close Down.  
**SCHENECTADY, N.Y.** General Electric Company (WGY). *W.L.* 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAD on 21.96 m. (13,681 kc); from 11.30 p.m. (approx.).  
 11.0 p.m.—"Stetson Parade" from Boston.  
 12 midnight.—Musical Programme from New York.  
 12.20 a.m. (Monday)—Capitol Theatre. Programme from New York.  
 2.0 a.m.—Talk, "Our Government."  
 2.15 a.m.—Time.  
 2.17 a.m.—"Atwater Kent Hour" from New York.  
 3.15 a.m.—"Biblical Drama" from New York.  
 3.45 a.m. (approx.).—Close Down.

**STAMBOUL.** Radio-Stamboul. *W.L.* 1,180 m. (254 kc); 5 kw.  
 3.0 p.m.—Dance Music.  
 5.0 p.m.—Concert of Turkish Music.  
 7.0 p.m.—Exchange Quotations and Market Prices of Wheat.  
 7.10 p.m.—Orchestral Concert. 1. "William Tell"—Overture (Rossini). 2. Romance, Op. 5 (Tchaikovsky). 3. Valse Triste (Sibelius). 4. "Pique Dame"—Selection (Tchaikovsky).  
 7.50 p.m.—Weather and Time.  
 8.0 p.m.—Dance Music.  
 8.30 p.m.—News by the "Agence Anatolie."  
 8.45 p.m. (approx.).—Close Down.  
**STOCKHOLM.** Radiotjänst (SASA). *W.L.* 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala, on 1315.5 m. (228 kc); Göteborg, 416.7 m. (720 kc); Malmö, 260.9 m. (1150 kc); and Sundsvall, 545.6 m. (550 kc).  
 10.0 a.m.—Divine Service.  
 12.30 p.m.—Symphony Concert from Malmö. 1. Symphony in D minor (Franck). 2. Les Preludes (Liszt).  
 2.15 p.m.—Male Choir.  
 3.0 p.m.—Children's Corner.  
 4.0 p.m.—Divine Service.  
 5.0 p.m.—"Wallenstein"—Drama (Schiller) from Malmö.  
 7.5 p.m.—Chamber Music—String Quintet (Schubert) from Malmö.  
 7.55 p.m.—Soprano Duets.  
 8.15 p.m.—News and Weather.  
 8.40 p.m.—Concert of Viennese Music. 1. Military March (Schubert). 2. Stephanie Gavotte (Czibulka). 3. Liebesleid (Kreisler). 4. Marche miniature viennoise (Kreisler). 5. Alt-Wien (Godowsky). 6. Selection from "Der arme Jonathan (Müllöcker). 7. Die Schönbrunner-Waltz (Lanner). 8. Suite, "Much ado about nothing" (Korngold). 9. Selection from "Eine Ballnacht" (O. Strauss). 10. The Blue Danube (Joh. Strauss).  
 10.0 p.m. (approx.).—Close Down.  
**STUTTGART.** Süddeutscher Rundfunk. *W.L.* 380.7 m. (788 kc); 4 kw.  
 10.30 a.m.—Morning Recital.  
 2.0 p.m.—Afternoon Concert.  
 4.0 p.m.—Sacred Concert from Freiburg. 1. Organ Selection; Wenn wir in höchsten Nöten sein (Bach). 2. Bible Reading. 3. Organ Selection, O Welt, ich muss dich lassen (Max Reger). 4. Bible

Reading. 5. Introduction and Passacaglia in F minor, Op. 63 (Max Reger).  
 5.0 p.m.—Poetry Reading.  
 5.35 p.m.—Time and Sports Notes.  
 6.0 p.m.—"Il Seraglio"—Opera (Mozart) from Cassel, News.  
**TOULOUSE.** Radiophonie du Midi. *W.L.* 391 m. (767 kc); 3 kw.  
 12.45 p.m.—Concert. 1. El Montanes—Paso doble (Pedro Seras). 2. "Sigismond"—Overture (Smet). 3. Serenade (Lecarsi). 4. Pianoforte Solos: (a) L'horloge à Grand mere (Smet). (b) Anzena (Pedro Seras). 5. Air from "Yasmina" (Smet). 6. Havana—Foxtrot. 7. Maqueta (Colomb). 8. Selection from "Yasmina" (Smet). 9. Impossible—Tango (Smet). 10. C'est Lily (de Buxeuil).  
 2.10 p.m.—Address and Psalms.  
 3.0 p.m.—Selection from "Manon" (Massenet).  
 3.10 p.m.—Talk on "Saint-Palais-sur-mer."  
 3.30 p.m. (approx.).—Concert. 1. "Ariane" (Massenet). 2. La Lettre de Manon (Massenet). 3. "Fra Diavolo" (Auber). 4. Nutcracker Suite (Tchaikovsky). 5. Le Hulla (Rousseau). 6. Pierné (Sophie Arrould). 7. Popular Dance Music.  
**VIENNA.** Radio-Wien. *W.L.* 576 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Programme relayed by Graz on 357.1 m. (840 kc); Innsbruck (294.1 m.; 1,020 kc); and Klagenfurt 272.7 m. (1,100 kc) from 10 a.m.  
 9.30 a.m.—Organ Recital. 1. Meinen Jesum lass ich nicht (Walther). 2. Fugue in E minor (Schubert). 3. Fantasy in G Major (Bach).  
 10.0 a.m.—Concert. 1. "Der Freischütz"—Overture (Weber). 2. "Much Ado About Nothing"—Suite (Korngold). 3. "Cello Concerto in G minor (Handel). 4. Symphony No. 1 in C minor (Brahms).  
 2.30 p.m.—Concert. 1. "Mignon"—Overture (Thomas). 2. G'schichten aus dem Wiener Wald Waltz (Strauss). 3. Selection from "La Bohème" (Puccini). 4. Violin Romance (Rubinstein-Waldteufel). 5. Ballet Music from "Naila" (Delibes). 6. Blues. 7. Einen Handkuss (Geiger). 8. Selection from "Elue einzige Nacht"

(Stolz). 9. Potpourri of Popular Songs (Barcherdt).  
 4.0 p.m.—Poetry Recital.  
 5.0 p.m.—Talk on "Morocco."  
 5.45 p.m.—Chamber Music. 1. String Quartet in F major (Mozart). 2. String Quartet in F Major (Mozart) (Dvorak).  
 7.0 p.m.—"Kunstlerblut"—Operetta (Eysler).  
**WARSAW.** Polskie-Radio. *W.L.* 1,111.1 m. (270 kc); 10 kw.  
 9.15 a.m.—Divine Service from the Posen Cathedral.  
 11.0 a.m.—Time Signal and Aviation Report.  
 11.10 a.m.—Concert.  
 1.0 p.m.—Agricultural Talks.  
 2.0 p.m.—Weather.  
 2.15 p.m.—Symphony Concert. 1. Fifth Symphony (Beethoven). 2. Sixth Symphony (Beethoven).  
 4.20 p.m.—Variety.  
 6.10 p.m.—Talk on "Prehistoric Man."  
 6.35 p.m.—Talk on "Polish Culture."  
 7.0 p.m.—Talk, "In the Fair Land of Provence."  
 7.30 p.m.—Concert from Posen and Warsaw. 1. "Fidelio"—Overture (Beethoven). 2. Pianoforte Solos, (a) Fantasia Op. 77 (Beethoven). (b) Valse (Brahms). 3. Baritone Solos: (a) Aria from "A Masked Ball" (Verdi). (b) Aria from "Prince Igor" (Borodin). (c) Sérénade chantée (Naprawnik). 4. Violin Concerto in G minor (Bruch). 5. Pianoforte Solos. (a) Viennese Waltz (Friedmann-Gertner). (b) Polonaise in E major (Liszt). In the interval News in French.  
 9.0 p.m.—Time and Aviation Report.  
 9.5 p.m.—News, Police News and Sports Notes.  
 9.30 p.m.—Dance Music.  
 10.30 p.m. (approx.).—Close Down.  
**WILNO.** Radio-Polognc. *W.L.* 435 m. (689 kc); 0.5 kw.  
 9.0 a.m.—Divine Service.  
 11.0 a.m.—Programme from Warsaw.  
 5.10 p.m.—Lithuanian Talk.  
 5.35 p.m.—Talk.  
 6.0 p.m.—News.  
 6.25 p.m.—Time and Variety.  
 6.35 p.m.—Talk, "Regional Scientific Research in Wilno."  
 7.30 p.m.—Programme from Warsaw.  
 9.0 p.m.—News.  
 9.30 p.m.—Dance Music.  
 10.30 p.m. (approx.).—Close Down.

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# PROGRAMMES FOR MONDAY

(February 27)

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

**BARCELONA.** Radio Barcelona (EAJI). W.L. 344.8 m. (870 kc.); 1.5 kw.  
Transmits at intervals from 11.0 a.m.  
5.30 p.m.—Concert: Selections by the Iberia Trio, gramophone Records, and Recitations.  
6.0 p.m.—Exchange Quotations and Market Prices.  
6.10 p.m.—Quintet Selections.  
8.30 p.m.—Talk, "The Lyon Mail."  
9.0 p.m.—Chimes and Weather.  
9.10 p.m.—Humorous Review of the Week's Events, in verse.  
9.20 p.m.—Selections by the "Cobla Barcelona."  
10.0 p.m.—Exchange Closing Prices.  
10.5 p.m.—Tenor Song Recital: 1. Canco de comia (Toldra). 2. The First Primrose (Grieg). 3. Home Sweet Home (Bishop). 4. Nur wer die sehnsucht kennt (Tchaikovsky).  
10.30 p.m.—Cello Recital: 1. Aria in C (Bach). 2. "Goyescas"—Interlude (Granados). 3. Nocturne (Chopin). 4. Concerto study (Popper).  
11.0 p.m. (approx.)—Close Down.  
**BERGEN.** Kringkastingselskap. W.L. 370.4 m. (810 kc.); 1.5 kw.  
Transmits at intervals from 10.15 a.m.  
7.5 p.m.—Choral Music.  
7.30 p.m.—Talk, "Henrik Ibsen and Modern Drama."  
8.0 p.m.—Violin Recital.  
8.30 p.m.—German Lesson.  
9.0 p.m.—Weather, News and Time.  
9.15 p.m. (approx.)—Close Down.  
**BERLIN.** Koenigswusterhausen. W.L. 1,250 m. (240 kc.); 8 kw.  
Transmits at intervals from 11.0 a.m.  
2.35 p.m.—Weather and Exchange.  
2.40 p.m.—Talk on "Cooking."  
3.0 p.m.—French Literature Lesson.  
3.30 p.m.—German Literature.  
4.0 p.m.—Programme from Voxhaus.  
5.0 p.m.—Technical Talk.  
5.30 p.m.—English Lesson.  
5.55 p.m.—Talk.  
7.0 p.m.—Programme from Voxhaus on 1,250 m. (240 kc.) and 35 kw.  
**BERLIN.** Voxhaus. W.L. 484.6 m. (619 kc.); 4 kw.  
Transmits at intervals from 9.10 a.m.  
2.30 p.m.—Talk for Women.  
3.0 p.m.—Technical Talk.  
3.30 p.m.—Reading from "Country and Life" (Stifter).  
4.0 p.m.—Concert. 1. Tenor Solos: (a) Allerselen, (b) Ich Schwebe (Strauss), (c) Feldeinsamkeit, (d) Botschaft (Brahms), (e) Daheim (Kaun). 2. Pianoforte Variations and Fugue on a Theme of Handel's (Brahms). 3. Tenor Solos: (a) Vor meinem Fenster, (b) Winterabend (Schwartz), (c) Verloren, (d) Der König (Graner). 4. (a) Minuet, (b) Merry Funeral March, (c) Wedding Waltz from "The Veil of Pierette."  
5.30 p.m.—Astronomy Talk.  
6.0 p.m.—Talk, "Ethics and Craftsmanship."  
6.25 p.m.—Talk, "The Body and the Career."  
6.55 p.m.—Commerce Talk.  
7.30 p.m.—Symphony Concert. 1. Symphony No. 7 in C major (Haydn). 2. Pianoforte Concerto in A major (Mozart). 3. Chamber Concerto for Pianoforte and Orchestra, Op. 20 (Gurlitt). 4. Comedy Overture (Reger).  
8.15 p.m. (approx.)—Weather, News, Time and Sports Notes.  
9.30 p.m.—Concert. 1. "Waldmeister"—Overture (Strauss). 2. Alte Kamaraden—for Pipes (Teike). 3. Flower Suite (Siede). 4. Kärntner Liedermarsch—for Pipes (Seifert). 5. (a) Persian Rose—Boston (Gehrke). (b) Blues from "Evelyn" (Granichstaeden). 6. Am Rüdeshheimer Schloss—for Pipes (Ziegler). 7. Offenbach Potpourri (Pétrus). 8. Im Prater—for Pipes (Stolz). 9. Winter Landscape (Lincke).  
**BERNE.** Radio-Berne. W.L. 411 m. (730 kc.); 1.5 kw.  
Transmits at intervals from 12 (noon).  
3.0 p.m.—Kursaal Orchestra. Review of books in the interval.  
6.30 p.m.—Time and Weather.  
6.35 p.m.—Talk, "Pictorial Art of Poland."  
7.0 p.m.—Tenor Song Recital.  
7.30 p.m.—Programme from Lausanne.  
9.0 p.m. (approx.)—News and Weather.  
9.10 p.m.—Kursaal Orchestra.  
9.30 p.m. (approx.)—Close Down.  
**BRESLAU.** Schlesische Funkstunde. W.L. 322.6 m. (930 kc.); 4 kw.  
Programme relayed by Gleiwitz on 250 m. (1,200 kc).

Transmits at intervals from 10.15 a.m.  
7.10 p.m.—Pianoforte Recital.  
8.20 p.m.—Recital of Love Literature.  
**BRUENN.** Komarov. W.L. 443 m. (676.8 kc.); 3 kw.  
Transmits at intervals from 11.15 a.m.  
7.0 p.m.—Programme from Prague.  
8.0 p.m.—Popular Concert.  
9.0 p.m.—Programme from Prague.  
**BRUSSELS.** Radio Belgique. W.L. 508.5 m. (590 kc.); 1.5 kw.  
5.0 p.m.—Concert by the Station Trio.  
7.45 p.m.—"Radio Chronique."  
8.15 p.m.—Song Recital.  
8.30 p.m.—Concert by the "Nouveaux Concerts et Royale Harmonie." Relayd from Antwerp: 1. "Symphonie tragique, No. 4" (Schubert). 2. Concerto for Pianoforte (Schumann). 3. Poème Symphonique (Van Hooft). 4. (a) Spanish Rhapsody for Pianoforte and Orchestra (Albeniz), (b) Hungarian Fantasia (Liszt). 5. "Salome"—Dance of the Seven Vells (R. Strauss). In the interval—Topical Talk.  
10.15 p.m.—News.  
10.30 p.m. (approx.)—Close Down.  
**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc.); 1 kw. Programme relayed by Kalundborg on 1,153.8 m. (260 kc.).  
5.30 p.m.—English Lesson.  
6.20 p.m.—Talk, "Wireless Broadcasting Stations."  
6.50 p.m.—Talk on the following Transmission.  
7.0 p.m.—Symphony Concert of Hungarian Music relayed from the "Odd fellow's Palace": 1. Sakuntala—Overture (Goldmark). 2. Concerto for Violin in D minor, Op. 27 (Dohnányi). 3. Two Movements from the First Suite, Op. 3 (Bela Bartók). 4. Hungarian Songs. 5. The First Hungarian Rhapsody (Liszt).  
9.0 p.m.—News.  
9.15 p.m.—Relay of Foreign Stations.  
11.0 p.m.—Chimes and Close Down.  
**CORK.** Cork Broadcasting Station (6CK); W.L. 400 m. (750 kc.); 1.5 kw.  
2.30 p.m.—Weather, Stock Market Prices and Gramophone Selections.  
6.15 p.m.—Programme from Dublin.  
**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc.); 1.5 kw.  
1.30 p.m.—Exchange, Weather and Gramophone Selections.  
6.0 p.m.—Gramophone Selections.  
6.15 p.m.—Children's Corner.  
7.20 p.m.—News.  
7.30 p.m.—Irish Lesson by Silo Ni Dhubbgain.  
7.45 p.m.—Talk for Farmers, by H. W. Stevens.  
8.0 p.m.—The Waverley Four (Vocal)  
8.10 p.m.—Ida Starkie O'Reilly ('Cello).  
8.25 p.m.—The Waverley Four.  
8.30 p.m.—The Station Orchestra.  
8.40 p.m.—Character Studies of the Great Composers—"Mozart" by W. Starkie, LL.D.  
9.10 p.m.—Hilda Roberts (Soprano).  
9.20 p.m.—Elizabeth Young and Company in sketch—"Hall the Highwayman."  
9.50 p.m.—Hilda Roberts (Soprano).  
10.0 p.m.—The Ceilidh Trio.  
10.30 p.m.—News, Weather and Close Down.  
**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc.); 4 kw. Programme relayed by Cassel, 252.1 m. (1,190 kc).  
Transmits at intervals from 11.30 a.m.  
3.30 p.m.—Orchestral Concert: 1. "Der Opernball"—Overture (Heuberger). 2. "The Force of Destiny"—Selection (Verdi). 3. "The Gipsy Baron" (Joh. Strauss). 4. "Siegfried"—Selection (Wagner). 5. "Il Trovatore" (Verdi). 6. "The Death of Siegfried," from "The Twilight of the Gods" (Wagner).  
5.15 p.m.—Wireless Notes and Other Announcements.  
5.30 p.m.—Talk, "As Guest with the Lofoten Fisherfolk."  
6.0 p.m.—English Literary Selection.  
6.15 p.m.—English Lesson.  
6.45 p.m.—Programme arranged by the Frankfurter Zeitung.  
7.15 p.m.—"Erde"—Drama (Schönherr), followed by Gramophone Selections.

**GRAZ.** Oest. Radio Verkehrs. W.L. 357.1 m. (840 kc.); 0.5 kw.  
10.0 a.m.—12.0 noon.—Programme from Vienna.  
3.10 p.m.—Concert.  
4.30 p.m.—Chess Talk.  
5.0 p.m.—Talk, "Wilhelm Kress."  
5.30 p.m.—Shorthand Lesson.  
6.0 p.m.—Lesson in Serbo-Croatian.  
6.35 p.m.—Folk Song Recital. 1. The Loreley—Folk Song. 2. Heidenröslein. 3. Blümlein auf der Heide. 4. Finnlands Wald (Kehldorfer). 5. Swabian Folk Song. 6. Zillertal Du bist mei Freud. 7. Der verliebte Bua (Koschat). 8. s'Nesterl (Brauneis). 9. Old Low-German Folk Song. 10. Spinn, Spinn. 11. Folk Song of Upper Austria (Kremsler). 12. Swabian Dance Song (Slicher). 13. Styrian Song (Schmölzer).  
7.15 p.m.—Sonata for Guitar and Violin (Giuliani).  
7.40 p.m.—"In der Spinnstube" (Bergen and Ferdl).  
8.20 p.m.—Concert. 1. Florentine March (Fueck). 2. G'schichten aus dem Wienerwald (Joh. Strauss). 3. "The Bohemian Girl"—Overture (Balfe). 4. Aubade printanière (Lacombe). 5. Bavarian "Liederkranz" (Hogg). 6. Styrian March (Wagner). News and Weather.  
**HAMBURG.** Norag (ha, in Morse). W.L. 396 m. (757 kc.); 4 kw. Programme relayed by Bremen on 252.1 m. (1,190 kc.); Manover, 297 m. (1,009 kc.); and Kiel, 256 m. (1,172 kc.).  
Transmits at intervals from 5.55 a.m.  
3.15 p.m.—Reading of Tales of the Sea.  
4.0 p.m.—Talk, "Cornelia Goethe."  
4.30 p.m.—Talk, "The Production of our Modern Medicaments."  
5.30 p.m.—Elementary English Lesson, relayed from Koenigswusterhausen.  
6.0 p.m.—Orchestral Music.  
6.20 p.m.—Talk, "The Reparation Problem."  
6.45 p.m.—(Hamburg Bremen and Kiel).—Ice Report.  
6.55 p.m.—Weather.  
7.0 p.m.—Organ Recital from Manover.  
8.15 p.m.—Concert from Bremen.  
**HANOVER.** Norag. W.L. 297 m. (1,009 kc.); 0.7 kw.  
7.0 p.m.—Organ Recital from St. Paul's Church. 1. Choral Fantasy "Straf mich nicht in deinem Zorn" (Max Reger). 2. Suite for Violin and Organ (Hans Koehler): (a) Pastorale, (b) Elegie, (c) Kanzone, (d) Arietta, (f) Fuga. 3. Three Organ Selections (Max Reger): (a) "Was Gott tut, das ist wohlgetan," (b) Kyrie eleison, (c) Consolation. 4. Two Selections for Violin and Organ (v. Gorissen): (a) Schlichte Weise, (b) Adagio religioso. 5. Toccata on the Choral, "Wie schön leucht' und der Morgenstern (Kaminski).  
8.15 p.m.—Reading of Lower-Saxon Character Studies from the Works of Heinrich Sohnrey, August and Friedrich Freudenthal and Karl Söhle.  
**HILVERSUM.** Algemeene Nederlandsche Radio - Omroep. W.L. 1,069 m. (280.5 kc.); 5 kw.  
11.40 a.m.—Police News.  
12.10 p.m.—Trio Concert.  
4.20 p.m.—Children's Corner.  
5.40 p.m.—Trio Concert.  
6.55 p.m.—English Lesson.  
7.25 p.m.—Police News.  
7.45 p.m.—Concert: 1. "Sophonisbe"—Overture (Paër). 2. Selection from "The Barber of Seville" (Rossini). 3. "Le Mariage Secret"—Overture (Cimarosa).  
8.15 p.m.—"The Bandmaster"—Opéra comique (Paër).  
8.55 p.m.—Talk.  
9.25 p.m.—Orchestral Programme: 1. "Orpheus in the Underworld"—Overture (Offenbach). 2. Musette (Offenbach).  
9.40 p.m.—Weather and News.  
9.50 p.m.—"The Betrothal by Lanternlight"—Opéra comique (Offenbach).  
10.40 p.m. (approx.)—Close Down.  
**HUIZEN.** W.L. 340.9 m. (890 kc.); 4 kw. (Until 5.40 p.m.)  
Transmits from 5.40 p.m. on 1,950 m. (154 kc.).  
12.10 p.m.—Organ Recital.  
3.40 p.m.—Programme for Hospitals.  
5.40 p.m.—Talk in Groningue Dialect.  
6.40 p.m.—English Lesson.  
7.10 p.m.—Talk.  
7.40 p.m.—Choral and Orchestral Concert. Talk in the Interval.

**KATTOWITZ.** Polskie-Radio. W.L. 422 m. (710 kc.); 10 kw.  
Transmits at intervals from 3.20 p.m.  
5.55 p.m.—News and Announcements.  
6.35 p.m.—Literary Talk.  
7.30 p.m.—Concert.  
9.0 p.m.—Time and News.  
**KIEL.** Norag. W.L. 256 m. (1,172 kc.); 0.7 kw.  
4.0 p.m.—Talk, "Economic Changes and their Effect on the Postal Services."  
7.0 p.m.—Organ Recital from Schleswig. 1. Fantasia in E minor (Bruhns). 2. Choral Prelude (Hanff): (a) Erbarm dich mein, o Herre Gott, (b) Wär Gott nicht mit uns dieser Zeit. 3. Prelude and Fugue in E minor (Bruhns). 4. Choral Preludes (Hanff): (a) Von Gott will ich nicht lassen, (b) Ein feste Burg ist unser Gott. 5. Prelude and Fugue in G major (Bruhns).  
**KOENIGSBERG.** Ostmarken Rundfunk. W.L. 330.3 m. (908 kc.); 1 kw. Programme relayed by Danzig on 272.7 m. (1,100 kc).  
Transmits at intervals from 10.0 a.m.  
3.30 p.m.—Orchestral Concert.  
6.0 p.m.—Concert (Danzig only).  
6.30 p.m.—English Lesson.  
7.5 p.m.—Programme from the "Stadthalle."  
8.5 p.m.—Jack London Concert. 1. Rhapsody in Blue (Gerschwin). 2. Reading from His Life. 3. Recitations. 4. "Song of the Vagabond" from "The Vagabond King" (Eriml). 5. Recitations. 6. Baritone Solos. 7. Recitations.  
9.15 p.m.—Weather and News.  
9.30 p.m.—Concert from Berlin.  
11.0 p.m. (approx.)—Close Down.  
**KOVNO.** Radio-Kannas. W.L. 2,000 m. (150 kc.); 15 kw.  
5.0 p.m.—Language Talk.  
5.30 p.m.—Esperanto Talk.  
5.50 p.m.—Esperanto Announcements.  
6.0 p.m.—Time, Weather and News.  
5.30 p.m.—Orchestral Concert.  
**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc.); 25 kw. Programme also relayed by Aix-la-Chapelle on 401 m. (748 kc.), Cologne 283 m. (1,060 kc.) and Muenster 241.9 m. (1,240 kc.).  
Transmits at intervals from 9.30 a.m.  
12.5 p.m.—Concert from Cologne: 1. Florentine March (Fueck). 2. Wiener Blut Waltz (Strauss). 3. "Edmont"—Overture (Beethoven). 4. Melodies from "The Bartered Bride" (Smetana). 5. Concerto for Oboe (Klughardt). 6. Selections from "Lohengrin" (Wagner). 7. Lo, holde Lo (Hafjos). 8. "Gipsy Love"—Potpourri (Lehr).  
3.15 p.m.—Talk for Women, from Cologne.  
3.50 p.m.—Topical Talk from Cologne.  
4.5 p.m.—Talk on "Gustav Falke" from Cologne.  
4.30 p.m.—Review of Books for Cologne, Aix-la-Chapelle and Langenberg only.  
4.30 p.m.—Review of Books for Muenster.  
5.0 p.m.—Concert: 1. Liebeslieder Waltz (Strauss). 2. "The Merry Wives of Windsor"—Overture (Nicolai). 3. Melodies from "La Traviata" (Verdi). 4. Spanish Dances (Moszkovsky). 5. Wiener Spaziergange—Potpourri (Komzak). 6. Krolls Balklänge (Lumby).  
6.20 p.m.—Reading from Cologne.  
6.45 p.m.—Talk for parents, from Cologne.  
7.15 p.m.—Collegium Musicum Concert from the works of Beethoven from Duesseldorf: 1. Symphony in C major. 2. Ballet Music. 3. Songs with Orchestra. 4. (a) Triumphant March from "Trapeza"; (b) Funeral March from "Leonore Prohaska"; (c) Turkish March from "The Ruins of Athens."  
9.0 p.m.—Humorous Recital from Elberfeld. Followed by News, Sports Notes, Concert and Dance Music from Cologne.  
11.0 p.m. (approx.)—Close Down.  
**LAUSANNE.** Société Romande de Radiophonie (HB2). W.L. 680 m. (441 kc.); 0.6 kw.  
Transmits at intervals from 6.45 a.m.  
6.30 p.m.—Talk, "The Social Reasons for Commercial Registration."

7.0 p.m.—Weather.  
7.1 p.m.—Theatre Review.  
7.30 p.m.—Symphony Concert relayed from the "Grand Théâtre de la Ville."  
**LEIPZIG.** Mittelddeutscher Rundfunk. W.L. 366.3 m. (810 kc.); 4 kw. Programme relayed by Dresden on 275.2 m. (1,090 kc).  
Transmits at intervals from 9.0 a.m.  
3.30 p.m.—Orchestral Concert from Dresden.  
5.0 p.m.—Technical Talk. Relayd from Koenigswusterhausen.  
5.30 p.m.—Elementary English Lesson. Relayd from Koenigswusterhausen.  
6.0 p.m.—Talk, "Propaganda and Export."  
6.30 p.m.—Art Talk.  
7.0 p.m.—Weather and Time.  
7.15 p.m.—Light Concert. 1. "The Grand Duchess of Gerolstein"—Overture (Offenbach). 2. Recitations by Karl Kessler. 3. Frau Luna—Waltzes (Lincke). 4. Recitations. 5. "The Merry Widow"—Selections (Lehar). 6. Recitations. 7. "Der Dumme August"—Overture (Gfaller).  
9.0 p.m.—Sports News.  
9.15 p.m.—Dance Music.  
11.0 p.m. (approx.)—Close Down.  
**MADRID.** Union Radio (EAJ7). W.L. 375 m. (800 kc.); 1.5 kw.  
Transmits at intervals from 11.45 a.m.  
2.0 p.m.—Orchestral Concert.  
7.0 p.m.—Orchestral and Vocal Concert. 1. Semiramide—Overture (Rossini). 2. Mal de amores—Selection (Serrano). 3. Soprano Songs (a) Salvador Rosa (Gomes), (b) Don Juan—Aria (Mozart), (c) La Serenata (Braga). 4. Talk. 5. Soprano Songs: (a) No me olvides (de los Terreros), (b) Nostalgia andalucia (Gimenez), (c) Madrigal (Gomes) Musica, luz y elegua (Alonso).  
9.30 p.m.—French Lesson.  
9.45 p.m.—Legal Talk.  
10.0 p.m. (approx.)—Close Down.  
**MILAN.** Unione Radiofonica Italiana (IMI). W.L. 541 m. (554 kc.); 7 kw.  
7.0 p.m.—English Lesson.  
7.50 p.m.—Time and Talk.  
8.0 p.m.—Concert. 1. Petite Suite (De Micheli). 2. Variety Items. 3. "Cece"—One Act Comedy (Pirandello). 4. Orchestral Selections.  
9.55 p.m.—News.  
10.0 p.m.—Concert. 1. "Rosalba"—Intermezzo (Pizzi). 2. Wedding Bells (Jessel). 3. Oriental Nights (Avana). 4. Une fête à Bangkok (Norden).  
10.30 p.m. (approx.)—Close Down.  
**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc.); 4 kw.  
Programme relayed by Nuernberg on 303 m. (990 kc); and Augsburg, 566 m. (530 kc).  
Transmits at intervals from 11.45 a.m.  
3.0 p.m.—Orchestral Concert: 1. "Mignon"—Overture (Thomas). 2. "Snow White"—Suite (Tchaikovsky). 3. Eine kleine Nachtmusik (Mozart). 4. Was Man als Kind sich erträumt (Tauber). 5. Selection from "Sylvia" (Delibes).  
4.30 p.m.—Finance Talk.  
5.30 p.m.—Agricultural Talk.  
6.0 p.m.—English Lesson.  
6.30 p.m.—Talk, "The Baroque Period and Ourselves."  
7.0 p.m.—Concert from the Works of Danzig Composers: 1. Serenade for Flute, Clarinet, Horn, Violin, Viola and Cello (Goebel). 2. Baritone Solos (Goebel). 3. Talk on "Danzig." 4. Sonata in F Minor for Cello and Pianoforte (Adanti). 5. "In der Fremde und Heimkehr"—Symphonic Poem for Baritone and Orchestra (Goebel).  
8.5 p.m.—Orchestral Concert: 1. "The Flying Dutchman." 2. "Lohengrin." 3. "Tannhäuser." 4. "The Mastersingers of Nuernberg" (Wagner).  
9.0 p.m.—News.  
9.15 p.m.—Chess Lesson.  
**NAPLES.** Unione Radiofonica Italiana (INA). W.L. 407 m. (737 kc.); 1.5 kw.  
Transmits at intervals from 12.0 noon.  
7.20 p.m.—Wireless Notes.  
7.40 p.m.—News.  
7.48 p.m.—Harbour Notes.  
7.50 p.m.—Concert of Classical Music. Music from the Works of Brahms, Vivaldi, Chopin, Sammartini, Pugnani, Castelnuovo, and Debussy.  
9.55 p.m.—Calendar.  
10.0 p.m. (approx.)—Close Down.  
CONTINUED ON NEXT PAGE

**PROGRAMMES FOR MONDAY—(Cont.)**

**OSLO.** Kringkastingselskapet. *W.L.* 461.5 m. (650 kc.); 1.5 kw. Programme relayed by Hamar on 566 m. (530 kc.); Porsgrund, 524 m. (572 kc.); Fredrikstad, 434.8 m. (690 kc.); and Notodden, 423 m. (709 kc.); and Rjukan, 448 m. (670 kc).  
Transmits at intervals from 10.10 a.m.  
5.15 p.m.—Orchestral Concert.  
6.15 p.m.—News.  
6.30 p.m.—German Lesson.  
7.0 p.m.—Time.  
7.2 p.m.—Song Recital. 1. Air from "William Tell" (Rossini). 2. Serenade (Gounod). 3. Stille mit hjerte (Hannikainen). 4. Berceuse (Merkant). 5. Mademoiselle Rococo (Melartin). 6. Serenata Napolitana (Melartin). 7. Titanla (Peterson). 8. Scherzo (Baekerr).  
7.30 p.m.—Talk, "Bismarck."  
8.0 p.m.—Choral Recital.  
8.30 p.m.—Reading.  
9.0 p.m.—News and Weather.  
9.15 p.m.—Topical Talk.  
9.30 p.m. (approx.)—Close Down.  
**PARIS.** Eiffel Tower (FL). *W.L.* 2,650 m. (113 kc.); 5 kw.  
7.56 a.m.—Time Signal (on 32 m. 9375 kc).  
9.26 a.m.—Time Signal.  
5.45 p.m.—Le Journal Parlé. Talks on "Wireless Novelties," "The Artistic Life," etc.  
7.10 p.m.—Weather.  
7.20 p.m.—Concert from the Works of Nerini: 1. Orchestral Prelude. 2. Songs: (a) Chanson de Lyska; (b) Les ânes du Caire. 3. Violin and Pianoforte Sonata. 4. Orchestra: (a) Souvenir lointain; (b) Romance in C major. 5. Pianoforte and Cello Sonata. 6. Songs: (a) La Fontaine Nejarine; (b) Ah! qu'il l'a fait bon regarder. 7. Solitude. At 7.56 p.m.: Time Signal (on 32 m. 9375 kc).  
8.30 p.m.—Educational Programme, Talks on "Preventive Medicine," "The Atomic Universe," "Electricity."  
10.26 p.m.—Time Signal.  
**PARIS.** Radio-Paris (CFR). *W.L.* 1750 m. (171 kc.); 3 kw.  
Transmits at intervals from 7.30 a.m.  
12.30 p.m.—Concert of Quartet Music, and Selections by the Singers Hallaert and La Houppa.

1.50 p.m.—Market Prices.  
3.30 p.m.—Exchange Quotations.  
3.45 p.m.—Concert: 1. "Iris" (Mascagni). 2. Pianoforte Solos: (a) L'Heure variée (Handel), (b) Granada (Albeniz). 3. The Devil in the Belfry" (Inghelbrecht). 4. Literary Selections. 5. Air de Ballet (Chabrier-Charmettes).  
4.45 p.m.—Exchange Quotations.  
7.0 p.m.—Agricultural Report.  
7.45 p.m.—Book-keeping Lesson.  
8.0 p.m.—Market Prices.  
8.15 p.m.—Gardening Talk.  
8.30 p.m.—"Carmen"—Opera Selection (Bizet). News in the interval.  
**PITTSBURGH.** Westinghouse Electric (KDKA). *W.L.* 315.6 m. (950 kc); 50 kw.  
Transmits at intervals from 2.45 p.m.  
11.15 p.m.—Symphony Concert relayed from the William Penn Hotel.  
11.30 p.m.—Programme relayed from WJZ, New York. "Robert Bulst" Company Programme.  
12 midnight—"The Eclipse Clippers"  
12.30 a.m. (Tuesday)—"Roxy's G.n.j."  
2.0 a.m.—"Riverside Hour."  
2.30 a.m.—"Rise and Shine."  
3.0 a.m.—Longine's Time, and "Rise and Shine" (Contd.).  
3.30 a.m.—"Shope and Grosvenor."  
4.0 a.m.—Weather and Time.  
4.15 a.m. (approx.)—Close Down.  
**ROME.** Unione Radiofonica Italiana (IRO). *W.L.* 451 m. (665 kc); 3 kw.  
Transmits at intervals from 11.30 a.m.  
7.0 p.m.—French Lesson.  
7.30 p.m.—Time, News and Weather.  
7.45 p.m.—Vocal and Instrumental Concert. 1. Second Symphony in D minor, Op. 36 (Beethoven). 2. Siciliana—Soprano Song (Leo). 3. Dimmi Amor (del. Lento). 4. Pupille—Soprano Song (Falconieri). 5. "Il Ritratto Difficile"—Play. 6. "Fingal's Cave"—Overture (Mendelssohn). 7. Variations on "La Paloma" (Manfred). 8. (a) Neapolitan Serenade (Costa), (b) New Moon—Tenor Song, with Guitar Accompaniment (Costa).  
9. Topical Review. 10. Mazurka—Guitar Solo (Di Poniolo). 11. Mandolinata—Guitar Solo

(Thome). 12. Ma Môme (Gavel and Gay). 13. Sierra Morena (Borghini). 14. Feneata ca Lucive (Anonimo). 15. Catari—Tenor Song (Cardillo). 16. Dance Music.  
10.10 p.m.—News.  
10.15 p.m. (approx.)—Close Down.  
**SCHENECTADY, N.Y.** General Electric Company (WGY). *W.L.* 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAD on 21.98 m. (13,661 kc) from 8 p.m. to 9 p.m. and 32.77 m. (9,155 kc), from 11.0 p.m.  
Transmits at intervals from 11.45 a.m.  
11.0 p.m.—Exchange and News.  
11.20 p.m.—"U.S. Radio Farm School."  
11.30 p.m.—Dinner Music from the Hotel van Curier, Schenectady.  
12.28 a.m. (Tuesday)—"Footnotes."  
12.30 a.m.—Concert.  
1.30 a.m.—Time.  
The following Programme from New York.  
1.32 a.m.—"The A and P Gypsies."  
2.30 a.m.—"General Motors Family Party."  
3.30 a.m.—"Flak Programme."  
4.0 a.m. (approx.)—Close Down.  
**STAMBOUL.** Radio-Stamboul. *W.L.* 1,180 m. (254 kc.); 5 kw.  
3.0 p.m.—Orchestral Concert.  
5.0 p.m.—Concert of Turkish Music.  
7.0 p.m.—Exchange Quotations and Market Prices of Wheat.  
7.10 p.m.—Orchestral Concert. 1. Wotan's Farewell and Fire Music (Wagner). 2. "Rienzi"—Overture (Wagner). 3. The Death of Isolde (Wagner). 4. Selections from "Lohengrin" (Wagner).  
7.59 p.m.—Weather and Time.  
8.0 p.m.—Dance Music.  
8.30 p.m.—News by the "Agence Anatolie."  
8.45 p.m. (approx.)—Close Down.  
**STETTIN.** Funkstunde A.G. *W.L.* 236.7 m. (1,267 kc.); 0.75 kw.  
Programme from Voxhaus until 6.20 p.m.  
6.20 p.m.—Talk, "Der Wildschütz."  
6.30 p.m.—"Der Wildschütz"—Opera (Lortzing), relayed from the Stettin Stadttheater, followed by Time, Weather, News and Sports Notes.  
9.30 p.m. (approx.)—Programme from Voxhaus.

**STOCKHOLM** Radlotjänst (SASA). *W.L.* 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala, on 1315.5 m. (228 kc); Göteborg, 416.7 m. (720 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc).  
Transmits at intervals from 11.35 a.m.  
5.10 p.m.—Children's Corner.  
5.30 p.m.—Concert from the Operakällar Restaurant.  
6.15 p.m.—Astronomy Talk.  
6.35 p.m.—Light Music.  
6.45 p.m.—Elementary English Lesson.  
7.15 p.m.—Soloist Concert.  
8.15 p.m.—News and Weather.  
8.40 p.m.—Talk on Foreign Politics.  
9.0 p.m. (approx.)—Close Down.  
**STUTTGART.** Süddeutscher Rundfunk. *W.L.* 380.7 m. (788 kc); 4 kw.  
Transmits at intervals from 11.30 a.m.  
3.15 p.m.—Orchestral Concert.  
5.0 p.m.—Time and Weather.  
5.15 p.m.—Talk, "Astronomy."  
5.45 p.m.—Wireless Notes.  
6.15 p.m.—Talk, "The Basque Coast."  
6.45 p.m.—Time and Weather.  
7.0 p.m.—"Castor and Pollux"—Swabian Comedy (Limann).  
8.30 p.m.—Programme of German Verse and Prose of the Last Hundred Years.  
9.45 p.m.—News.  
10.0 p.m.—Dance Music from the Museum Café, Karlsruhe.  
**TOULOUSE.** Radiophonie du Midi. *W.L.* 391 m. (767 kc); 3 kw.  
Transmits at intervals from 10.15 a.m.  
12.45 p.m.—Concert. 1. Marche aragonaise (Auvray). 2. Ballet des Sympes (Berlioz). 3. Looking for a Boy—Foxtrot (Gerschwin). 4. Valse (Translatenr). 5. Selection from "Romeo and Juliet" (Gounod). 6. Les clochettes d'amour (Herpin). 7. Nuits algériennes (Grehn). 8. Venus and Adonis (Georges). 9. Danse japonaise (Huguet). 10. Selection from "La chaste Suzanne" (Gilbert). 11. Malet Sévigné (Deffès). 12. New Charleston (Moretti). 13. Matinée orageuse (Schubert). 14. Pétropolis—One-step (Teroussset).  
5.20 p.m.—Cinema Talk.  
8.30 p.m.—Agricultural Report.  
8.45 p.m.—"Le Jour et la Nuit"—Opera-comique (Lecocq).

**VIENNA.** Radio-Wien. *W.L.* 576 and 517.2 m. (520 and 580 kc.); 0.75 and 5 kw. Programme relayed by Innsbruck on 294.1 m. (1,020 kc.) and Klagenfurt 272.7 m. (1,100 kc).  
Transmits at intervals from 10.0 a.m.  
3.15 p.m.—Concert. 1. Es lebe das Leben (Ischpold). 2. Princess Gretl (Raiman). 3. Carnival in Nice—Overture (Dietrich). 4. Aus der galanten Zeit (Hennings). 5. Serenata Milongua (Leblond). 6. Potpourri from "Die gold'ne Meisterin" (Eysler). 7. Chopinata—Foxtrot (Doucet). 8. My heart is a Gipsy (Krauss).  
4.20 p.m.—Children's Corner.  
5.20 p.m.—Talk on "Instinct."  
5.50 p.m.—Talk, "Plants as Explorers."  
6.20 p.m.—Theatre Talk.  
7.5 p.m.—Schumann Recital. 1. Song Cycle "Frauen Liebe und Leben." 2. Sonata for Pianoforte and Violin in A minor, Op. 105. 3. Songs. 4. Phantasiestücke for Pianoforte, Violin and 'Cello.  
**WARSAW.** Polskie-Radio. *W.L.* 1111.1 m. (270 kc); 10 kw.  
Transmits at intervals from 11 a.m.  
3.40 p.m.—Talk on "The Polish Language."  
4.20 p.m.—Education Talk.  
4.45 p.m.—Children's Corner.  
5.15 p.m.—Dance Music from the Café Gastronomja.  
6.5 p.m.—Agricultural Report.  
6.15 p.m.—Variety.  
6.35 p.m.—Elementary French Lesson.  
7.30 p.m.—Concert: 1. Clarinet Quintet Op. 115 (Brahms). 2. Songs (Brahms). 3. Pianoforte and Clarinet Concerto (K. M. Weber). 4. Songs, (a) The Miller (Schubert), (b) I Weep Not. (c) The Two Grenadiers (Schumann). 5. Cello Concerto Op. 33 (Volkman). In the interval News in French.  
9.0 p.m.—Time and Aviation Report.  
9.5 p.m.—News, Police News and Sports Notes.  
9.30 p.m. (approx.)—Close Down.  
**WILNO.** Radio-Pologne. *W.L.* 435m. (689 kc); 0.5 kw.  
Transmits at intervals from 3.40 p.m.  
7.30 p.m.—Programme from Warsaw.  
9.0 p.m.—News.  
9.15 p.m. (approx.)—Close Down.



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# PROGRAMMES FOR TUESDAY

(February 28)

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

**BARCELONA.** Radio Barcelona (E.A.J.I.). W.L. 344.8 m. (870 kc); 1.5 kw.

Transmits at intervals from 11.0 a.m. 5.30 p.m.—Concert: Selections by the Station Quintet, Gramophone Records and Recitations.

6.0 p.m.—Exchange Quotations. 6.10 p.m.—Fashion Review. 6.30 p.m.—Quintet Selections. 8.40 p.m.—Elementary English Lesson.

9.0 p.m.—Chimes and Weather. 9.10 p.m.—"Der Rosenkavaller"—Waltzes (Strauss).

9.20 p.m.—Tenor Song Recital: 1. Jugar con fuego—Romance (Bartieri). 2. La Marieta del ull viu—Romance (Morera). 3. La mszurka roja (Serrano).

9.45 p.m.—Astronomy Talk. 10.0 p.m.—Exchange Closing Prices. 10.5 p.m.—"A Man of Talent"—Play (Nieto).

10.45 p.m.—"La Ermita, la Fuente y el Rio"—Drama (Marquina)—Act 3.

11.20 p.m. (approx.)—Close Down.

**BERGEN.** Kringkastingselskap. W.L. 370.4 m. (810 kc); 1.5 kw.

Transmits at intervals from 10.15 a.m. 6.40 p.m.—Introductory Commentary on following opera.

7.0 p.m.—"The Bartered Bride"—Opera (Smetana), from the Royal Opera House, Stockholm. In the interval: Weather, News and Time.

**BERLIN.** Koenigswusterhausen. W.L. 1,250 m. (240 kc); 8 kw.

Transmits at intervals from 11.0 a.m. 2.0 p.m.—Talk on "Household Arrangement here and in America."

2.35 p.m.—Weather and Exchange. 3.0 p.m.—Education Talk. 3.30 p.m.—Talk on "Tococo Art."

4.0 p.m.—Programme from Leipzig. 5.0 p.m.—Accountancy Talk. 6.30 p.m.—Spanish Lesson. 5.55 p.m.—Talk, "The Face of the Earth."

7.30 p.m.—Programme relayed from Voxhaus on 1,250 m. (240 kc) and 35 kw.

**BERLIN.** Voxhaus. W.L. 484.6 m. (619 kc); 4 kw.

Transmits at intervals from 9.10 a.m. 2.30 p.m.—Talk, "Ability and Literary Academies."

3.0 p.m.—Talk, "The Battle of Life and the Art of Living."

3.30 p.m.—Reading from "Bambi" (Salten).

3.45 p.m. (approx.)—Relay of the "The Damsel from the Hotel Esplanade."

5.30 p.m.—Review of Books. 6.0 p.m.—Talk, "The Mountain University in Davos."

6.25 p.m.—Talk, "The Teaching of Music."

6.55 p.m.—Talk, "Working Conditions in Literature."

7.30 p.m.—Concert. 1. Two Grotesques for Cello and Piano. (a) The Ghostly Hour, (b) The Gnome's Caprice (Haas). 2. Recitations: (a) Radio (Leacock), (b) The Elegantly Furnished Room (Klabund). 3. Baritone Solos. 4. Recitations: (a) The Fractured Leg (Schmitz), (b) The Finest "Calling in the World (Heller).

9.15 p.m. (approx.)—Weather, News, Time and Sports Notes. 9.30 p.m. (approx.)—Close Down.

**BERNE.** Radio-Berne. W.L. 411 m. (730 kc); 1.5 kw. Programme relayed by Baste on 1100 m. (273 kc) from 6.30 p.m.

Transmits at intervals from 12 (noon). 6.30 p.m.—Time and Weather. 6.35 p.m.—Talk, "The Soul of Japan."

7.0 p.m.—"Haberlis Pudi"—Dialect Play from the "Heimatschutz-theatre."

8.20 p.m. (approx.)—Kursaal Orchestra. News and Weather in the interval. 9.30 p.m. (approx.)—Close Down.

**BRESLAU.** Schlesische Funkstunde. W.L. 322.6 m. (930 kc); 4 kw. Programme relayed by Gleiwitz on 250 m. (1,200 kc).

Transmits at intervals from 10.15 a.m. 3.30 p.m.—Concert of Russian Music. 5.0 p.m.—Literary Talk. 5.30 p.m.—Programme from Koenigswusterhausen. 5.55 p.m.—Weather. 6.0 p.m.—Talk, "Good German."

6.30 p.m.—Review of Art and Literature. 7.10 p.m.—Variety Concert.

6.0 p.m.—"The Family"—Play (Leschrad). 6.35 p.m.—Talk. 7.0 p.m.—Slavonic Dances (Dvorak). 9.0 p.m.—Programme from Prague.

**BRUSSELS.** Radio Belgique. W.L. 508.6 m. (590 kc); 1.5 kw.

5.0 p.m.—Dance Music relayed from the "Armenonville Tea Room."

6.0 p.m.—French Lesson. 7.45 p.m.—"Radio Chronique."

8.15 p.m.—Orchestral Concert: 1. "L'Amour est Roi"—March (Mouton). 2. "The Tales of Hoffman"—Selection (Offenbach). 3. Talk, "The Original Paintings of Brainer and Crasbeck."

4. "L'Arlesienne"—Suite (Bizet). 5. Topical Talk. 6. "Le Roi l'a dit"—Selection (Delibes). 7. Musical Interlude with M. Sylvain Hamy (Piano), and M. Bayfield (Evans): (a) I wonder why you made me cry—Fox-trot-Blues (Evans-Bee); (b) At dawn—Melody (Hamy); (c) Always just a dream—Fox-trot Song (Hamy); (d) Naughty Charleston—Piano-forte Solo (Hamy); (e) Paradise and you—Ballad; (f) Tes yeas—Waltz (Hamy); (g) Ain't that too bad—Fox-trot (Endor). In the interval: "William Tell"—Selections (Rossini). 8. "La Gioconda"—Dance of the Hours (Ponchielli). 9. Polonaise for flute (Faulk). 10. The kinky kids' parade (Donaldson). 11. Scherzo for piano-forte (De Bock). 12. Waltz (Waldteufel).

10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

**BUDAPEST.** Magyar Radio-Ujsag. W.L. 555.6 m. (540 kc); 3 kw.

2.30 p.m.—Children's Corner. 4.0 p.m.—Piano-forte Recital of Hungarian Airs and Operetta Melodies.

5.15 p.m.—Talk, "Natural Science." 6.0 p.m.—Programme relayed from the Royal Hungarian Opera House. 9.0 p.m.—Time and News. 9.5 p.m.—Concert of Zsigane Music.

**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc); 1 kw.

Programme relayed by Kalundborg on 1153.8 m. (260 kc).

6.30 a.m.—Exercises. 2.0 p.m.—Concert. 4.30 p.m.—Children's Corner. 5.0 p.m.—Talk, "Parachutes."

5.30 p.m.—Shorthand Lesson. 6.0 p.m.—News, Exchange and Time. 6.30 p.m.—Talk, "Austria, the Land Between Two Powers."

7.0 p.m.—"Three Little Girls"—Musical Play (Kollo). Relayed from the "Folketeatret."

10.0 p.m.—News and Close Down.

**CORK.** Cork Broadcasting Station (6CK). W.L. 400 m. (750 kc); 1.5 kw.

2.80 p.m.—Weather, Stock Market Prices and Gramophone Selections. 6.15 p.m.—Programme from Dublin.

**GRACOW.** Polskie-Radio. W.L. 566 m. (530 kc); 1.5 kw.

Transmits at intervals from 11 a.m. 4.45 p.m.—Programme from Warsaw. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.30 p.m.—Programme from Kattowitz.

9.0 p.m.—Programme from Warsaw. 9.30 p.m.—Concert from the "Pavilion Restaurant."

10.30 p.m. (approx.)—Close Down.

**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc); 1.5 kw.

1.30 p.m.—Exchange, Weather and Gramophone Selections. 6.0 p.m.—Gramophone Selections. 6.15 p.m.—Children's Corner. 7.0 p.m.—Gramophone Selections. 7.20 p.m.—News. 7.30 p.m.—Famine Talk by M. O. Slochthradha. 7.45 p.m.—Spanish Lesson by Y. Starkie, LL.D.

8.0 p.m.—Lecture Recital on "Omar Khayyam" by the Rev. E. Savell Hicks, M.A. Relayed from the Unitarian Church, St. Stephen's Green.

9.15 p.m.—Concert Programme by the Augmented Station Orchestra and Violet Fahy (Vocalist).

10.0 p.m.—National Songs by Men's Chorus. 10.30 p.m.—News, Weather and Close Down.

**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc); 4 kw.

Programme relayed by Cassel, 252.1 m. (1,190 kc).

Transmits at intervals from 11.30 a.m.

3.30 p.m.—Concert of Modern Music: 1. Jeder cinnal in Berlin—March (Hirsch). 2. Auf Bananenschalen rutscht sich sein—Blues: 3. Mein süsser Affe—Fox-trot. 4. Frag' nicht—Waltz. 5. Zu Ingelheim am Rhein—Slow Fox-trot. 6. Sunbeam (Fox-trot). 7. Du, immer Du. 8. Süss ist das Geheimnis unsrer Liebe—Slow Fox-trot. 9. Mein Kind, für dich hab' ich dies Lied gemacht—Slow Fox-trot. 10. Ach, Loulou. 11. Incertitude—Tango. 12. Das hör' ich so gern Dance Potpourri.

4.45 p.m.—Reading. 5.15 p.m.—Wireless Notes and other Announcements. 5.30 p.m.—Talk for Women, from Cassel.

5.45 p.m.—Talk, "Vienna and Franz Schubert in the Year 1928," from Cassel.

6.15 p.m.—Talk, "Doctor and Teacher," from Cassel. 6.45 p.m.—Chess Lesson. 7.15 p.m.—Programme from Stuttgart.

**GRAZ.** Oest-Radio-Verkehr. W.L. 357.1 m. (840 kc); 0.5 kw.

7.5 p.m.—"Tippmamsoll" Play, and "Der Selbstmörder" Play. 7.40 p.m.—Concert. 1. Military March (Schubert). 2. Frauenerwürde (Jos. Strauss). 3. "Rakoczi"—Overture (Keter-Bela). 4. Duet from "Die Fledermaus" (John Strauss). 5. Love Duet from "Lady Hamilton" (Küncke). 6. Selection from "Carmen" (Bizet). 7. Pikantierer Walzer (Lehar). 8. (a) Niemand liebt Dich so wie ich (Lehar). (b) Champagne Song from "Die Czarewitsch" (Lehar). 9. Selection from "Der Betelstudent" (Mihöcker). 10. Prelude to "The Czarewitsch" (Lehar). News and Weather.

**HAMBURG.** Norag (ha, in Morse). W.L. 396 m. (757 kc); 4 kw.

Programme relayed by Bremen, on 252.1 m. (1,190 kc); Hanover, 297 m. (1,009 kc); and Kiel, 256 m. (1,172 kc).

Transmits at intervals from 5.55 a.m. 3.15 p.m. (Hamburg and Kiel). "The New Woman"—Dialogue. 4.0 p.m. (Hamburg only)—Talk, "Past and Present Dramatic Art."

4.20 p.m.—Taxation Talk. 4.35 p.m. (Hamburg, Bremen and Hanover)—Talk, "Careers, the Army, Police Force and Public Services."

5.0 p.m. (Hamburg and Kiel).—Waltz Programme. 6.0 p.m.—Talk, "Unemployment Insurance and its Organisation."

6.25 p.m.—Gardening Talk. 6.55 p.m.—Weather. 7.0 p.m.—"Cavalleria rusticana"—Opera (Mascagni). 8.15 p.m. (Hamburg, Hanover and Bremen)—Concert from Works of Hamburg composers. 1. Three Intermezzi (Schaub). 2. Suite, Nussknacker und Mausekönig (Schaub). 3. Chamber Symphony for Piano-forte and String Quintet (Roters). 4. Serenade for string Quartet, Flute and Piano-forte (Roters). 5. Dance Suite for Chamber Orchestra.

9.0 p.m. (approx.)—Topical Talk, News and Cabaret Music. 10.25 p.m. (Hamburg, Bremen and Kiel).—Ice Report. 10.30 p.m. (approx.)—Close Down.

**HANOVER.** Norag. W.L. 297 m. (1,009 kc); 0.7 kw.

3.15 p.m.—Concert of Tyrolean Folk Songs and Yodel Selections: 1. Linzer Buam—March (Drescher). 2. Songs: (a) A Bleamerl and a Herz; (b) Die lustigen Fuhrerl; (c) Vietringer Marsch. 3. Ball and der Alm (Seidl). 4. Songs: (a) Dachtstein March, (b) Appenzeller Jodler, (c) Bernese Oberland. 5. Tölzer Schützenmarsch (Kretzner).

**HILVERSUM.** Algemeene Vereeniging Radio-Omroep. W.L. 1,069 m. (280.5 kc); 5 kw.

11.40 a.m.—Police News. 12.10 p.m.—Trio Concert. 2.40 p.m.—Fashion Talk. 5.40 p.m.—Trio Concert. 6.55 p.m.—English Lesson. 7.25 p.m.—Police News. 7.45 p.m.—Review of Books. 8.5 p.m.—Concert: 1. "The Rains of Athens"—Overture (Beethoven). 2. "Pique Dame"—Suite (Tchaikovsky). 3. Romance from "The Queen's Symphony (Hady). 4. Densen—Minuet.

8.40 p.m.—Piano-forte Recital: 1. Partita in C Minor (Bach). 2. Rhapsody in B minor (Brahms). 3. Rondeau Op. 16 in E Flat major

(Chopin). 4. Polonaise Op. 53 in A Flat major (Chopin).

9.15 p.m.—Orchestral Programme: 1. Waltz from "Der Rosenkavaller" (Rich. Strauss). 2. Homage March from "Sigurd Jorsalfar" (Grieg). 3. Per aspera ad astra—March (Urbach). 4. Du und Du—Waltz (Joh. Strauss). 5. Selection from "The Dollar Princess" (Fall). 10.0 p.m.—Weather and News. 10.10 p.m.—Orchestral Programme: 1. Serenade (Roselli). 2. Kermesse d'été (Molhuysen). 3. The Lotus-flower (Lincke). 4. Froschkönigs Fackelzug (Kronberger).

**HUIZEN.** W.L. 340.9 m. (880 kc); 4 kw. (Until 5.40 p.m.). Transmits from 5.40 p.m. on 1,950 m. (154 kc).

12.10 p.m.—Time, and Trio Concert. 5.10 p.m.—Gramophone Concert. 6.10 p.m.—Esperanto Lesson. 6.40 p.m.—English Lesson. 7.15 p.m.—Ecclesiastical Latin Lesson. 7.40 p.m.—Choral and Instrumental Concert from St. Dominicus Church Amsterdam. Talk in the interval. 10.10 p.m.—News.

**KATTOWITZ.** Polskie-Radio. W.L. 422 m. (710 kc); 10 kw.

Transmits at intervals from 3.20 p.m. 6.30 p.m.—"Hrabina"—Opera (Moniuszko). Relayed from the Polish Theatre, Kattowitz. 9.30 p.m.—Concert from the Caff Atlantic. 10.30 p.m. (approx.)—Close Down.

**KIEL.** Norag. W.L. 256 m. (1,172 kc); 0.7 kw.

4.0 p.m.—Talk, "Culture in Schleswig-Holstein." 4.35 p.m.—Talk, "Careers." 6.15 p.m.—Violin Recital. 1. Rondeau Brilliant in B minor, for Violin and Piano-forte, Op. 70 (Schubert). 2. Sonata in E flat major, Op. 18, for Violin and Piano-forte (Rich. Strauss).

**KOVNO.** Radio-Kaunas. W.L. 2,000 m. (150 kc); 15 kw.

5.0 p.m.—Talk, "Ten Years Ago." 5.30 p.m.—Talk, "Intellectual Culture of the Nation." 6.30 p.m.—Orchestral Concert of Military Music.

**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc); 25 kw. Programme also relayed by Aix-la-Chapelle on 401 m. (748 kc); Cologne 283 m. (1,060 kc) and Muenster 241.9 m. (1,240 kc).

Transmits at intervals from 9.30 a.m. 12.5 p.m.—Concert from Cologne. 1. Oriental March (Aibout). 2. Gruss an Wien Waltz (Siede). 3. Carnival Overture (Zimmer). 4. Paraphrase on "Caro mio ben" (Giordani-Leuschner). 5. Rhapsody (Lindsay-Theimer). 6. Gipse Song (Renée). 7. In the Temple of Beauty (Hummel). 8. Song and Boston (Mandt). 9. "Jelantjepliebe (Profes). 10.30 p.m.—Talk. 3.0 p.m.—Children's Corner from Cologne. 3.30 p.m.—Reading from "Das ele Blüt" from Cologne. 4.0 p.m.—Talk on "Easter Problems" from Cologne. 4.30 p.m.—Topical Talk from Cologne. 4.40 p.m.—Commerce Talk from Cologne. 5.0 p.m.—Gramophone Records from Dortmund. 6.15 p.m.—French Lesson from Cologne. 6.45 p.m.—Talk, "Man and Commerce" from Cologne. 7.15 p.m.—Concert from Dortmund. 1. Talk. 2. Choral Greetings. 3. (a) Recitations, (b) "The Land of Work"—Choral Selection. 4. (a) Bergleute (Bröger), (b) Song of the Coal Heaver, for Speaking Chorus, (c) Die Türen schlagen (Engelke), hoch (Winckler), (d) Er (Wohlgemuth), (e) Song, Lied unter Tag (Hoffmann). 5. Piano-forte Solo Toccata—Impressions of a Machine Room (Prokofeff). (b) Recitations. 6. (a) Recitation "Ich from' wie ich" (Winckler), (b) Choral Selection, "Song of Labour" (Halling). Followed by News, Sports Notes, from Cologne. Silent Night.

**LAUSANNE.** Société Romande de Radiophonie (HB2). W.L. 680 m. (441 kc); 0.6 kw.

Transmits at intervals from 6.45 a.m. 7.0 p.m.—Weather. 7.1 p.m.—Orchestral Concert: 1. "The Daughter of the Regiment"

—Overture (Donizetti). 2. Idylle arabe (Chaminade). 3. Prelude to "The Deluge" (Saint-Saens). 4. Ballet Music from "Le Cid" (Massenet).

7.50 p.m.—Song Recital. 8.20 p.m.—Literary Talk.

**LEIPZIG.** Mitteldentscher Rundfunk. W.L. 366.3 m. (819 kc); 4 kw.

Programme relayed by Dresden on 275.2 m. (1,090 kc).

Transmits at intervals from 9.0 a.m. 5.5 p.m.—Talk for Women. 5.30 p.m.—Elementary Spanish Lesson. Relayed from Koenigswusterhausen. 6.0 p.m.—Readings from the Works of Reuter. 7.15 p.m.—"Das Fatale Ei"—Grotesque (Schütt). 8.15 p.m.—Concert of Symphonic Dances. 1. Minuet (Beethoven). 2. German Dances (Schumann). 3. Hungarian Dances (Brahms). 4. German Dances (Reger). 5. Slavonic Dances (Dvorak). 9.15 p.m.—Sports News. 9.30 p.m.—Dancing Lesson. 9.45 p.m.—Concert of Orchestral and Dance Music. 11.0 p.m. (approx.)—Close Down.

**MADRID.** Union Radio (E.A.J.T.). W.L. 375 m. (800 kc); 1.5 kw.

Transmits at intervals from 11.45 a.m. 2.0 p.m.—Orchestral and Vocal Concert.

7.0 p.m.—Orchestral Concert. 1. La Hebra—Selection (Estela). 2. En Cerezo hay una venta—Selection (Wagner). 3. La Fille de Madame Angot—Selection (Lecocq). Interlude by Luis Medina. 7.45 p.m. (approx.)—Dance Music relayed from the Hotel Ritz. 9.30 p.m.—English Lesson. 9.45 p.m.—Medical Talk. 10.0 p.m.—Programme relayed by San Sebastian, 335 m. (895 kc). Time, and Exchange Closing Prices. 10.10 p.m.—Concert of Modern Spanish Music. 1. "Castilla"—Dance (Alvarez Cantos). 2. Two Poems for Voice and Orchestra: (a) El viaje definitivo (Jimenez), (b) La rueca (Villaespesa). 3. Autumn Ballad for Voice and Orchestra (Hallfiter)—Text by Apollinaire. 4. Sarabande (Salazar). 5. "Sonatina"—Dance Suite (Hallfiter). 6. Evocation medioeval (Del Campo): (a) Prelude, (b) Romances, (c) Triste estaba el caballero, (d) Morisco. 12.20 a.m. (Wednesday)—News. 12.30 a.m. (approx.)—Close Down.

**MILAN.** Unione Radiofonica Italiana (IMI). W.L. 541 m. (554 kc); 7 kw.

4.5 p.m.—Quintet Concert. 7.0 p.m.—German Lesson. 7.50 p.m.—Art Talk. 8.0 p.m.—Variety Concert. 1. Oberon—Overture (Weber). 2. "William Ratcliff"—Dream and Intermezzo from Act. 3. (Mascagni). 3. "Christopher Columbus"—Selections (Franchetti). 4. Concerto in A minor (Vivaldi). 5. "King Enzo"—Selection (Respighi). 6. Magliolata (Caloso). 7. Old Story (Limentola). 8. O del mio amato ben—Soprano Song (Donaway). 9. Villanella (Daquini). 10. L'Oiseau amoureux (Couperin). 9. Serse-Largo (Handel). 10. Bosnian Songs for Soprano. 11. The Merry Wives of Windsor—Selection (Nicolai).

9.55 p.m.—News. 10.0 p.m.—Dance Music. Relayed from the "Fischetteria Toscana." 10.50 p.m. (approx.)—Close Down.

**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc); 4 kw. Programme relayed by Nuernberg on 303 m. (990 kc) and Augsburg, 566 m. (530 kc).

Transmits at intervals from 10.20 a.m. 3.0 p.m.—Orchestral Concert. 4.5 p.m.—Dialect Recital. 5.40 p.m.—Natural History Talk. 6.0 p.m.—Film Talk. 6.30 p.m.—Concert from Nuernberg. 1. Weidmannsheil March (Beckling). 2. Chantuse Felah (Bosiljevac). 3. Polka (Narkoni). 4. Two Slavonic Songs. 5. Malenkosti (Hruza). 6. Sokolska Koracnica (Tuma). 7. Kod Supera Waltz (Hruza). 8. O Sole mio (di Capua). 9. Hrvatsko Kolo. 10. March. 7.30 p.m.—Reading. 8.0 p.m.—Chamber Music: 1. Suite for Five Wind Instruments, Op. 9; 2. Five Tenor Songs. 3. Serenade for Five Wind Instruments, Op. 12 (Kaleva). 9.5 p.m.—News. 9.20 p.m.—Discussion on "Genius." CONTINUED ON NEXT PAGE

**PROGRAMMES FOR TUESDAY—(Cont.)**

**NAPLES.** Unione Radiofonica Italiana (INA). *W.L.* 407 m. (737 kc); 1.5 kw. Transmits at intervals from 12.0 noon 7.40 p.m.—News. 7.48 p.m.—Harbour Notes. 7.50 p.m.—Relay of an Opera from the "San Carlo Theatre." In the interval: Dance Music from the Studio. 9.55 p.m.—Calendar. 10.7 p.m. (approx.)—Close Down.

**OSLO.** Kringkastingselskapet. *W.L.* 461.5 m. (650 kc); 1.5 kw. Programme relayed by Hamar on 560 m. (530 kc); Porsgrund, 524 m. (572 kc); Fredrikstad, 434.8 m. (690 kc); Notodden, 423 m. (709 kc); and Rjukan, 448 m. (670 kc). Transmits at intervals from 10.10 a.m. 6.20 p.m.—Household Hints. 6.0 p.m.—News. 6.15 p.m.—Programme from Stockholm. News in the interval. 9.35 p.m.—Topical Talk.

**PARIS.** Eiffel Tower (FL). *W.L.* 2,650 m. (113 kc); 5 kw. 7.56 a.m.—Time Signal (on 32 m. 9,375 kc.) 9.28 a.m.—Time Signal. 5.45 p.m.—Le Journal Parlé. Talks on "The Work of Ernest Zyromski," "Books to Read." 7.10 p.m.—Weather. 7.30 p.m.—Concert: 1. The Judgement of Midas (Cools). 2. Piano-forte Solos: (a) La Chanson des Abeilles (Filippucci), (b) Toccata (Sartatti), 3. Berceuse (Cools), 4. (a) Concerto Andante (Bach), (b) Le Vent qui pleure dans la Nuit (Dehume), (c) Gavotte (Gosse), 5. Piano-forte Solos, (a) Allegro (Bach), (b) Fabilau (Schumann), (c) Cello Solo—Harlequin (Popper). At 7.56 p.m. Time Signal (on 32 m., 9,375 kc.) 8.30 p.m.—Educational Programme. Talks on "Life in the United States," "The Town of Nish in Winter," "Customs and Peoples." 10.26 p.m.—Time Signal.

**PARIS.** Petit Parisien. *W.L.* 340.9 m. (880 kc); 0.5 kw. 9.0 p.m.—Concert. 1. "Frithiof"—Overture (L ubois). 2. Selection from "Patrie" (Paladilhé). 3. Suite brève (Dubois). 4. Xavière (Dubois). 5. Petite Valse (Pala-

dihé). 6. La Farandole (Dubois). **PARIS.** Radio-Paris (CFR). *W.L.* 1750 m. (171 kc); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Orchestral Concert. 1.50 p.m.—Market Prices. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Concert. 1. Madame Roland (Fourdrain). 2. "Cello Concerto (Grieg). 3. Ad Astra (Tremisot). 4. Piano-forte Solos, (a) Arlequinade (Dejean), (b) Les Mouches (Talex), 5. Variations japonaises (Vidal). 6. Violin Solo, Jeux (Ibert). 7. Marche Militaire (Schubert). 4.45 p.m.—Exchange Quotations. 7.0 p.m.—Agricultural Report. 7.45 p.m.—Elementary English Lesson. 8.0 p.m.—Market Prices. 8.15 p.m.—Literary Talk. 8.30 p.m.—Concert. 1. Festival Messenger. 2. (a) Le Héron, (b) La Laitière et le Pot au Lait (La Fontaine). 3. (a) Gavotte in G (Handel), (b) La Campanella (Liszt). 4. Symphony (Chausson). 5. Concerto for Piano and Orchestra (Grieg). News in the interval. **PITTSBURGH.** Westinghouse Electric (KDKA). *W.L.* 315.6 m. (950 kc); 50 kw. Transmits at intervals from 2.45 p.m. 11.0 p.m.—Time. 11.10 p.m.—"Yellow Cab Theatrical Calendar." 11.15 p.m.—Symphony Concert. Relay from the "Penn Hotel." 12 (midnight)—Time, followed by Sacred Music. 12.30 a.m. (Wednesday)—The Haller Bakers. Programme from WJZ, New York. 1.0 a.m.—"The Stromberg Carlson Hour." 2.0 a.m.—"The Headliners." 2.30 a.m.—"Torrid Tots." 3.0 a.m.—Longine Time, followed by "Torrid Tots" (continued). 3.30 a.m.—Time and Weather. 3.45 a.m. (approx.)—Close Down. **POSEN.** Polskie-Radio. *W.L.* 344 m. (872 kc); 1.5 kw. Transmits at intervals from 12 noon. 4.20 p.m.—English Lesson. 4.45 p.m.—Programme from Warsaw. 6.0 p.m.—Variety. 6.15 p.m.—Programme from Katowitz followed by Time and Weather.

**PRAGUE.** Strásnice. *W.L.* 348.9 m. (860 kc); 5 kw. Transmits at intervals from 10.0 a.m. 7.0 p.m.—"Monsieur de Pourceaugnac" (Molière). **ROME.** Unione Radiofonica Italiana (IRO). *W.L.* 451 m. (665 kc); 3 kw. Transmits at intervals from 11.30 a.m. 7.0 p.m.—English Lesson. 7.30 p.m.—Time, News and Weather. 7.45 p.m.—Vocal and Instrumental Concert, followed by "La Serva Padrona"—One-Act Lyric Comedy (Pergolesi). 9.0 p.m. (approx.)—Vocal and Instrumental Concert (contd.). 9.55 p.m.—News. 10.0 p.m. (approx.)—Close Down.

**SCHENECTADY.** N.Y. General Electric Company (WGY). *W.L.* 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAD on 21.96m. (13,661 kc), from 6 p.m. to 7 p.m. and by 2XAF on 32.77 m. (9,155 kc), from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News. 11.30 p.m.—Dinner Music from the Hotel Ten Eyck, Albany, N.Y. 12.30 a.m. (Wednesday)—The Madrigal Quartet. 1.0 a.m.—4.30 a.m.—Programme from New York. 1.0 a.m.—The Selberling Singers. 1.30 a.m.—"The Sealy Air Weavers." 2.0 a.m.—Time and "Ever-ready Hour." 3.0 a.m.—Bridge Lesson. 3.30 a.m.—Rolfé's Palais d'Or Orchestra. 4.30 a.m.—"The Homesteaders," from Rochester, N.Y. 5.0 a.m.—Shea's Buffalo Symphony Orchestra from Buffalo, N.Y. 6.0 a.m. (approx.)—Close Down.

**STAMBOUL.** Radio-Stamboul. *W.L.* 1,180 m. (254 kc); 5 kw. 3.0 p.m.—Orchestral Concert. 3.50 p.m.—Dance Music. 5.0 p.m.—Concert of Turkish Music. 7.0 p.m.—Exchange Quotations and Market Prices of Wheat. 7.10 p.m.—Orchestral Concert. 1. "The Barber of Seville"—Overture (Rossini). 2. Tortojada—Valse (Morcna). 3. Maria Luz (Sme). 4. La Nuit (Rubinstein). 5. The Dance of the Hours from "La Gioconda" (Ponchielli). 7.50 p.m.—Weather and Time.

8.0 p.m.—Dance Music. 8.30 p.m.—News by the "Agence Anatolie." 8.45 p.m. (approx.)—Close Down. **STOCKHOLM.** Radiotjänst (SASA). *W.L.* 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1315.5 m. (228 kc); Göteborg, 416.7 m. (720 kc); Malmo, 260.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc). Transmits at intervals from 11.35 a.m. 5.0 p.m.—Children's Corner. 5.30 p.m.—Concert of Light Music. 5.45 p.m.—Agricultural Talk. 6.0 p.m.—Talk on Hygiene. 6.15 p.m.—"Carmen"—Opera (Bizet) with Introductory Talk from the Royal Opera House. 8.15 p.m.—News and Weather. 9.35 p.m. (approx.)—Close Down.

**STUTT GART.** Süddeutscher Rundfunk. *W.L.* 330.7 m. (788 kc); 4 kw. Transmits at intervals from 11.30 a.m. 3.15 p.m.—Afternoon Concert. 1. Durch Nacht und Nebel—March (Urbach). 2. Waltz Potpourri (Robrecht). 3. Andante from the Cello Concerto (Goltermann). 4. "Nabucco"—Overture (Verdi). 5. "The Nutcracker Suite" (Tchaikovsky). 6. Heinzelmännchens Hochzeit (Köpping). 7. Sektgeister—Waltz (Urbach). 8. Festival March (Trinkauss). 5.15 p.m.—Anecdotes. 5.45 p.m.—Legal Talk. 6.15 p.m.—Talk, "Old Germanic Poetry in Bohemia." 6.45 p.m.—Time, Weather and Wireless Notes. 7.15 p.m.—"The Geisha"—Operetta (Jones), followed by "An Entertainment in the Lions Cage," from the Schneider Circus in the Stuttgart Town Hall. News.

**TOULOUSE.** Radiophonie du Midi. *W.L.* 391 m. (767 kc); 3 kw. Transmits at intervals from 10.15 a.m. 12.45 p.m.—Concert. 1. Les Nuits du Bois—Fox-trot (de Bozi). 2. Selection from "The Tales of Hoffmann" (Offenbach). 3. Ninon (Elsen). 4. Lumière de la Mine—Valse (Zeller). 5. "Cocorico"—Selection (Ganne). 6. Humo—Tango (Bonincontro). 7. Danse latine (Fourdrain). 8. Terpsichore—Ballet (Ganne). 9. M'Amour (Cérimèle). 10. Selection from "Lakmé" (Delibes). 11. Menuet

Pompeux (Ganne). 12. Joya—Paso doble (Pelabon). 13. Le Petit Chat (Siede). 14. March (Erkele). 8.15 p.m.—Opera Relay from the Capitol Theatre.

**VIENNA.** Radio-Wien. *W.L.* 576 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Programme relayed by Innsbruck on 294.1 m. (1,020 kc), and Klagenfurt, 272.7 m. (1,100 kc), and by Graz, on 357.1 m. (840 kc), until 7.0 p.m. Transmits at intervals from 10.0 a.m. 3.15 p.m.—Orchestral Concert. 1. Mikado Waltz (Sullivan). 2. "Le Roi l'a dit"—Overture (Delibes). 3. Elsa's Dream (Wagner). 4. Song from "Die Tote Stadt" (Korngold). 5. Brahms Fantasia (Morena). 6. Schwalben Waltz (Strauss). 7. Lilac Time (Schubert-Berté). 8. March Song (Weid). 9. Traum der Sennerin (Labitzky). 10. If I Were the Little King (Nagypal). 4.25 p.m.—Talk, "Music in Modern Life." 4.50 p.m.—Talk, "The Vienna Fair and Woman." 5.0 p.m.—Travel Talk. 5.30 p.m.—Talk, "Selfishness as a Hindrance in Cultural Development." 6.0 p.m.—Relay of "Fidelio" (Beethoven).

**WARSAW.** Polskie-Radio. *W.L.* 1111.1 m. (270 kc); 10 kw. Transmits at intervals from 11 a.m. 3.40 p.m.—Literary Talk. 4.20 p.m.—Talk, "The Graphic Arts." 4.45 p.m.—Concert. 1. Orchestral Selections from "Pelias and Melisande" (Sibelius). 2. Suite for Three Bassoons (Wessenborn). 3. Four Selections from "The Christmas Tree" (Rebikov). 4. Suite Marocaine (Lacome). 6.30 p.m.—Programme from Katowitz.

**WILNO.** Radio-Pologne. *W.L.* 435m. (689 kc); 0.5 kw. 3.40 p.m.—News in Lithuanian. 3.55 p.m.—Talks. 4.45 p.m.—Orchestral Concert. 5.50 p.m.—Weather, Time and Variety. 6.20 p.m.—Programme from Posen. 9.30 p.m.—News. 9.45 p.m. (approx.)—Close Down.



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# PROGRAMMES FOR WEDNESDAY (February 29)

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

**BARCELONA.** Radio Barcelona (EAJL). W.L. 344.8 m. (870 kc.); 1.5 kw.

Transmits at intervals from 11.0 a.m. 5.30 p.m.—Quintet Music, Gramophone Records and Recitations.

6.0 p.m.—Market Prices. 6.10 p.m.—Quintet Selections: 1. Penalba (Margall). 2. Egyptian Ballet (Luigini). 3. One step (Gilbert). 4. Heinzelmänn's Wachtparade (Noack).

8.30 p.m.—Castilian Grammar Lesson. 9.5 p.m.—Exchange Quotations and News.

9.10 p.m.—Quintet Selections: 1. Marche de France (Margall). 2. Que la vie est belle (Strauss).

9.20 p.m.—Song Recital. 9.45 p.m.—Recitations from Literary and Theatrical works.

10.5 p.m.—Pianoforte Recital: 1. Nocturne in C minor (Chopin). 2. Sonata No. 3, Op. 58 (Chopin).

10.30 p.m.—Relay of part of the Concert by the Toldra Quintet—from the "Granja Royale."

12.0 midnight (approx.)—Close Down.

**BERGEN.** Kringkastingselskap. W.L. 370.4 m. (810 kc.); 1.5 kw.

Transmits at intervals from 10.15 a.m. 7.0 p.m.—Leap Year Ball—Old and New Melodies.

9.0 p.m.—Weather, News and Time. 9.15 p.m.—Dance Music.

**BERLIN.** Koenigswusterhausen. W.L. 1,250 m. (240 kc.); 8 kw.

Transmits at intervals from 11 a.m. 2.0 p.m.—Educational Talk.

2.35 p.m.—Weather and Exchange. 3.0 p.m.—Talk on "Prussian Culture."

3.30 p.m.—Talk on "Max Reger." 4.0 p.m.—Programme from Hamburg.

5.0 p.m.—Technical Talk. 5.30 p.m.—French Lesson.

5.55 p.m.—Talk on "The Review of Political and Economic Professions."

6.20 p.m.—Talk, "Books and Book Culture."

7.30 p.m.—Programme relayed from Voxhaus on 1,250 m. (240 kc) and 35 kw.

**BERLIN.** Voxhaus. W.L. 484.6 m. (619 kc.); 4 kw.

Transmits at intervals from 9.10 a.m. 2.30 p.m.—Talk, "Parliamentary Work for Women."

3.0 p.m.—Talk, "The Electrical Treatment of Internal Diseases."

3.30 p.m.—Fairy Tales for Children. 4.0 p.m.—Orchestral Concert. 1. "Das Orchester des Eremiten" (Mailart). 2. Melody (Rachmaninoff). 3. Spanish Dance (Moszkovsky). 4. Selection from "If I Were King" (Adam). 5. Larghetto (Handel-Hubay). 6. Magyar dalok—Potpourri (Lehár). 7. Potpourri from "Der Bettelstudent" (Müllbacher).

5.30 p.m.—Talk on "The Transplanting of Flowers for the House."

6.0 p.m.—Talk on "Goethe's Works set to Music by Mendelssohn, Brahms, Löwe and Hugo Wolf."

6.25 p.m.—Legal Talk. 6.55 p.m.—Talk, "The Philosophy of Modern Art."

7.30 p.m.—Concert. 1. Nanette Gavotte for Orchestra. 2. Soprano Solo—In Park von Sanssouci. 3. Orchestra, The Sultan's Dream. 4. Tenor Solo—Sag' du zu mir. 5. Waltz. 6. Orchestra, Der erste Liebe goldene Zeit. 7. Tenor Solo, from "Dorine und der Zufall." 8. Soprano Solo from "Die Braut des Lucullus." 9. Tenor Solo from "Die Braut des Lucullus." 10. Moonlight Waltz. 11. Tenor Solo from "La Chaste Susanne." 12. Soprano Solo, from "La Chaste Susanne." 13. Duet from "The Lady of the Rose." 14. Orchestra: (a) Opium Dream, (b) Kommt doch alle. 15. Duet from "The Woman in Purple."

9.15 p.m. (approx.)—Weather, News, Time and Sports Notes.

9.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

**BERNE.** Radio-Berne. W.L. 411 m. (730 kc.); 1.5 kw.

Transmits at intervals from 12 noon. 3.0 p.m.—Kursaal Orchestra. Children's Corner in the interval.

6.30 p.m.—Time and Weather. 6.35 p.m.—Programme from Zurich.

7.0 p.m. (approx.)—"Kleider machen Leute"—Musical Play after the Story by Gottfried Keller.

8.50 p.m.—News and Weather.

9.5 p.m.—Kursaal Orchestra. 9.30 p.m. (approx.)—Close Down.

**BRESLAU.** Schlesische Funkstunde. W.L. 322.6 m. (930 kc.); 4 kw.

Programme relayed by Gleiwitz on 250 m. (1,200 kc).

Transmits at intervals from 10.15 a.m. 3.15 p.m.—Orchestral Concert from the Works of Bruckner, Wagner, Moszkovsky and Grieg, etc.

4.45 p.m.—Dialect Programme from Gleiwitz.

5.10 p.m.—Talk on "Don Carlos." 5.55 p.m.—Legal Talk.

6.30 p.m.—"Don Carlos"—Opera (Verdi). Relay from the Municipal Theatre.

**BRUENN.** Komarov. W.L. 443 m. (676.8 kc.); 8 kw.

Transmits at intervals from 11.15 a.m. 6.10 p.m.—French Lesson.

6.30 p.m.—Programme from Prague. 8.0 p.m.—"Rococo Concert."

9.0 p.m.—Time and News.

**BRUSSELS.** Radio Belgique. W.L. 508.5 m. (590 kc.); 1.5 kw.

5.0 p.m.—Concert by the Station Trio.

7.45 p.m.—"Radio Chronique." 8.15 p.m.—Recital of Gramophone Records—with Commentary.

8.30 p.m.—Concert by the Orchestra of the Royal Zoological Society, Antwerp, with Pianoforte Interludes by Mlle. Magda Tagliaferro. 1. "Manfred"—Overture (Schumann). 2. Concerto in D for Pianoforte and Orchestra (Mozart). 3. Symphony with Organ accompaniment (Saint-Saëns). 4. Pianoforte Solos, (a) Novelette (Schumann), (b) Valse (Chopin), (c) The Miller's Dance (De Falla). 5. Norwegian Rhapsody (Lalo).

10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

**BUDAPEST.** Magyar-Radio Ujsag. W.L. 555.6 m. (540 kc.); 3 kw.

Transmits at intervals from 8.30 a.m. 7.45 p.m.—Chamber Music.

9.15 p.m.—Time, News and Dance Music from the Ritz Hotel.

**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc.); 1 kw.

Programme relayed by Kalundborg on 1,153.8 m. (260 kc.). 6.30 a.m.—Exercises.

2.0 p.m.—Concert. 5.0 p.m.—Talk, "Iceland."

5.30 p.m.—Variety. 5.35 p.m.—Announcements.

6.0 p.m.—News, Exchange and Time. 6.30 p.m.—Talk, "Odense."

7.0 p.m.—Talk on "Kal Aaga Bruun" and Concert from his works.

8.15 p.m.—News. 8.30 p.m.—Reading.

9.0 p.m.—Orchestral Concert: 1. "The Merry Wives of Windsor"—Overture (Nicolai). 2. Military Waltz (Waldteufel). 3. Selection from "The Barber of Seville" (Rossini). 4. Romance from the Violin Concerto, Op. 22 in D minor (Wieniawski). 5. Swedish Folk Songs and Dances (Södermann). 6. "Hunyady Lázló"—Overture (Erkel). 7. Gold and Silver—Waltz (Lehár). 8. Sérénade for Strings (Pierné). 9. Andante serioso (Hermansen). 10. El Rolando Gavotte (Leoncavallo). 12. Galop militaire (Lumbye).

10.0 p.m.—Dance Music from the Palace Hotel. 11.30 p.m. (approx.)—Close Down.

**CORK.** Cork Broadcasting Station (6CK). W.L. 400 m. (750 kc.); 1.5 kw.

2.30 p.m.—Weather, Stock Market Prices and Gramophone Selections.

6.15 p.m.—Programme from Dublin.

**CRACOW.** Polskie-Radio. W.L. 566 m. (530 kc.); 1.5 kw.

Transmits at intervals from 11 a.m. 4.45 p.m.—Children's Corner.

5.15 p.m.—Programme from Warsaw. 6.05 p.m.—Agricultural Report.

6.15 p.m.—Variety. 6.35 p.m.—Talk, "Are we more highly strung in these days?"

7.0 p.m.—"Hejnal Air" and Sports Notes. 7.30 p.m.—Programme from Warsaw.

**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc.); 1.5 kw.

1.30 p.m.—Exchange, Weather and Gramophone Selections. 6.0 p.m.—Gramophone Selections. 6.15 p.m.—Children's Corner. 7.0 p.m.—Talk for Women. 7.20 p.m.—News. 7.30 p.m.—Irish Lesson by M.O. Maolain.

7.45 p.m.—German Lesson by Olga von Wenckstern.

8.0 p.m.—Irish Tone Sketches by the Station Orchestra with Selections by Joseph Schofield ('Cello) and Mary Maguire (Soprano).

9.15 p.m.—"Wee Macgregor" by the Rev. A. H. Macpherson.

9.30 p.m.—W. E. Manahan and Company in Variety Half Hour.

10.0 p.m.—Amhrain Ghalachla by Donnchadh MacCoiligh.

10.15 p.m.—The Station Orchestra: (a) Norwegian Scenes (Matt), (b) Prelude—View of the Mountain, (c) Intermezzo—Peasant's Dance, (d) Scherzo—Sleigh Ride.

10.30 p.m.—News, Weather and Close Down.

**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc.); 4 kw.

Programme relayed by Cassel, 252.1 m. (1,190 kc).

Transmits at intervals from 12.30 p.m. 3.30 p.m.—Concert from Works of Rossini. 1. "William Tell"—Overture. 2. Aria. 3. "The Barber of Seville"—Selection. 4. "The Sleg of Corinth"—Overture.

5. Aria. 6. Suite from "La boutique fantasque" (arr. Respighi): (a) Kosakentans, (b) Nocturno, (c) Mazurka, (d) Tarantella, (e) Cancan, (f) Gallop.

4.45 p.m.—Review of Books. 5.15 p.m.—Wireless Notes and Other Announcements.

5.30 p.m.—Talk, "Brahma Samadsch and Rabindranath Tagore."

6.0 p.m.—Talk arranged by the Frankfurt Chamber of Commerce. 6.30 p.m.—French Lesson.

7.0 p.m.—Talk, "Natural History." 7.15 p.m.—Chamber Music. 1. Trio in C minor, Op. 101 (Brahms).

2. Fourth Concerto (Rameau): (a) La Pantomime, (b) L'Indiscrete. 3. Trio in B flat major, Op. 99 (Schubert).

8.15 p.m.—Orchestral Concert. 9.15 p.m. (approx.)—Close Down.

**HAMBURG.** Norag (ha, in Morse). W.L. 396 m. (757 kc.); 4 kw.

Programme relayed by Bremen, on 252.1 m. (1,190 kc); Hanover, 297 m. (1,009 kc); and Kiel, 256 m. (1,172 kc).

Transmits at intervals from 5.55 a.m. 3.15 p.m.—Programme from Hanover.

4.0 p.m.—"Grandmother's Songs." 5.0 p.m.—(Hamburg and Kiel)—Orchestral Music.

6.0 p.m.—Talk, "Atmospheric Depressions."

6.25 p.m.—The Lower-German School. 6.55 p.m.—Weather.

7.0 p.m.—Talk, "Foreign Loans." 7.15 p.m.—Sylt-Frieland Concert.

1. Introductory talk. 2. (a) Cradle Song (Lulu v. Strauss and Torney), (b) Pidder Lings (von Liliencron). 3. A Dying Speech (Andreas Hübbe). 4. "En Injem"—Poem (Christiansen) recited in the original language by Frau Godeline Wieland and in German by Alice Fliegel. 5. Songs, (a) Hareft-Leedji—Sylt Dance with accordion accompaniment, (b) Seem'n's Klagg Song. 6. Notes on "Goede Mischeel." 7. "Goede Mischeel"—Drama (L. von Humburg).

9.30 p.m. (approx.)—Concert from Café Wallhof and News.

10.25 p.m.—(Hamburg, Bremen and Kiel)—Ice Report.

10.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

**HANOVER.** Norag. W.L. 297 m. (1,009 kc); 0.7 kw.

3.15 p.m.—Concert. 1. Viennese March (Kreisler). 2. Songs, (a) A Strauss Waltz (Lorens), (b) Da draussen in der Wachau (Arnold). (c) Ich hab' in Pichelsdorf nen kleinen Blumengarten (Leux). 3. Mädel, heut ist Johannisnacht (Gilbert). 4. Songs, (a) Vom Sekt sind die Geigen berauscht (Wolf), (b) Die ersten Vellchen hab' ich für dich gepflückt (Röder), (c) Wann werden wir und wiedersehen (Ziegler). 5. Foxtrot from "Marietta" (Kollo).

5.0 p.m.—Electrola Concert. 9.30 p.m. (approx.)—Relay of foreign stations.

**HILVERSUM.** Algemeene Vereeniging Radio-Omroep. W.L. 1,069 m. (280.5 kc); 5 kw.

11.40 a.m.—Police News. 12.10 p.m.—Trio Concert. 2.10 p.m.—Programme for Women and Children.

5.10 p.m.—Concert: 1. "La Princesse Jaunc"—Overture (Saint-

Saëns). 2. Russian Scenes (Bantock). 3. Album Leaf (de Micheli).

4. Aria from "Le Roi de Lahore" (Massenet). 5. Drinking Song from "Hamlet" (Thomas). 6. Selection from "The Huguenots" (Meyerbeer). 7. Serenade (Widor). 8. Recitative and Aria from "A Masked Ball" (Verdi).

9. Liebesoefenbarung (Luling). 10. Polar Star—Waltz (Waldteufel). 11. Selection from the works of Suppé (Morena).

6.55 p.m.—Talk. 7.25 p.m.—Weather and News.

7.45 p.m.—Talk. 8.10 p.m.—"The Lady with the Reason for Divorce"—Hungarian Comedy (Vajda). Weather and News in the Interval.

10.25 p.m. (approx.)—Close Down.

**HUIZEN.** W.L. 340.9 m. (880 kc); 4 kw. (Until 5.40 p.m.) Transmits from 5.40 p.m. on 1,950 m. (154 kc).

12.10 p.m.—Trio Concert. 4.55 p.m.—Children's Corner. 6.40 p.m.—Shorthand Lesson.

7.10 p.m.—Poultry Talk. 7.40 p.m.—Vocal and Orchestral Concert. Relay from the "De Deelen," Rotterdam. Talk in the interval.

**KATTOWITZ.** Polskie-Radio. W.L. 422 m. (710 kc); 10 kw.

Transmits at intervals from 3.20 p.m. 5.15 p.m.—Programme from Wilno. 6.35 p.m.—Talk on "The Science of Work."

7.30 p.m.—Concert. 9.30 p.m.—Concert from the Café Astoria.

**KOENIGSBERG.** Ostmarken Rundfunk. W.L. 330.3 m. (908 kc); 1 kw.

Programme relayed by Danzig on 272.7 m. (1,100 kc).

Transmits at intervals from 8.0 a.m. 3.30 p.m.—Concert of Operetta Music. 5.5 p.m.—Agricultural Report.

5.30 p.m.—Talk, "Possibilities of Progress in Country Schools."

6.0 p.m.—Talk, "The Middle Stone Age."

6.0 p.m. (Danzig only)—Talk "The History of the Baltic States."

6.30 p.m.—English Lesson. 7.5 p.m.—"Der Verschwenner"—Musical Play (Kreutzer).

9.15 p.m.—Weather and News. 9.30 p.m. (approx.)—Concert (Koenigsberg only).

9.30 p.m.—Concert of Light Selections and Dance Music (Danzig only).

**KOVNO.** Radio-Kaunas. W.L. 2,000 m. (150 kc); 15 kw.

5.0 p.m.—Talk on "Diseases in Children."

5.30 p.m.—Talk, "My Journey Through Brazil."

6.0 p.m.—Time, Weather and News. 6.30 p.m.—Relay from the National Theatre.

**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc.); 25 kw.

Programme also relayed by Aix-la-Chapelle on 401 m. (748 kc.), Cologne 283 m. (1,060 kc.) and Münster 241.9 m. (1,240 kc.).

Transmits at intervals from 9.30 a.m. 12.5 p.m.—Concert from Cologne. 1. Die Komödianten March (Führmann). 2. Blumenwälder (Tschakovsky). 3. "Marianna"—Overture (Wallace). 4. Melodies from "Der Stier von Olvera" (d'Albert). 5. Pianoforte Solo, Königin Polka (Raff). 6. Serenade (Onestile). 7. Über Allen Zauber Liebe (Lassens). 8. Mein Lieblich tanz!—Intermezzo (Micheli).

1.30 p.m.—Talk. 2.45 p.m.—Talk for Women, from Cologne.

3.30 p.m.—Commerce Talk from Cologne.

4.0 p.m.—Topical Talk from Cologne. 4.15 p.m.—Education Talk from Cologne.

5.0 p.m.—Concert from Cologne: 1. Thermen Waltz (Strauss). 2. La Victorieuse Néroique (Michiels). 3. Melodies from "Izeyl" (Pierné). 4. Toscanetta—Sicilian Song (Bece). 5. Egyptian Suite (Profs). 6. The Rustle of Spring (Stinding). 7. Ein musikalischer Scherz—Potpourri (Aston).

6.10 p.m.—Talk, "Morals in Commerce and Law" from Cologne.

7.0 p.m.—Dancing Lesson from Cologne.

7.30 p.m.—Choral Concert from Cologne: 1. Meeresstille und glückliche Fahrt for Choir and Orchestra. 2. Bilder aus Norden (Hofmann). 3. Winter Sunsets—for Choir and Orchestra (Führlich). 4. Two Orchestral pieces: (a) Hirtentanz; (b) Bauertanz

(Bunning). 5. Solo and Choral Selection (Kaum). 6. "Die Deutsche Tanne"—Idylle for Bass Solo, Choir and Orchestra (Koch). Followed by News, Sports Notes, Concert and Dance Music.

11.0 p.m. (approx.)—Close Down.

**LEIPZIG.** Mitteldeutscher Rundfunk. W.L. 366.3 m. (819 kc); 4 kw.

Programme relayed by Dresden on 275.2 m. (1,000 kc).

Transmits at intervals from 9.0 a.m. 3.30 p.m.—Children's Corner. 5.0 p.m.—Technical Talk. Relay from Koenigswusterhausen.

5.30 p.m.—Elementary French Lesson. Relay from Koenigswusterhausen.

6.0 p.m.—Medical Talk. 6.30 p.m.—Talk, "Modern Ground Laws."

7.0 p.m.—Weather and Time. 7.15 p.m.—"The Music Master"—Opera (Pergolesi).

9.0 p.m.—Press and Sports News. 9.15 p.m.—Cabaret Concert. 11.0 p.m. (approx.)—Close Down.

**MADRID.** Union Radio (EAJ7). W.L. 375 m. (800 kc); 1.5 kw.

Transmits a interval from 11.45 a.m. 2.0 p.m.—Orchestral and Instrumental Concert.

7.0 p.m.—Orchestral Concert. 1. Prelude in D major (Scriabin). 2. La Indiana—Selection (Sacco del Valle). 3. Les Dragons de l'impératrice—Selection (Messager). 4. Fleur de Thé—Selection (Lecocq). 5. El as—Selection (Calleja). In the Interval—Talk, "The Medieval Theatre."

9.30 p.m.—History Lesson. 9.45 p.m.—Meteorological Talk.

10.0 p.m.—Chimes and Exchange Closing Prices.

10.10 p.m.—Popular Concert. 1. La Flor del pazo (del Campo). 2. La Dogaresa—Romance (Millan). 3. La balada de la luz (Vives). 4. Los de Aragón—Legend (Serrano). 5. La Duquesadel Tabarín—Song (Bard). 6. La Rabalera-jota (Vivez). 7. El capricho de las damas—Duet (Foglietti). 8. Blood and Sand—Song (Luna). 9. El duo de la Africana (Caballero). In the Interval—Talk on "Investigation of the Petroleum Deposits in Spain—the present state of the work." Selection from "El Tio de Alcalá"—One-act Farce (Arniches).

12.20 a.m. (Thursday)—News. 12.30 a.m. (approx.)—Close Down.

**MILAN.** Unione Radiofonica Italiana (IMI). W.L. 541 m. (554 kc); 7 kw.

7.0 p.m.—French Lesson. 7.50 p.m.—Time and Technical Wireless Lesson.

8.0 p.m.—Relay of an Operetta from the Teatro Lirico.

9.55 p.m. (approx.)—News and Close Down.

**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc); 4 kw.

Programme relayed by Nuernberg on 303 m. (990 kc); and Augsburg 566 m. (530 kc).

Transmits at intervals from 11.45 a.m. 3.0 p.m.—Quartet Concert.

5.55 p.m.—Beethoven Pianoforte Recital. 1. Six Variations on "Nel cor non più mi sento." 2. Rondo in C major. 3. Six Variations on a Theme in G major.

6.15 p.m.—Talk on "Careers." 6.45 p.m.—Talk on "Viennese Coffee."

7.5 p.m.—Orchestral Concert. 1. "Fra Diavolo"—Overture (Lincke). 2. Divertimento in D major (Mozart). 3. Violin Concerto in A major (Smetana). 4. Three Bohemian Dances (Smetana). 5. Talk. 6. "Prince Methusalem" (Strauss). 7. Nordseebilder—Waltz (Strauss). 8. Polka from "Die Fledermaus" (Strauss). 9. Polka Mazurka. 10. Gallop.

9.0 p.m.—News. 9.15 p.m.—Gramophone Records.

10.15 p.m. (approx.)—Close Down.

**NAPLES.** Unione Radiofonica Italiana (INA). W.L. 407 m. (737 kc); 1.5 kw.

7.20 p.m.—Wireless Notes. 7.48 p.m.—Harbour Notes.

7.50 p.m.—Concert of Light Music. 8.30 p.m.—Relay of an Opera from the Theatre Bellini.

9.55 p.m.—Calendar and Programme Notes.</

**PROGRAMMES for WEDNESDAY—(Cont.)**

524 m. (572 kc); Fredriksstad, 434.8 m. (690 kc); Notodden, 423 m. (709 kc); and Rjukan, 448 m. (670 kc).  
 Transmits at intervals from 10.10 a.m.  
 4.40 p.m.—Programme for Boys.  
 5.40 p.m.—French Lesson.  
 6.15 p.m.—News.  
 6.30 p.m.—Talk on the following Concert.  
 7.0 p.m.—Time.  
 7.2 p.m.—Orchestral Concert of Old and New Dance Music for Leap Year's Day.  
 8.0 p.m.—Song Recital (Tenor).  
 8.30 p.m.—Orchestral Concert.  
 9.15 p.m.—News and Weather.  
 9.30 p.m.—Topical Talk.  
 9.45 p.m.—Variety Programme.  
 11.0 p.m.—Dance Music.  
 1.0 a.m. (Thursday).—Close Down.  
**PARIS.** Eiffel Tower (FL). WL. 2,650 m. (113 kc); 5 kw.  
 7.56 a.m.—Time Signal (on 32 m. 9,375 kc).  
 9.26 a.m.—Time Signal.  
 5.45 p.m.—Le Journal Parlé. Talks on "The Metaphysical Unrest in the Theatre," "Science," etc.  
 7.10 p.m.—Weather.  
 7.30 p.m.—"Vialophone Concert."  
 1. "Tannhäuser"—Overture (Wagner). 2. "Cavalleria Rusticana" (Mascagni). 3. Meditation from "Thais" (Massenet). 4. "La Fleur que tu m'avais jetée" from "Carmen" (Bizet). 5. Prelude to "L'après midi d'un Faune" (Debussy). 6. Danse Macabre (Saint-Saëns). At 7.56 p.m. Time Signal (on 32 m. 9,375 kc).  
 8.30 p.m.—Educational Programme. Talks on "The Week in Agriculture," and "Sports."  
 10.26 p.m.—Time Signal.  
**PARIS.** Radio-Paris (CFR). WL. 1,750 m. (171 kc); 3 kw.  
 Transmits at intervals from 7.30 a.m.  
 12.30 p.m.—Orchestral Concert.  
 1.50 p.m.—Market Prices.  
 3.30 p.m.—Exchange Quotations.  
 3.45 p.m.—Concert. 1. Rythmes espagnols (Laparra-Grecourt). 2. Sonata for Violin (Locatelli). 3. Madrilène (Infante). 4. Piano-forte Solos, (a) Gavotte from "Iphigenia in Aulis" (Gluck). (b) Fantasia Impromptu (Chopin). 5. Concerto for Cello (Haydn). 6. Impressions de Plein Air (Wormser)

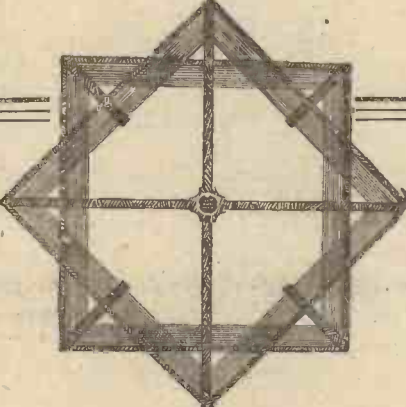
4.45 p.m.—Exchange Quotations.  
 7.0 p.m.—Agricultural Report.  
 8.0 p.m.—Market Prices.  
 8.30 p.m.—Concert. News in the interval.  
**PITTSBURGH.** Westinghouse Electric (KDKA). WL. 315.6 m. (950 kc); 50 kw.  
 Transmits at intervals from 2.45 p.m.  
 11.10 p.m.—Time.  
 11.10 p.m.—Yellow Cab Theatrical Calendar.  
 11.15 p.m.—Symphony Concert, relayed from the William Fenn Hotel.  
 12.0 midnight.—Time, followed by Address from the University of Pittsburgh.  
 12.15 a.m. (Thursday).—Variety Programme.  
 12.45 a.m.—Talk, "The Political Situation in Washington to-night."  
 1.0 a.m.—Programme from WJZ, New York—"Champion Sparkers."  
 1.30 a.m.—"The Sylvania Foresters."  
 2.0 a.m.—Variety Hour.  
 3.0 a.m.—Time and Weather.  
 3.15 a.m. (approx.).—Close Down.  
**PRAGUE.** Strasnice. WL. 348.9 m. (860 kc); 5 kw.  
 Transmits from 10.0 a.m.  
 6.30 p.m.—Opera Selection.  
 8.0 p.m.—Programme from Bruenn.  
 9.0 p.m.—Time, News and Orchestral Music.  
**ROME.** Unione Radfonica Italiana (IRO). WL. 451 m. (665 kc); 3 kw.  
 Transmits at intervals from 11.30 a.m.  
 7.0 p.m.—German Lesson.  
 7.30 p.m.—Time, News, Exchange Quotations and Weather.  
 7.45 p.m.—Talk, "The Sun, Mercury and Venus."  
 8.0 p.m. (approx.).—Relay from a Rome Theatre. In the interval: Review of Books and News.  
**SCHENECTADY, N.Y.** General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAD on 21.96 m. (13,661 kc) from 11.0 p.m. Transmits at intervals from 11.45 a.m.  
 11.0 p.m.—Exchange and News.  
 11.20 p.m.—"U.S. Radio Farm School."  
 11.30 p.m.—"WGY Agricultural Programme."

12.15 a.m. (Thursday)—Studio Programme.  
 12.30 a.m.—"The Soconyans" from New York.  
 1.0 a.m.—The Remington Band from Iliou, N.Y.  
 1.30 a.m.—The Radio Rollickers.  
 2.0 a.m.—Time, and "The Ipana Troubadours" from New York.  
 2.30 a.m.—"Goodrich Programme" from New York.  
 3.30 a.m.—News from "Time."  
 4.0 a.m. (approx.).—Close Down.  
**STAMBOUL.** Radio-Stamboul. WL. 1,180 m. (154 kc); 5 kw.  
 3.0 p.m.—Orchestral Concert.  
 3.50 p.m.—Dance Music.  
 5.0 p.m.—Concert of Turkish Music.  
 7.0 p.m.—Exchange Quotations and Market Prices of Wheat.  
 7.10 p.m.—Chamber Music. 1. String Quartet in D minor (Schubert). 2. Cello Solo. 3. Phantasiestücke (Schumann).  
 7.50 p.m.—Weather and Time.  
 8.0 p.m.—Dance Music.  
 9.30 p.m.—News by the "Agence Anatolie."  
 8.45 p.m. (approx.).—Close Down.  
**STETTIN.** Funkstunde A.G. WL. 236.7 m. (1,267 kc); 0.75 kw.  
 Programme from Voxhaus until 4.0 p.m.  
 4.0 p.m.—Tea Concert from the "Grossen Saal des Konzerthauses," Stettin.  
 6.0 p.m.—Programme from Voxhaus.  
 7.30 p.m.—Concert of Waltz Songs and Music. 1. (a) Wiener Blut, (b) Schatz—Walzer (Joh. Strauss). 2. Soprano solos, (a) Dorfschwalben Walzer (Jos. Strauss), (b) Il Baccio (Arditi). 3. Tenor Solos, (a) "Lauschige Nacht" from "Die Landstreicher" (Ziehrer), (b) Song from "A Night in Venice" (Joh. Strauss). 4. (a) Opernball—Walzer (Heuberger), (b) Mondnacht auf der Alster (Fetras). 5. Soprano Solos, (a) Olympia's Waltz from "The Tales of Hoffmann" (Offenbach), (b) The Blue Danube (Joh. Strauss). 6. Tenor Solos, (a) Dream Waltz from "Der Feldprediger" (Miljökcker), (b) "Auf dem Maskenball" (Trunk). 7. (a) Immer oder nimmer (Waldteufel), (b) Die letzten Tropfen (Kratzel), followed by News, Weather, Time and Sports Notes.

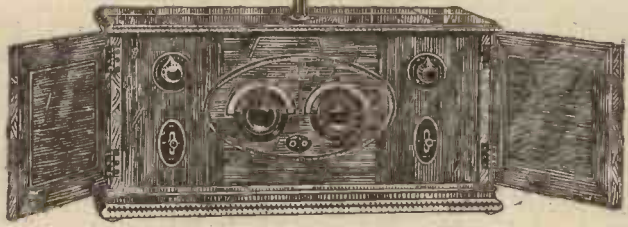
9.30 p.m.—Dance Music from the "Grossen Saal des Konzerthauses," Stettin.  
**STOCKHOLM.** Radiotjänst (SASA). WL. 454.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1315.5 m. (225 kc); Göteborg, 416.7 m. (720 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc).  
 Transmits at intervals from 11.35 a.m.  
 4.30 p.m.—Children's Corner.  
 5.0 p.m.—Talk.  
 5.15 p.m.—Light Music.  
 5.45 p.m.—Talk on Forestry.  
 6.5 p.m.—Light Music.  
 6.20 p.m.—German Lesson.  
 6.50 p.m.—Symphony Concert with Introductory Talk, from the Concert Hall. 1. Historical Pictures—Selection (Sibelius). 2. Selection (Sibelius). 3. Kanteletar (Sibelius). 4. Symphony in D (Sibelius).  
 8.15 p.m.—News and Weather.  
 8.40 p.m.—History Talk.  
 9.0 p.m.—Dance Music.  
 10.15 p.m. (approx.).—Close Down.  
**STUTTGART.** Süddeutscher Rundfunk. WL. 380.7 m. (788 kc); 4 kw. Transmits at intervals from 11.30 a.m.  
 6.15 p.m.—Spanish Lesson.  
 6.45 p.m.—Time and Weather.  
 7.0 p.m.—Schiller Cycle: "The Death of Wallenstein"—Tragedy, News.  
**TOULOUSE.** Radiophonie du Midi. WL. 391 m. (767 kc); 3 kw. Transmits at intervals from 10.15 a.m.  
 12.45 p.m.—Concert. 1. Ki Ka Mo—March (Fiévet). 2. Tatiana—Tango (Rosset). 3. Valse des Balsers (Ganne). 4. Danse des Lutines (Gillet). 5. Selection from "Sapho" (Massenet). 6. Sainte Nitouche—Foxtrot (von Parys). 7. Soir d'été (Fourdrain). 8. Sérénade (Porret). 9. Tout près de la Source (Péne). 10. Selection from "Phi-phi" (Christiné). 11. Appassionato (Filippucci). 12. Les bérêts (Lugini). 13. Chanson de l'aieule (Wachs). 14. Valse (Waldteufel).  
 5.20 p.m.—Sports Talk.  
 8.45 p.m.—Concert. 1. Selections from "Tannhäuser" (Wagner). 2. Programme of Tangos.  
**VIENNA.** Radio-Wien. WL. 578 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Programme relayed by

Graz on 357.1 m. (840 kc), Innsbruck, 294.1 m. (1,020 kc), and Klagenfurt, 272.7 m. (1,100 kc). Transmits at intervals from 10.8 a.m.  
 3.0 p.m.—Orchestral Concert from the Works of Strauss, Wolf, Kollo, etc.  
 4.0 p.m.—Children's Corner.  
 5.0 p.m.—Talk, "The Draining of the Zuyder Zee."  
 5.30 p.m.—Agricultural Talk.  
 6.0 p.m.—Health Talk.  
 6.30 p.m.—Concert. Relayed from the Concert Hall. 1. "Käthen von Hellbronn"—Overture (Pfitzner). 2. Symphony in C minor (Haydn). 3. Symphony No. 6 in A major (Bruckner). Followed by Light Music.  
**WARSAW.** Polskie-Radio. WL. 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 11 a.m.  
 3.0 p.m.—Talk, "The Popular Theatre."  
 3.25 p.m.—News.  
 3.40 p.m.—Answers to Letters.  
 4.20 p.m.—Talk, "Hygiene and Medicine."  
 4.45 p.m.—Programme from Cracow.  
 5.15 p.m.—Concert from Wilno.  
 6.5 p.m.—Agricultural Report.  
 6.15 p.m.—Variety.  
 6.35 p.m.—Agricultural Talk.  
 7.0 p.m.—Talk, "The Great Forests of Kampinos."  
 7.30 p.m.—Concert of Music for Wind Instruments. 1. "Oberon"—Overture (Weber). 2. Fantasia on Themes from "Samson and Delilah" (Saint-Saëns). 3. Dance from "Halka" (Moniuszko). 4. Potpourri of Themes from "Eugene Onegin" (Tchaikovsky). 5. Ballet Music from "The Prophet" (Meyerbeer). In the interval news in French.  
 9.0 p.m.—Time and Aviation Report.  
 9.5 p.m.—News, Police News and Sports Notes.  
 9.30 p.m. (approx.).—Close Down.  
**WILNO.** Radio-Pologne. WL. 435 m. (689 kc); 0.5 kw. Transmits at intervals from 3.40 p.m.  
 4.20 p.m.—Children's Corner.  
 4.45 p.m.—Talk.  
 5.10 p.m.—Military Orchestra.  
 6.0 p.m.—News.  
 6.25 p.m.—Time and Variety.  
 7.30 p.m.—Programme from Warsaw.  
 9.0 p.m.—News.  
 9.15 p.m. (approx.).—Close Down.

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# PROGRAMMES FOR THURSDAY

(March 1)

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

**BARCELONA.** Radio Barcelona (EA-1). W.L. 344.8 m. (870 kc.); 1.5 kw.

Transmits at intervals from 11.0 a.m. to 6.0 p.m.—Market Prices.

6.10 p.m.—Quintet Selections: 1. Pepe Lujan (Fernandez). 2. La Bohème—Selection (Puccini). 3. Catamaroa (Valls). 4. March (Moretes).

6.20 p.m.—Children's Corner.

6.30 p.m.—Reading from "The Adventures of Baron Munchausen."

6.40 p.m.—Talk, "The Streets of Barcelona."

6.50 p.m.—Health Report for the City of Barcelona.

7.00 p.m.—English Lesson.

7.10 p.m.—Chimes and Weather.

7.20 p.m.—Exchange Quotations and News.

7.30 p.m.—Symphony Concert relayed from the "Liceo Theatre." In the Interval, Exchange Closing Prices.

**BERGEN.** Kringkastingselskap. W.L. 370.4 m. (810 kc.); 1.5 kw.

Transmits at intervals from 10.15 a.m. to 5.30 p.m.—Programme for Girls.

7.0 p.m.—The Wireless Orchestra: 1. Scandinavian Folk Melodies (Bernards). 2. Norwegian Rhapsody, No. 1 (Svendsen). 3. Adrienne Lecouvreur (Gilea).

8.0 p.m.—Talk, "Fifteen Years in China."

8.30 p.m.—Hürum Sonata for Violin and Piano-forte.

9.0 p.m.—Weather, News and Time.

9.15 p.m.—English Lesson by Mr. F. L. M. Somerville.

9.30 p.m. (approx.)—Close Down.

**BERLIN.** Koenigswusterhausen. W.L. 1,250 m. (240 kc.); 8 kw.

Transmits at intervals from 1.30 p.m. to 2.35 p.m.—Weather and Exchange.

2.40 p.m.—Talk on "Cooking."

3.0 p.m.—Educational Talk.

3.30 p.m.—Talk, "Art Criticism and Broadcasting."

4.0 p.m.—Programme from Voxhaus.

5.0 p.m.—Talk, "German Scholars Abroad."

5.30 p.m.—Spanish Lesson.

5.55 p.m.—Talk, "Water in Pasture Lands."

6.20 p.m.—Talk, "Woman speaks of Herself."

7.30 p.m.—Programme relayed from Voxhaus on 1,250 m. (240 kc.); and 35 kw.

**BERLIN.** Voxhaus. W.L. 984.6 m. (619 kc.); 4 kw.

Transmits at intervals from 9.10 a.m. to 2.30 p.m.—Talk, "The Public and the Railway Traffic."

3.0 p.m.—Talk, "The Restoration of German Cathedrals."

3.30 p.m.—Recital—"The Child in Poetry."

4.0 p.m.—Concert. 1. Three Scenes for Piano-forte from "Petruschka" (Stravinsky). 2. Contralto Solos: (a) Liebestreu, (b) In stiller Nacht, (c) Sapphische Ode, (d) Von ewiger Liebe (Brahms). 3. Violin Concerto in D major (Paganini).

5.30 p.m.—French Talk on "The Life and Works of Jules Verne."

6.0 p.m.—Publicity Talk.

6.25 p.m.—Talk on "Vulcanism."

6.55 p.m.—Talk on "The Brothers Grimm."

7.30 p.m.—"Ach Wie so Trügerisch"—Play (Presber).

8.0 p.m. (approx.)—Concert. 1. Clarinet Solo, Rigoletto-Fantasia (Bass). 2. "Der Ehemann"—Comedy. 3. "Hochzeitsszenen" (Smetana). 4. "Der Junggeselle"—Farce. 5. Intermezzo from "L'Ami Fritz" (Mascagni).

9.15 p.m. (approx.)—Weather, News, Time and Sports Notes.

9.30 p.m.—Dancing Lesson, followed by Dance Music.

**BERNE.** Radio Berne. W.L. 411 m. (730 kc.); 1.5 kw. Programme relayed by Basle on 1,100 m. (273 kc.) from 6.30 p.m.

Transmits at intervals from 12.00 noon to 3.0 p.m.—Kursaal Orchestra. Talk for Children in the Interval.

6.30 p.m.—Time, Weather and Winter Sports Bulletin.

6.35 p.m.—Art Talk.

7.0 p.m.—Quartet Concert.

8.20 p.m.—Kursaal Orchestra. News and Weather in the Interval.

9.30 p.m. (approx.)—Close Down.

**BRESLAU.** Schlesische Funkstunde. W.L. 322.8 m. (930 kc.); 4 kw. Programme relayed by Gielwitz on 250 m. (1,200 kc).

Transmits at intervals from 10.15 a.m. to 3.30 p.m.—Strauss Concert.

5.0 p.m.—Children's Corner.

5.50 p.m.—Shorthand Lesson,

6.50 p.m.—English Reading from "The Happy Prince" (Wilde).

7.20 p.m.—Symphony Concert. 1. Concerto for Piano-forte and Orchestra (Rachmaninoff). 2. Four Tone Poems (Reger).

9.30 p.m.—Programme from Voxhaus.

10.0 p.m.—Dance Music.

11.0 p.m. (approx.)—Close Down.

**BRUENN.** Komarov. W.L. 443 m. (676.8 kc.); 3 kw.

Transmits at intervals from 11.15 a.m. to 5.20 p.m.—Shorthand Lesson.

6.30 p.m.—Programme from Prague.

**BRUSSELS.** Radio-Belgique. W.L. 508.5 m. (590 kc.); 1.5 kw.

5.0 p.m.—Children's Corner, followed by Colonial Bulletin.

6.0 p.m.—Flemish Lesson.

7.45 p.m.—"Radio Chronique."

8.15 p.m.—Orchestral and Instrumental Concert: 1. Carmen festi-vum (Gilson). "2. The Great Mogul"—Selection (Audran). 3. Talk on "The Belgian Theatre."

4. Mlenka (Blockx). 5. Five Studies for Piano-forte (Chopin). 6. Topical Talk. 7. "Hérodiade"—Ballet (Massenet). 8. Andante and Allegro for Trumpet (Gullaume). 9. Un bon garçon (Yvain). 10. (a) Improptu (Brenda), (b) Rondeau (Jongen). 11. The Sleeping Beauty (Tchaikovsky). 12. Ballet des parfums (Popy).

10.15 p.m.—News.

10.30 p.m. (approx.)—Close Down.

**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc.); 1 kw.

Programme relayed by Kalundborg on 1,153.8 m. (260 kc.).

6.30 a.m.—Exercises.

2.0 p.m.—Concert.

5.30 p.m.—Talk.

6.0 p.m.—News, Exchange and Time.

6.30 p.m.—Political Review for the Month of February.

7.0 p.m.—Danish Concert from the works of Weyse, Ingemann, etc.

8.15 p.m.—News.

8.30 p.m.—Drama (de Musset).

9.0 p.m.—Concert: Folk Music of all lands: 1. Slovakia Song (Maly). 2. Fantasia of Russian Tzigane Melodies (Artemeff). 3. Fantasia of Arabian Melodies (Leopold). 4. Siamese Folk Songs. 5. Fantasia of American National Songs. 6. Two Mexican Dances.

10.0 p.m. (approx.)—Close Down.

**CORK.** Cork Broadcasting Station (6CK). W.L. 400 m. (750 kc.); 1.5 kw.

2.30 p.m.—Weather, Stock Market Prices and Gramophone Selections.

6.15 p.m.—Programme from Dublin.

**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc.); 1.5 kw.

1.30 p.m.—Exchange, Weather and Gramophone Selections.

6.0 p.m.—Gramophone Selections.

6.15 p.m.—Children's Corner.

7.0 p.m.—Gramophone Selections.

7.10 p.m.—News.

7.30 p.m.—French Lesson by Mlle. Giudicelli.

7.45 p.m.—History Talk by S. Mac Cathmhaoili.

8.0 p.m.—Concert Programme by the Station Orchestra, Gladys Mac Nevin (Soprano) and Fay Sargent and Jimmy O'Dea (Entertainers).

9.0 p.m.—Talk, "Irish Place Names," by S. O. Dubhail.

9.15 p.m.—Wither's Dance Band.

10.30 p.m.—News, Weather and Close Down.

**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc.); 4 kw. Programme relayed by Cassel, 252.1 m. (1,190 kc).

Transmits at intervals from 12.30 p.m. to 3.30 p.m.—Concert of Russian Music: 1. The Steppes of Central Asia (Borodin). 2. Nocturne from the Second String Quartet (Borodin). 3. Three Songs: Borodin (a) zum Helmatstrand zurückzukehren, (b) Arabian Melody, (c) Rich and Poor. 4. Im Kloster (Borodin). 5. Kamarinskja—Scherzo (Glinka). 6. Three Songs (Gretschaninov): (a) Bor nür die Steppe, (b) Weide was neigest du den Wipfel, (c) Heimat. 7. In the Crimea—Suite (Mussorgsky): (a) An de Azurküste, (b) Im Dorf, (c) Nahe den äldlichen Ufern. 8. Une nuit sur le mont chauve (Mussorgsky).

4.45 p.m.—Reading.

5.15 p.m.—Wireless Notes and Other Announcements.

5.45 p.m.—Agricultural Talk from Cassel.

6.15 p.m.—Talk, "The Adventures of an Elephant Hunter."

6.45 p.m.—Programme arranged by the Frankfurter Zeitung.

7.15 p.m.—Concert of Contrasts: 1. "Iphigenie in Aulis" (Gluck). 2. (a) Chorus from "Antigone" (Sophocles), (b) Chorus from "The Magic Flute" (Mozart). 3. (a) Basilio's Song from "The Barber of Seville" (Paisiello), (b) Basilio's Song from "The Barber of Seville" (Rossini). 4. (a) Scene from "The Maid of Orleans" (Schiller), (b) Scene from "St. Joan" (Shaw). 5. (a) Fugue from the "Wohltemperierten Klavier" (Bach), (b) Fugue from the Sonata for Piano-forte (Beethoven). 6. (a) Selection from "Nero" (Sueton), (b) Selection from "Lenin" (Marcu). 7. (a) Scene and Air from "Der Freischütz" (Weber), (b) "The Death of Isolde" from "Tristan and Isolde" (Wagner). 8. (a) Two Poems (Günther), (b) Two Poems from "Dafnesliedern" (Holz). 9. (a) Chaconne in F major for Piano-forte (Handel), (b) Third Movement from the Piano-forte Sonata (Strawinsky). 10. (a) Selection from "Wilhelm Meister" (Goethe), (b) Selection from "Manhattan Transfer" (Dos Passos). 11. (a) Selection from "German Dances" (Beethoven), (b) Romantic—English Waltz (Morelle and de Rance).

10.30 p.m.—Programme from Voxhaus.

11.30 p.m. (approx.)—Close Down.

**HAMBURG.** Norag (ha, in Morse). W.L. 396 m. (757 kc.); 4 kw. Programme relayed by Bremen, on 252.1 m. (1,190 kc); Manover, 297 m. (1,009 kc); and Kiel, 256 m. (1,172 kc.).

Transmits at intervals from 5.55 a.m. to 3.15 p.m.—(Hamburg only).—Reading from "Die Reportage Gottes."

4.0 p.m.—(Hamburg and Kiel).—Concert from Café Wallhof.

5.0 p.m.—(Hamburg and Kiel).—Orchestral Music.

6.0 p.m.—Talk, "The Dancing Profession for Women."

6.25 p.m.—Talk, "Diseases of the Teeth and Mouth."

6.55 p.m.—Weather.

7.0 p.m.—Programme from Kiel.

9.0 p.m.—Talk, "Motherhood," followed by News and Cabaret Music.

10.25 p.m.—Ice Report.

10.30 p.m. (approx.)—Close Down.

**HILVERSUM.** Algemeene Nederlandsche Radio-Omroep. W.L. 1069 m. (280.5 kc); 5 kw.

11.40 a.m.—Police News.

12.10 p.m.—Trio Concert.

2.40 p.m.—Programme for Hospitals.

3.40 p.m.—Women's Talk.

4.55 p.m.—Concert. 1. "Joseph"—Overture (Méhul). 2. Selection from "Henry VIII" (Saint-Saëns). 3. Aria from "Samson and Delilah" (Saint-Saëns). 4. Aria from "Die Kreuzfahrer" (Gade). 5. Suite from Peer Gynt, N. 2 (Grieg). 6. Gavotte Caprice (Bortkiewicz). 7. Eternal Love (Brahms). 8. Breit über mein Haupt (Rich. Strauss). 9. Gaeciele (Rich. Strauss). 10. Norwegian Rhapsody (Svendsen). 11. Request items, (a) Spring Voices—Waltz (Joh. Strauss), (b) Volga Song, (c) Serenade on a Red Letter Day (Lincke), (d) Die Wachtparade kommt (Rich. Ellenberg). 12. Finale.

6.40 p.m.—Talk, "Sonata No. 3, Op. 2 for Piano-forte."

6.55 p.m.—English Lesson.

7.25 p.m.—Police News.

8.0 p.m.—Symphony Concert, relayed from the "Concertgebouw," Amsterdam. In the Interval: "Sonata Op. 1, No. 3 for Piano-forte."

10.10 p.m.—Weather and News.

**HUIZEN.** W.L. 340.9 m. (890 kc); 4 kw. (Until 5.40 p.m.). Transmits from 5.40 p.m. on 1,950 m. (154 kc).

12.10 p.m.—Trio Concert.

5.40 p.m.—Educational Talk.

6.40 p.m.—Book-keeping Lesson.

7.10 p.m.—Concert from the "Juliankerk" Church at Veeendaal.

**KATTOWITZ.** Polskie-Radio. W.L. 422 m. (710 kc); 10 kw.

Transmits at intervals from 3.20 p.m. to 6.35 p.m.—Talk.

7.30 p.m.—Chamber Music. 1. String Quartet in D, Op. 2 (Tchaikovsky). 2. String Quartet (Rimsky-Korsakoff).

9.30 p.m.—Concert from the Café Atlantic,

KIEL. Norag. W.L. 256 m. (1,172 kc); 0.7 kw.

3.15 p.m.—Concert of Northern Music: 1. Overture, "Wieland der Schmied" (Henriques). 2. Songs: (a) Schwarze Rosen, (b) Schilfrohr, säusle, (c) Ich wollt, ich wär im Inderland (Sibelius). 3. Petite Suite, Op. 98 a (Sibelius). 4. Songs: (a) Mainacht, (b) Ich hatte einst einen Herzensschatz, (c) Ich trage den Hut, den ich will (Sinding). 5. Aladdin Suite (Nielsen).

7.0 p.m.—"Fuer"—Drama (Hans Ehrke).

**KOVNO.** Radio-Kaunas. W.L. 2,000 m. (150 kc); 15 kw.

4.30 p.m.—Talk, "Our Blind War Heroes."

5.0 p.m.—French Talk.

5.30 p.m.—Temperance Talk.

6.0 p.m.—Time, Weather, News.

6.30 p.m.—Orchestral Concert.

**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc); 25 kw. Programme also relayed by Aix-la-Chapelle, on 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Münster, 241.9 m. (1,240 kc).

Transmits at intervals from 9.30 a.m. to 12.5 p.m.—Concert from Cologne.

1.30 p.m.—Talk.

3.35 p.m.—Topical Talk from Cologne.

4.5 p.m.—Talk, "First Aid in Accidents," from Düsseldorf.

4.30 p.m.—Talk, "Good German," from Cologne.

5.0 p.m.—Concert from Cologne. 1. Sonata in E major for Violin and Piano-forte (Handel). 2. Soprano Solos: (a) Heidenröslein (Kienlen), (b) Holder Blütenmal, (c) On the Wings of Song (Mendelssohn). 3. Piano-forte Solos (Chopin): (a) Nocturne, (b) Scherzo, 4. Violin Solos: (a) Nigger Song and Dance (Scott), (b) Capriccio in B flat major (Paganini-Kreisler). 5. Soprano Solos: (a) Du mein Herzens Krönelein (Strauss), (b) Herzensstausch (Reger), (c) Wald-cinsamkeit (Reger). 6. Sonata for Violin and Piano-forte in E minor (Mozart).

6.10 p.m.—Spanish Lesson from Münster.

6.30 p.m.—Talk on Debussy's "Pelleas and Melisande," from Cologne.

6.50 p.m.—Introductory Talk.

7.0 p.m.—"Pelleas and Melisande"—Musical Play (Debussy), relayed from the Opera House, Cologne, followed by News and Sports Notes, and Concert from the Café Corso, Dortmund.

11.0 p.m. (approx.)—Close Down.

**LEIPZIG.** Mitteldeutscher Rundfunk. W.L. 366.3 m. (819 kc); 4 kw. Programme relayed by Dresden on 275.2 m. (1,090 kc).

Transmits at intervals from 9.0 a.m. to 3.30 p.m.—Concert by the Dresden Station Orchestra.

5.20 p.m.—Taxation Talk.

5.30 p.m.—Advanced Spanish Lesson. Relayed from Koenigswusterhausen.

6.0 p.m.—Weather and Time.

6.5 p.m.—Talk, "Social Politics."

6.30 p.m.—Talk, "Classical French Tragedy."

7.15 p.m.—"Phedre"—Play (Racine) after the Text by Schiller.

9.0 p.m.—Cabaret Concert.

9.5 p.m.—Press and Sports News.

9.30 p.m. (approx.)—Silent Night.

**MADRID.** Union Radio (EAJ7). W.L. 375 m. (800 kc); 1.5 kw.

Transmits at intervals from 11.45 a.m. to 2.0 p.m.—Orchestral and Vocal Concert.

7.0 p.m.—Orchestral Concert. 1. La nina mimada—Selection (Penella). 2. Der Freischütz—Selection (Weber). In the Interval—Talk on "Plastic Art—the Art of Egypt, Chaldea and Persia."

8.0 p.m. (approx.)—Dance Music relayed from the Hotel Ritz.

9.30 p.m.—French Lesson.

10.0 p.m.—Programme relayed by San Sebastian (335 m., 895 kc). Time and Exchange Quotations.

10.10 p.m.—Concert by the Orchestra of the Hotel Nacional. 1. Vito-paso-doble (Lope). 2. A Orillas del Sebau (Sellenit). 3. La del Soto del Parral (Soutullo y Vert). 4. Songs, (a) Cuatrecita (Moris and Oepida), (b) Paut allon (Moris and Oepida). 5. La santa espina (Morera). 6. Las castill-gadores (Alonso). 7. Una noche en Calatayud—Selection (Luna). 8. A clerto rey (Romero). 9. Pandereta (Puche and Vila).

10. "El señor Joaquin"—Selection (Caballero). 11. El barbero de Lavapiés—Selection (Barbieri). 12. Corazon gitano (Domingo).

12.20 a.m. (Friday).—News.

12.30 a.m. (approx.)—Close Down.

**MILAN.** Unione Radiofonica Italiana (1MI). W.L. 541 m. (554 kc); 7 kw.

11.15 a.m.—News.

4.0 p.m.—Exchange Quotations.

4.5 p.m.—Quintet Concert.

4.50 p.m.—Children's Corner.

7.0 p.m.—English Lesson.

7.30 p.m.—Wireless Notes.

7.50 p.m.—"Mignon"—Opera (Thomas).

9.55 p.m.—News and Close Down.

**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc); 4 kw.

Programme relayed by Nuernberg on 303 m. (990 kc); and Augsburg, 560 m. (530 kc).

3.0 p.m.—Trio Selections: 1. Mai-käfers Liebespech (Friedmann). 2. Serenata amorosa (Bece). 3. Liebestraume (Liszt). 4. Stephanie Gavotte (Czibulka). 5. Extase (Ganne). 6. Serenade (Widor). 7. Song Potpourri (Pétrus).

4.30 p.m.—Talk on "Poultry Breeding."

5.30 p.m.—Agricultural Talk.

6.0 p.m.—Talk on "Direr."

6.30 p.m.—Poetry Recital from the Works of Edouard Mörike.



PROGRAMMES FOR THURSDAY—(Cont.)

Brunett (Stenhammer). 2. (a) An die Nachtigall, (b) Die junge Schäferin, (c) Auf dem Wasser, (d) Du bist die Ruh (Schubert). 9.15 p.m.—News and Weather. 9.30 p.m.—Topical Talk. 9.30 p.m. (approx.)—Close Down. PARIS. Eiffel Tower (FL). W.L. 2.650 m. (113 kc); 5 kw. 7.56 a.m.—Time Signal (on 32 m., 9875 kc.). 9.26 a.m.—Time Signal. 5.45 p.m.—Le Journal Parlé. Talks on "The Salon of the Humorist," "Books to Read." 7.10 p.m.—Weather. 7.30 p.m.—Concert. 1. Bass Solos: (a) Aria from "Prince Igor" (Borodin), (b) Aria from "Prince Schalkovity" (Moussorgsky), (c) Souvenir d'un Bal, (d) Sérénade de Don Juan (Tchaikovsky). 2. Violin Solos: (a) Largo (Corti), (b) Danse Espagnole (Granados-Kreisler), (c) Sérénade (Arensky), (d) Rondo (Mozart-Kreisler). 3. Songs: (a) Objet de mon amour (Gluck), (b) La Cloche (Saint-Saëns), (c) Les Adieux de l'Hôtelisse arabe (Bizet), (d) Automne (Fauré). 4. (a) Espana (Albeniz), (b) La Faute de l'Abbé Mouret (Bruneau), (c) Selection from "Salammbo" (Reyer). At 7.56 p.m. Time Signal (on 32 m., 9875 kc.). 8.30 p.m.—Educational Programme. Talks on "Modern Art," "Musical Technique," "The Art of Singing." 10.26 p.m.—Time Signal. PARIS. Petit Parisien. W.L. 340.9 m. (890 kc.); 0.5 kw. 9.0 p.m.—Concert from the Works of Beethoven. 1. "Fidello"—Overture. 2. Kreutzer Sonata—Pianoforte Solo. 3. First Movement from the First Symphony, Op. 24. 4. Quintet for Oboe, Pianoforte, Clarinet, Bassoon and Horn. 5. Adagio from the Septet, Op. 20. 6. Scherzo from the Ninth Symphony, Op. 125. 7. Last Movement from the Sixth Quartet, Op. 135. 8. Turkish March. PARIS. Radio-Paris (CFR). W.L. 1,750 m. (171 kc.); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert of Orchestral Music.

1.50 p.m.—Market Prices. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Talk for Children on "Leap Year," followed by Pianoforte Solos, Variety and Poetry Recital. 4.45 p.m.—Exchange Quotations. 7.0 p.m.—Agricultural Report. 7.45 p.m.—Book-keeping Lesson. 8.0 p.m.—Market Prices. 8.15 p.m.—Esperanto Talk. 8.30 p.m.—Concert. News in the Interval. PITTSBURGH. Westinghouse Electric (KDKA). W.L. 315.6 m. (950 kc); 50 kw. Transmits at intervals from 2.15 p.m. 11.0 p.m.—Time. 11.10 p.m.—Yellow Cab Theatrical Calendar. 11.15 p.m.—Symphony Concert, relayed from the William Penn Hotel. 12.0 (midnight)—Time. 12.30 a.m. (Friday)—Variety Programme. 1.0 a.m.—Programme relayed from WJZ, New York, "Retold Tales." 1.30 a.m.—"American Plano Company Ampico Hour." 2.0 a.m.—"Maxwell Hour." 3.0 a.m.—Time and Weather. 3.15 a.m. (approx.)—Close Down. PRAGUE. Strasnice. W.L. 348.9 m. (860 kc); 5 kw. Transmits from 10.0 a.m. 12.35 p.m.—Market Prices. 3.10 p.m.—Children's Corner. 3.20 p.m.—Market Prices. 3.30 p.m.—Dance Music. 4.30 p.m.—Talk on Trade and Industry. 4.50 p.m.—German Transmission. 5.15 p.m.—Agricultural Report. 5.25 p.m.—Talk. 5.35 p.m.—Talk. 5.45 p.m.—French Lesson. 6.30 p.m.—Concert from the Works of Dvorak and Tchaikovsky. 8.45 p.m.—Relay of Foreign Stations. 9.0 p.m.—Time and News. 9.15 p.m. (approx.)—Close Down. ROME. Unione Radiofonica Italiana (IRO). W.L. 451 m. (665 kc); 3 kw. Transmits at intervals from 11.30 a.m. 7.0 p.m.—French Lesson. 7.40 p.m.—"La Poupee"—Opera

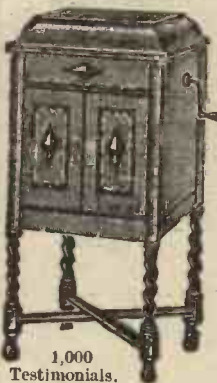
(Audran). In the interval: Topical Review. 9.40 p.m.—News. 9.50 p.m.—Dance Music. 10.15 p.m. (approx.)—Close Down. SCHENECTADY, N.Y. General Electric Company (WGY). W.L. 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAD on 21.96 m. (13,661 kc), from 8 p.m.—9 p.m. and by 2XAD on 32.77 m. (9,155 kc), from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News. 11.30 p.m.—Dinner Music from the Hotel Kenmore, Albany, N.Y. 12.30 a.m. (Friday)—Studio Programme. 1.0 a.m.—3.0 a.m.—Programme from New York. 1.0 a.m.—Dodge Programme. 1.30 a.m.—The Hoover Sentinels. 2.0 a.m.—Time and the Clicquot Club Eskimos. 3.0 a.m.—Carborundum Band, relayed from Niagara Falls, N.Y. 4.0 a.m.—Dance Music from New York. 4.30 a.m.—Organ Recital from the Strand Theatre, Albany, N.Y. 5.30 a.m. (approx.)—Close Down. STAMBOUL. Radio-Stamb ul. W.L. 1180 m. (154 kc); 5 kw. 3.0 p.m.—Orchestral Concert. 3.50 p.m.—Dance Music. 5.0 p.m.—Concert of Turkish Music. 7.0 p.m.—Exchange Quotations and Market Prices of Wheat. 7.30 p.m.—Tzigane Music. 7.50 p.m.—Weather and Time. 8.0 p.m.—Dance Music. 8.30 p.m.—News by the "Agence Anatolie." 8.45 p.m. (approx.)—Close Down. STOCKHOLM. Radiotjänst (SASA). W.L. 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1,315.5 m. (228 kc); Göteborg, 416.7 m. (720 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc). Transmits at intervals from 11.35 a.m. 4.45 p.m.—Studio Service. 5.15 p.m.—Children's Corner. 5.45 p.m.—Agricultural Talk. 6.5 p.m.—Recitation. 6.25 p.m.—Talk, "The Social System of the Middle Ages." 6.45 p.m.—Concert. 1. Suite for Flute and Strings (Bach). 2. Five German Dances (Schubert). 3. Five Melodies (Juon).

7.45 p.m.—Biology Talk. 8.15 p.m.—News and Weather. 8.40 p.m.—French Recital. 9.0 p.m. (approx.)—Close Down. STUTTGART. Süddeutscher Rundfunk. W.L. 330.7 m. (788 kc); 4 kw. Transmits at intervals from 11.30 a.m. 5.15 p.m.—Talk, "Wireless Photography and the Problems of Television." Relayed from Freiburg, 573.6 m. (523 kc). 5.45 p.m.—Talk, "The Hair." 6.15 p.m.—Chess Lesson. 7.15 p.m.—Programme from Frankfurt. 9.30 p.m.—Programme from Voxhaus. 11.15 p.m. (approx.)—Close Down. TOULOUSE. Radiophonie du Midi. W.L. 391 m. (767 kc); 3 kw. Transmits at intervals from 10.15 a.m. 12.45 p.m.—Concert. 1. "La Marjolaine"—Overture (Lecocq). 2. Valse (de Sylva). 3. Amor criollo—Tango (Sentis). 4. Ukrainka (Kaufmann). 5. Selection from "If I Were King" (Adam). 6. La Chanson du Bambino (Richepin). 7. I Wonder—Foxtrot. 8. Tu Terrica—Jota (Huguet). 9. La Petite Pagode (Siede). 10. Selection from "Rose Marie" (Friml). 11. Heimlich Tanz (Lincke). 12. Valse (Ziehrer). 13. Sérénade sentimentale (Mezzacapo). 14. Barcelona—One-step (Evans). 5.20 p.m.—Science Talk. 8.45 p.m.—Opera Relay from the Capitol Theatre. VIENNA. Radio-Wien. W.L. 576 and 517.2 m. (520 and 580 kc). 0.75 and 5 kw. Programme relayed by Graz on 357.1 m. (840 kc); Innsbruck, 294.1 m. (1,020 kc); and Klagenfurt, 272.7 m. (1,100 kc). Transmits at intervals from 10 a.m. 3.15 p.m.—Orchestral Concert from the Works of Fall, Mozart, Tchaikovsky, etc. 4.40 p.m.—Theatre Talk. 4.45 p.m.—Talk on "Arlberg." 5.0 p.m.—Agricultural Talk. 5.30 p.m.—Sports Talk. 5.45 p.m.—Talk in Esperanto. 6.0 p.m.—French Lesson. 6.30 p.m.—Programme Announcements. 6.40 p.m.—Violin Recital. 1. Violin Concerto in E major (Bach).

2. Violin Concerto in F Major (Wladigeroff). 7.40 p.m.—Concert. 1. Light Cavalry"—Overture (Suppe). 2. Idyllen Waltz (Strauss). 3. Potpourri of Opera Airs (Tobani). 4. Selection from "Caucasian Sketches" (Ippolitov-Ivanov). 5. Vocal Potpourri of Hungarian Songs (Tanber). 6. Suppé Fantasia (Lhote). 7. Potpourri of Humorous Songs (Geriger). WARSAW. Polskie-Radio. W.L. 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 11 a.m. 3.25 p.m.—Programme for Boy Scouts. 3.40 p.m.—Programme for Women. 4.20 p.m.—Review of Books. 4.45 p.m.—Programme from Wilno. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.35 p.m.—Elementary English Lesson. 7.30 p.m.—Concert from Wilno. In the interval News in French. 9.0 p.m.—Time and Aviation Report. 9.5 p.m.—News, Police News and Sports Notes. 9.30 p.m.—Dance Music. 10.30 p.m. (approx.)—Dance Music. WILNO. Radio-Pologne. W.L. 435 m. (689 kc); 0.5 kw. Transmits at intervals from 3.40 p.m. 4.20 p.m.—Programme from Warsaw. 4.45 p.m.—Literary Programme. 6.0 p.m.—News. 6.25 p.m.—Time and Variety. 6.35 p.m.—Talk. 7.30 p.m.—Concert. ZAGREB. Radioklub-Zagreb. W.L. 310 m. (967 kc.); 0.35 kw. Transmits at intervals from 12.15 p.m. 4.0 p.m.—Concert. 5.45 p.m.—Talk, "Tuberculosis." 6.15 p.m.—Announcements. 6.30 p.m.—Programme from Prague, followed by News. ZURICH. Radio-Genossenschaft. W.L. 588.2 m. (510 kc.); 2 kw. Transmits at intervals from 11.30 a.m. 6.32 p.m.—Talk, "Preliminary Art Training for the Child." 7.0 p.m.—Vocal and Instrumental Concert. 7.30 p.m.—Song Recital. 8.20 p.m.—Dance Music from Operetta. 9.0 p.m.—News and Weather. 9.15 p.m. (approx.)—Close Down.

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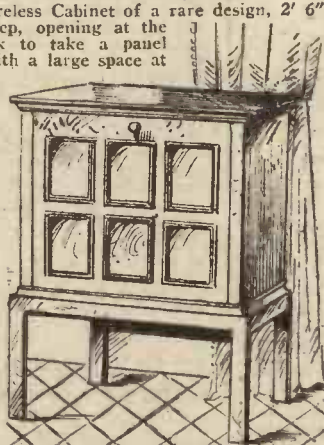
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# PROGRAMMES FOR FRIDAY

(March 2)

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

**BARCELONA.** Radio Barcelona (EAJJ). W.L. 344.8 m. (870 kc); 1.5 kw.  
Transmits at intervals from 11.0 a.m.  
2.30 p.m.—Elementary Music Lesson.  
3.0 p.m.—Chimes and Weather.  
9.5 p.m.—Exchange Quotations and News.  
9.10 p.m.—Quintet Selections. 1. Rheingruss—March (Siede). 2. Spring Song (Mendelssohn).  
9.25 p.m.—Programme of Jotas.  
9.35 p.m.—Selections by Rodolfo Kolb.  
9.45 p.m.—Literary Programme.  
10.0 p.m.—Exchange Closing Prices.  
10.5 p.m.—Second Lent Concert. 1. Salve regina (Perez Moya). 2. Magdalena (Ribo). 3. Pregaria a Jesus (Millet). 4. O Sacrum Convivium (Viadana). 5. La Resignacion (Millet). 6. Intra de la Dominica XVIII—Gregorian Melody. 7. Velum Temple (Palestrina).  
11.0 p.m. (approx.)—Close Down.  
**BASLE.** Basler Radio-Genossenschaft. W.L. 1,100 m. (273 kc); 0.25 kw.  
6.30 p.m.—Time and Weather.  
6.35 p.m.—Reading from the Works of Brentano, Eichendorff, Novalis and Hölderlin.  
7.0 p.m.—Concert of Viennese Music. Soprano and Piano-forte Solos.  
3.20 p.m.—Programme from Berne.  
**BERGEN.** Kringkastingselskap. W.L. 370.4 m. (810 kc.); 1.5 kw.  
Transmits at intervals from 10.15 a.m.  
7.0 p.m.—The Wireless Orchestra.  
7.30 p.m.—Recitation.  
8.0 p.m.—The Wireless Orchestra.  
8.30 p.m.—Talk, "Meteorology."  
9.0 p.m.—Weather, News and Time.  
9.15 p.m.—English Lesson by Mr. F. L. M. Somerville.  
9.30 p.m. (approx.)—Close Down.  
**BERLIN.** Koenigswusterhausen. W.L. 1,250 m. (240 kc.); 8 kw.  
Transmits at intervals from 1.30 p.m.  
2.35 p.m.—Weather and Exchange.  
3.0 p.m.—Talk, "Master and Pupil."  
3.30 p.m.—Talk, "Art Criticism and Broadcasting."  
4.0 p.m.—Programme from Leipzig.  
5.0 p.m.—Talk, "The Training of an Operatic Prima Donna."  
5.30 p.m.—English Lesson.  
5.55 p.m.—Economics Talk.  
6.20 p.m.—Talk for Physicians.  
The following programme relayed on 1,250 m. (240 kc) and 35 kw.  
7.0 p.m.—Programme from Breslau.  
9.30 p.m.—Programme from Voxhaus.  
**BERLIN.** (Voxhaus). W.L. 484.6 m. (619 kc); 4 kw.  
Transmits at intervals from 9.10 a.m.  
2.30 p.m.—Talk, "The Berlin Woman of the 19th Century."  
3.0 p.m.—Talk, "The Construction of the Operas of Mozart."  
3.30 p.m.—Orchestral Concert.  
5.30 p.m.—Talk on the Opera "La Sonnambula."  
6.0 p.m.—Italian Lesson.  
6.25 p.m.—Talk, "The Weather in Poetry, Myth and Life."  
6.55 p.m.—Talk, "How a Law is Made."  
7.30 p.m.—Reading "Das Ochsenfurter Männerquartett" (Frank).  
8.0 p.m.—Concert of Modern Music. 1. Quartet Op. 22 (Hindemith). 2. Quartet Op. 7 (Bartok).  
9.15 p.m. (approx.)—Weather, News, Time and Sports Notes.  
9.30 p.m.—Pastoral Concert. 1. Bastien and Bastienne—Overture (Mozart). 2. Soprano Solos, (a) Aria from "Bastien and Bastienne," (b) Wenn du mich liebst (Pergolesi). 3. Orchestra, (a) Faun and Nymph (Königsberger), (b) Shepherds' Play (Hermann). 4. Soprano Solos, (a) Daphnis and Thyrsis (Bac), (b) The Young Shepherdess (Schubert). 5. Orchestra, (a) Der verliebte Schäfer (Gellert), (b) Liebesfreud (Kreisler). 6. Soprano Solo, The Song of the Little Shepherdess (Winter-Watts). 7. Pastorale (Bizet).  
10.30 p.m. (approx.)—Close Down.  
**BERNE.** Radio-Berne. W.L. 411 m. (730 kc); 1.5 kw.  
Transmits at intervals from 12 noon.  
3.0 p.m.—Kursaal Orchestra.  
3.30 p.m.—Talk on "Cookery."  
4.0 p.m.—Kursaal Orchestra.  
6.30 p.m.—Time, Weather and Winter Sports Bulletin.  
6.35 p.m.—Music Talk.  
7.0 p.m.—Programme from Basle.  
7.30 p.m.—Kursaal Orchestra.  
8.0 p.m.—Programme from Geneva.  
8.30 p.m.—Kursaal Orchestra, News and Weather in the interval.  
9.30 p.m. (approx.)—Close Down.

**BREMEN.** Norag. W.L. 252.1 m. (1,190 kc); 0.7 kw.  
8.0 p.m.—Concert of Folk Songs: 1. The Bremen Folk Chorus: (a) Innsbruck, ich muss dich lassen, (b) In Strassburg auf der Schanz, (c) Lieblich hat sich gesellet, (d) Schön Rottraut (Schumann). 2. Heimatsklänge—a Tone Picture (Krome). 3. The Bremen Folk Chorus: (a) Sandmännchen, (b) Drunten im Unterland, (c) Mei Schätzle is fein, (d) Alleweil kann man nit lustig sein, (e) Die bayerischen Maide.  
**BRESLAU.** Schlesische Funkstunde. W.L. 322.6 m. (930 kc); 4 kw.  
Programme relayed by Gleiwitz on 250 m. (1200 kc).  
Transmits at intervals from 10.15 a.m.  
3.30 p.m.—Orchestral Concert from the Works of Millöcker, Smetana, Komzak, etc.  
5.0 p.m.—Talk for Women.  
5.50 p.m.—Poetry Recital.  
6.40 p.m.—Talk on "Upper Silesia" from Gleiwitz.  
7.20 p.m.—"Wettlauf"—Tragedy (Lehnard). Followed by Esperanto Talk.  
**BRUENN.** Komarov. W.L. 443 m. (676.8 kc); 3 kw.  
Transmits at intervals from 11.15 a.m.  
5.0 p.m.—Time, and German Transmission.  
5.25 p.m.—Talk.  
5.50 p.m.—Programme from Prague.  
**BRUSSELS.** Radio Belgique. W.L. 508.5 m. (590 kc.); 1.5 kw.  
5.0 p.m.—Concert by the Station Trio.  
5.55 p.m.—Colonial Bulletin—in Flemish.  
7.45 p.m.—Radio Chronique.  
8.15 p.m.—"Aida," Opera (Selection) (Verdi). In the Interval—Topical Talk, and Theatre Talk and Review.  
10.15 p.m.—News.  
10.30 p.m. (approx.)—Close Down.  
**BUDAPEST.** Magyar Radio Ujsag. W.L. 555.6 m. (540 kc); 3 kw.  
Transmits at intervals from 8.0 a.m.  
5.45 p.m.—Literary Talk.  
6.30 p.m.—Cabaret Concert.  
8.0 p.m.—Time and News, followed by Tzigane Music.  
**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc); 1 kw.  
Programme relayed by Kalundborg on 1153.8 m. (260 kc).  
6.30 a.m.—Exercises.  
2.0 p.m.—Concert.  
4.0 p.m.—Children's Corner.  
5.0 p.m.—Chimes.  
5.30 p.m.—Talk, "Experts."  
6.0 p.m.—News, Exchange and Time.  
6.16 p.m.—Talk relayed from the Copenhagen University.  
7.0 p.m.—Concert of New Operatic Music. 1. March from "Polenblut" (Nedbal). 2. Waltz from "The Merry Peasant" (Fall). 3. Selection from "Eva" (Lehár). 4. Entr'acte from "The Chocolate Soldier" (O. Strauss). 5. Waltz from "Die ideale Gattin" (Lehár). 6. Waltz from "Countess Mariza" (Kalmán). 7. Selection from "Vilflmer" (Kollo). 8. Bulgarian March from "The Chocolate Soldier" (O. Strauss).  
8.0 p.m.—News.  
8.15 p.m.—Reading.  
9.0 p.m.—Recital of New Danish Songs.  
9.30 p.m. (approx.)—Close Down.  
**CORK.** Cork Broadcasting Station (6CK). W.L. 400 m. (750 kc); 1.5 kw.  
2.30 p.m.—Weather, Stock Market Prices and Gramophone Selections.  
6.15 p.m.—Programme from Dublin.  
**CRACOW.** Polskie-Radio. W.L. 566 n. (530 kc); 1.5 kw.  
Transmits at intervals from 11 a.m.  
3.40 p.m.—Talk, "The Formation of the Baltic."  
4.20 p.m.—Talk, "Weaving Mills."  
4.45 p.m.—Programme from Warsaw.  
6.5 p.m.—Agricultural Report.  
6.15 p.m.—Variety.  
6.35 p.m.—Talk, "A Review of Broadcasting."  
7.0 p.m.—"Hejnal Air" and Sports Notes.  
7.15 p.m.—Programme from Warsaw.  
**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc); 1.5 kw.  
1.30 p.m.—Exchange, Weather and Gramophone Selections.  
6.0 p.m.—Gramophone Selections.  
6.15 p.m.—Children's Corner.  
7.0 p.m.—Gramophone Selections.  
7.20 p.m.—News.  
7.30 p.m.—Talk on Gardeulug by G. O. Sherrard.

7.45 p.m.—Italian Lesson.  
8.0 p.m.—Welsh Programme by W. S. Gwynn Williams and selected artists.  
9.30 p.m.—The Station Orchestra.  
9.40 p.m.—H. R. White and Male Chorus.  
10.20 p.m.—The Station Orchestra.  
10.30 p.m.—News, Weather and Close Down.  
**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc); 4 kw.  
Programme relayed by Cassel 252.1 m. (1,190 kc).  
Transmits at intervals from 12.0 noon.  
6.0 p.m.—Talk, "German Intellectual Life in the first half of the Nineteenth Century."  
6.50 p.m.—Film Notes.  
7.0 p.m.—Programme from Stuttgart, followed by Concert of new Flemish Compositions, from Cassel: 1. "Charlotte Corday"—Overture (Benoit). 2. Poems (Guido Gezelle and Poi de Mont). 3. Sterbender Wald—for contralto, and piano-forte (Duvosel). 4. Suite in Old Style (Jan Block). 5. "Stories from Flanders" (Cyril Buyse). 6. Three Songs, Op. 16 (Edgar Tinel): (a) Gondelied; (b) Traht sua; (c) Tränen. 7. Selection from works of Felix Timmermanns. 8. Rubens March (Benoit). Late Concert from Cassel.  
**HAMBURG.** Norag (ha, in Morse). W.L. 396 m. (757 kc); 4 kw.  
Programme relayed by Bremen, on 252.1 m. (1,190 kc); Hanover, 297 m. (1,009 kc); and Kiel, 256 m. (1,172 kc).  
Transmits at intervals from 5.55 a.m.  
3.15 p.m. (Hamburg, Bremen and Kiel)—Concert by the Rathic Quartet.  
4.0 p.m.—Talk, "The North and Baltic Seas as the Home of the Germanic Race."  
4.20 p.m.—Talk, "Young Germany."  
4.40 p.m.—Talk, "Daily Gymnastics."  
5.0 p.m. (Hamburg and Kiel)—Orchestral Music.  
5.30 p.m.—Advanced English Lesson from Koenigswusterhausen.  
6.0 p.m. (Hamburg and Kiel)—Concert.  
6.25 p.m.—Talk, "Fruit Growing."  
6.55 p.m.—Weather.  
7.0 p.m.—"Till Eulenspiegel und der Burgermeister von Schilda"—Farce (Dr. Ernst Wachler).  
8.0 p.m. (Hamburg, Hanover and Kiel)—Concert of Folk Songs: 1. Mein Schatz ist in die Welt hinaus. 2. Entfieh nit mir (Mendelssohn). 3. In der Marienkirche (Loewe). 4. Kein Freud ohn' dich (Regnart). 5. Hans and Gretel. 6. Selections for Small Choir. 7. Selections for Large Choir.  
9.0 p.m. (approx.)—Topical Talk and News and Cabaret Music.  
10.25 p.m. (Hamburg, Bremen and Kiel)—Ice Report.  
10.30 p.m. (approx.)—Close Down.  
**HANOVER.** Norag. W.L. 297 m. (1,009 kc); 0.7 kw.  
3.15 p.m.—Concert. 1. Serenade in F major, Op. 3 V (Haydn). 2. Songs: (a) Abendlied (Schulz), (b) Wiegeliend (Mozart), (c) An den Sonnenschein (Schumann), (d) Wenn ich früh in den Garten geh (Schumann). 3. Dedication, Op. 25 I (Schumann). 4. Songs: (a) Trennung (Marschner), (b) Lieber Schatz sel wieder gut (Franz), (c) Der treue Johnie (Beethoven), (d) Feinsliebchen (Brahms). 5. Murrelndes Lüftchen Op. 21 IV. (Jensen).  
5.0 p.m.—Orchestral Music.  
**HILVERSUM.** Algemeene Vereeniging Radio Omroep. W.L. 1069 m. (280.5 kc); 5 kw.  
11.0 a.m.—Police News.  
12.10 p.m.—Trio Concert.  
5.10 p.m.—Concert: 1. "Fra Diavolo"—Overture (Weber). 2. Two Old French Dances. 3. Soprano Solos, (a) November (Tremisnot), (b) Little Roses (Cesek). 4. Selection from "Turandot" (Puccini). 5. Soprano Solos, (a) Vlinderdie (Appeldoorn), (b) Schermerhiedje (Appeldoorn). 6. Valse lente (Merikante). 7. Le reveil du Lion (Kontski). 8. Potpourri on the Works of Lortzing (arr. Urbach). 9. Morgenblätter—Waltz (Joh. Strauss). 10. Nlnna nanna—Valse Strauss (de Michell). 11. Hoppla wir tanzen (Geisler). 12. Finale.  
5.55 p.m.—Talk.  
7.25 p.m.—Police News.  
7.45 p.m.—Talk, "Inland Navigation"

8.15 p.m.—Chamber Music. Quartet in D Major, Op. 64, No. 5 (Haydn).  
8.40 p.m.—Talk.  
9.10 p.m.—Chamber Music (continued): Quartet, Op. 59, No. 1 (Beethoven).  
10.10 p.m.—Weather and News.  
10.20 p.m.—How to Dance the Yale Blues."  
10.55 p.m.—Close Down.  
**HUIZEN.** W.L. 340.9 m. (880 kc); 4 kw. (Until 5.40 p.m.). Transmits from 5.40 p.m. on 1,950 m. (154 kc).  
12.10 p.m.—Time, and Trio Concert.  
2.40 p.m.—Programme for Women from Utrecht.  
3.40 p.m.—Gramophone Concert.  
4.55 p.m.—Piano-forte Recital from the Works of Rachmaninoff.  
6.25 p.m.—Talk on Sociology, from the Seminary at Warmout.  
7.10 p.m.—Programme arranged by the Liberal Protestant Association.  
**KATOWITZ.** Polskie-Radio. W.L. 422 m. (710 kc.); 10 kw.  
Transmits at intervals from 3.20 p.m.  
4.45 p.m.—Quartet Concert of Eighteenth and Nineteenth Century Music.  
5.55 p.m.—News and Announcements.  
6.30 p.m.—Talk on "Major-General Baden-Powell."  
6.55 p.m.—Talk on "The History of Music."  
7.15 p.m.—Programme from Warsaw.  
9.0 p.m.—Time and News.  
9.15 p.m. (approx.)—Close Down.  
**KOENIGSBERG.** Ostmarken Rundfunk. W.L. 330.3 m. (908 kc.); 1 kw. Programme relayed by Danzig on 272.7 m. (1,100 kc).  
Transmits at intervals from 10.0 a.m.  
6.0 p.m.—Talk, "Life in New York."  
6.30 p.m.—Spanish Lesson.  
7.5 p.m.—Talk, "The Impressions of a Philistine." (Koenigsberg only).  
7.5 p.m.—"Die Letzten Masken"—Play (Schnitzler) and "Literature"—Play (Schnitzler). (Danzig only).  
8.0 p.m.—Concert of Old Viennese Music, followed by News.  
9.10 p.m.—Dancing Instruction.  
9.30 p.m.—Programme from Berlin.  
**KOVNO.** Radio-Kaunas. W.L. 2,000 m. (150 kc); 15 kw.  
5.0 p.m.—Talk, "The Mind and Tuberculosis."  
5.30 p.m.—English Talk.  
6.0 p.m.—Time, Weather and News.  
6.30 p.m.—Relay from the National Theatre.  
**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc); 25 kw. Programme also relayed by Aix-la-Chapelle on 401 m. (748 kc); Cologne, 233 m. (1060 kc); and Muenster, 241.9 m. (1,240 kc).  
Transmits at intervals from 9.30 a.m.  
12.5 p.m.—Concert from Eibelfeld.  
1.30 p.m.—Talk.  
2.40 p.m.—Talk, "Academic Careers—for Women" from Cologne.  
3.10 p.m.—Review of Books for Langenberg, Cologne and Aix.  
3.40 p.m.—Review of Books for Muenster.  
3.45 p.m.—Topical Talk from Cologne.  
3.55 p.m.—Recital from the Works of Eduard Mörike. Poems, Songs and a Reading, from Cologne.  
4.35 p.m.—Talk for Young People, from Cologne.  
5.0 p.m.—Concert from the Works of Hugo Kaun, from Cologne. 1. Märkische Suite. 2. Song Scene for Cello and Orchestra.  
6.15 p.m.—Talk on Gustav Mahler's "Eighth Symphony" from Cologne.  
6.40 p.m.—Commerce Talk from Cologne.  
7.5 p.m.—Introductory Talk to the Following Transmission.  
7.15 p.m.—"Tantris the Fool"—Drama (Hardt), from Cologne. Followed by News, Sports Notes, Concert and Dance Music.  
11.0 p.m. (approx.)—Close Down.  
**LEIPZIG.** Mitteldeutscher Rundfunk. W.L. 366.3 m. (819 kc); 4 kw. Programme relayed by Dresden on 275.2 m. (1090 kc).  
Transmits at intervals from 9.0 a.m.  
3.30 p.m.—Concert of Music from German Opera.  
5.5 p.m.—Review of Books.  
5.30 p.m.—Advanced English Lesson. Relayed from Koenigswusterhausen.  
6.0 p.m.—Talk on "The Leipzig Spring Fair."  
6.30 p.m.—Talk, "Frederick the Great."  
7.0 p.m.—Weather and Time,

7.15 p.m.—Concert of Romantic Music: 1. Oberon—Overture (Weber). 2. Violin Concerto in E Minor, Op. 64 (Mendelssohn). 3. Spring Symphony in B Flat Major, Op. 38 (Schumann).  
9.15 p.m. (approx.)—Press and Sports News, followed by relays from the Leipzig Wireless Ball, Dancing Madras, and Dance Music.  
**MADRID.** Union Radio (EAJ7). W.L. 375 m. (800 kc); 1.5 kw.  
Transmits at intervals from 11.45 a.m.  
2.0 p.m.—Orchestral and Vocal Concert.  
7.0 p.m.—Concert of Chamber Music. 1. Trio for Flute (Debussy). 2. Songs: (a) Si tu m'aimes (Pergolesi), (b) J'ai pardonne (Schumann). (c) Larmes (Février). 3. Sonata Trio in C minor, for flute, violin and piano-forte (Bach). 4. Oberon-Cavatime and Arias (Weber).  
9.30 p.m.—English Lesson.  
10.0 p.m.—Time and Exchange Closing Prices.  
10.10 p.m.—Orchestral and Vocal Concert. 1. Sextet Selection. 2. Soprano Songs: (a) Lakmé—Aria (Delibes), (b) English Song (D'Hardelt), (c) El amor (Pavloff). 3. Bandurria and Guitar Selections: (a) Valse, No. 2 (Chopin), (b) Polonaise from the "Suite in D" (Bach). 4. Indian Song (Rimsky-Korsakoff). 5. Soprano Song: (a) El cementerio (Hahn), (b) The Soldier's Wife (Rachmaninoff), (c) "Manon"—Aria (Massenet). 6. Bandurria and Guitar Solos: (a) Serenade (Malats), (b) "Granada and Cuba" (Albeniz), (c) Zapatoero (Sarasate). In the interval: Talk on "Influenza." News. Dance Music. Relayed from the "Alcazar."  
12.30 a.m. (Saturday, approx.)—Close Down.  
**MILAN.** Unione Radiofonica Italiana (IMI). W.L. 541 m. (554 kc); 7 kw.  
7.0 p.m.—German Lesson.  
7.50 p.m.—Symphony Concert: 1. "The Marriage of Figaro" (Mozart). 2. Second Symphony (Beethoven). 3. Literary Talk. 4. "Mary Magdalene"—Three Dances (Pedrollo). 5. "Redemption" (Frank). 6. Madame Butterfly (Puccini). 7. "I Lithuani"—Selections (Ponchielli).  
9.55 p.m.—News.  
10.0 p.m.—Dance Music. Relayed from the "Fiaschetta Toscana."  
10.30 p.m. (approx.)—Close Down.  
**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc.); 4 kw. Programme relayed by Nuernberg on 303 m. (990 kc.) and Augsburg, 566 m. (530 kc).  
Transmits at intervals from 10.20 a.m.  
3.0 p.m.—Orchestral Concert: 1. "The Water Carrier"—Overture (Cherubini). 2. Selection from "The Mikado" (Sullivan). 3. Am Bache (Grützacher). 4. Scherzo Tarantelle—Violin Solo (Wienlawsky). 5. Grillenbann (Smetak). 6. Wiener Spaziergänge—Potpourri (Komzak).  
4.5 p.m.—Frankish Legends and Stories from Nuernberg.  
5.15 p.m.—Mandoline Concert: 1. Per Aspera ad Astra March (Urbach). 2. Intermezzo from "Cavalleria Rusticana" (Mascagni). 3. Serenade (Granzow). 4. Ricordi di Alla March (Sartori). 5. Waltz (Wormsbacher). 6. A Fairy Tale—Tone Picture (Smetak). 7. Erzhzog Albrecht March (Komzak). 8. An der Weser (Pressel).  
6.15 p.m.—Sports Talk.  
6.30 p.m.—English Talk.  
7.0 p.m.—"Euryanthe"—Opera (Weber).  
9.15 p.m.—Wireless News.  
9.25 p.m.—News and Winter Sports Bulletin.  
9.30 p.m. (approx.)—Close Down.  
**NAPLES.** Unione Radiofonica Italiana (INA). W.L. 407 m. (737 kc); 1.5 kw.  
Transmits at intervals from 12.0 noon.  
7.20 p.m.—Wireless News.  
7.30 p.m.—News.  
7.48 p.m.—Harbour Notes.  
7.50 p.m.—"Lucrecia Borgia"—Opera (Donizetti).  
9.55 p.m.—Calendar.  
10.0 p.m. (approx.)—Close Down.  
**OSLO.** Kringkastingselskapet. W.L. 461.5 m. (650 kc.); 1.5 kw. Programme relayed by Hamar on 566 m. (530 kc.); Porsgrund, 524 m. (572 kc.); Fredrikstad 434.8 m. (690 kc.); Notodden 423 m. (709 kc.); and Rjukan 448 m. (670 kc).  
CONTINUED ON NEXT PAGE.

PROGRAMMES FOR FRIDAY—(Cont.)

Transmits at intervals from 9.0 a.m. 4.30 p.m.—Dance Music. 5.40 p.m.—French Lesson. 6.15 p.m.—English Lesson. 7.0 p.m.—Time. 7.2 p.m.—Orchestral Concert: 1. Symphony No. 1 in D minor, Op. 21 (Sinding). 2. Concerto for Piano No. 1 in A major (Cleve). 3. Lyric Suite (Grieg). 8.30 p.m.—Programme from Bergen. 9.0 p.m.—News and Weather. 9.15 p.m.—Topical Talk. 9.30 p.m. (approx.)—Close Down. PARIS. Eiffel Tower (FL). WL, 2.650 m. (113 kc); 5 kw. 7.56 a.m.—Time Signal (on 32 m. 9375 kc). 9.28 a.m.—Time Signal. 9.45 p.m.—Le Journal Parlé. Talks on "The Music Hall," "The Looking-glass of Modern Life," "Science." 7.10 p.m.—Weather. 7.30 p.m.—Concert. 1. Pianoforte Solos, (a) Sonata (Schumann), (b) Gavotte (Rameau), (c) Le Voyageur. 2. Songs for Mezzo-Soprano, (a) The Song of the Fisherman, (b) Lament (Faure), (c) Three Songs to Words by Paul Fort. 3. Soir de Fêtes à Havane (Filippucci). 4. Marche Bohémienne (Filippucci). At 7.56 p.m. Time Signal (on 32 m. 9375 kc). 8.30 p.m.—Educational Programme. Talks on "Latin Without Tears," "Writers of To-day," "Eighteenth Century Romance Writers." 10.26 p.m.—Time Signal. PARIS. Petit Parisien. WL 340.9 m. (880 kc); 0.5 kw. 8.0 p.m.—Dance Music. 9.0 p.m. (approx.)—Close Down. PARIS. Radio-Paris (CFR). WL 1750 m. (171 kc); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert: 1. Mary Lou (Wood). 2. Honolulu Moon (Wood). 3. "Rosamunde"—Overture (Schubert). 4. D'Espagne (Badenes). 5. Sereneta Discrota (Deleau). 6. Songs, (a) "Richard Coeur de Lion"—Air (Grétry), (b) Indian Song from "Rose Marie" (Priml). 7. Violin Solo (Frank). 8. Pas d'Armes from "Le Roi Jean" (Saint-Saëns). 9. Mother Goose (Bavel). 10. Cello Solo, La

Mouche (Mastrucci). 11. Les Jardine de la Nuit (Boisard). 12. "Sapho" (Massenet). 1.50 p.m.—Market Prices. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Concert: 1. L'enfant et les Sortilèges (Ravel). 2. Violin Solos, (a) Grave (Bach), (b) Polichinelle (Kreisler). 3. Ballade for Orchestra (Debussy). 4. Literary Programme. 5. Ballet Music from "Etienne Marcel" (Saint-Saëns). 4.45 p.m.—Exchange Quotations. 7.0 p.m.—Agricultural Report. 7.45 p.m.—Advanced English Lesson. 8.0 p.m.—Market Prices. 8.30 p.m.—Concert: News in the interval. PITTSBURGH. Westinghouse Electric (KDKA). WL 315.6 m. (950 kc); 50 kw. Transmits at intervals from 3.45 p.m. 11.0 p.m.—Time. 11.10 p.m.—Yellow Cab Theatrical Calendar. 11.15 p.m.—Dinner Concert by the KDKA little Symphony Orchestra. 12 midnight—Time, and Talk on "Drawings Old and New," arranged by the University of Pittsburgh. 12.15 a.m. (Saturday)—"Week End Tours." The following programme relayed from WJZ, New York. 12.30 a.m.—"Castoria Rock-a-bye Lady." 1.0 a.m.—Godfrey Ludlow (Violinist). 1.30 a.m.—"White Rock Concert." 2.0 a.m.—"Wrigley Review." 3.0 a.m.—Reymer's R.V.B. Trio. 3.30 a.m. (approx.)—Close Down. POSEN. Polskie-Radio. WL 344 m. (872 kc); 1.5 kw. Transmits at intervals from 12 (noon). 4.30 p.m.—Bulletin of "Jeunesse de Pologne" Association. 4.45 p.m.—Programme from Warsaw. 5.45 p.m.—Variety. 6.15 p.m.—Topical Talk. 6.30 p.m.—Talk. 6.55 p.m.—Finance Notes. 7.15 p.m.—Programme from Warsaw followed by Time, Weather and News. PRAGUE. Stranice. WL 348.0 m. (860 kc); 3 kw. Transmits from 10.0 a.m. 4.50 p.m.—German Transmission.

6.0 p.m.—"The Brandenburgs in Bohemia" Opera (Smetana), from the Opera House. 9.0 p.m.—Orchestral Music. ROME. Unione Radiofonica Italiana (IRO). WL 451 m. (665 kc); 3 kw. Transmits at intervals from 11.30 a.m. 7.0 p.m.—English Lesson. 7.30 p.m.—Time, News, Exchange. 7.45 p.m.—Vocal and Instrumental Concert: 1. Jeux d'enfants—Suite (Bizet). 2. Adagio (Mozart). 3. Gavotte (Handel). 4. "La Tosca";—Strange Harmony (Puccini). 5. The Cloak—Tenor Solo (Puccini). 6. "Dus Uomini calmi"—Comedy (Marinelli). 7. Prayer and Temple Dance (Grieg). 8. Mignon" Selection (Thomas). 9. "Samson and Delilah" Soprano Song (Saint-Saëns). 10. Aria (Tenaglia). 11. Capriccio No. 13 (Paganini). 12. Aida—Duet (Verdi). 13. Aria (Respighi). 14. "Euryanthe"—Overture (Weber). 10.0 p.m. (approx.)—Close Down. SCHENECTADY, N.Y. General Electric Company (WGY). WL 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAD on 21.96 m. (13,661 kc), from 6 p.m. to 7 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News. 11.20 p.m.—U.S. Radio Farm School 11.30 p.m.—Programme from Syracuse University, N.Y. 12.30 a.m. (Saturday)—Health Talk. 12.35 a.m.—The WGY Players. 1.0 a.m.—"Pro-Joy" Hour by Kolin Hager (Bartone). 2.0 a.m.—Time and "The Anglo-Persians," from New York. 2.30 a.m.—"Cathedral Echoes," by the Mixed Quartet. 3.0 a.m.—"Palmolive Hour," from New York. 4.0 a.m. (approx.)—Close Down. STAMBOUL. Radio-Stamboul. WL 1,180 m. (154 kc); 5 kw. 3.0 p.m.—Dance Music. 5.0 p.m.—Concert of Turkish Music. 7.0 p.m.—Orchestral Concert. 1. "Raymonde"—Overture (Thomas). 2. Caucasian Sketches (Ippolitoff Ivanov). 3. Intermezzo. 7.50 p.m.—Weather and Time. 8.0 p.m.—Dance Music. 8.30 p.m.—News by the "Agence Anatolie." 8.45 p.m. (approx.)—Close Down.

STETTIN. Funkstunde A.G. WL 236 m. (1,267 kc); 0.75 kw. Programme from Voxhaus until 12.5 p.m. 12.5 p.m.—Agricultural Report. 12.30 p.m.—Programme from Voxhaus. STOCKHOLM. Radiotjänst (SASA). WL 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1,815.5 m. (228 kc); Göteborg, 416.7 m. (720 kc); Malmö, 200.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc). Transmits at intervals from 11.35 a.m. 5.0 p.m.—Talk for Boy Scouts. 5.20 p.m.—Concert of Light Music. 6.0 p.m.—Household English Lesson. 6.15 p.m.—Literary Talk. 7.0 p.m.—Musical Play from Göteborg 8.15 p.m.—News and Weather. 8.40 p.m.—Talk on Statistics. 9.0 p.m.—Chamber Music. 9.30 p.m. (approx.)—Close Down. STUTTGART. Süddeutscher Rundfunk. WL 380.7 m. (788 kc); 4 kw. Transmits at intervals from 11.30 a.m. 6.15 p.m.—English Lesson. 7.0 p.m.—Symphony Concert, from the Liederhalle: 1. Selection from the Water Music (Haydn). 2. Aria for Bass, "Mentre di lascio" (Mozart). 3. Kammer-symphonie (Schreker). 4. Kindertotenlieder (Mahler). 5. Ballet Suite (Reger), followed by Reading. 9.45 p.m.—News. 10.0 p.m. (approx.)—Close Down. TOULOUSE. Radiophonie du Midi. WL 391 m. (767 kc); 3 kw. Transmits at intervals from 10.15 a.m. 12.45 p.m.—Concert. 1. "The Ruins of Athens"—Overture (Beethoven). 2. Aria from the Suite in D (Bach). 3. Hungarian Dances (Brahms). 4. Rigaudon from "Dardanus" (Rameau). 5. Selection from "The Damnation of Faust" (Berlioz). 6. Danse des Poupées (Turina). 7. Serenade (Widor). 8. Chanson ronde (Kunc). 9. Berceuse gasconne (Lacombe). 10. La chanson d'Amour (Schubert). 11. Zampognari (d'Indy). 12. Scènes foraines (Mignan). 13. Plaisir d'amour (Martini). 14. Marche des Mousquetaires (Köhne-man). 5.20 p.m.—Talk for Motorists.

8.45 p.m.—Concert. 1. "Rheingold"—"The Entry of the Gods into Valhalla" (Wagner). 2. "Der Freischütz" (Weber). 3. Concerto in G major (Beethoven). 4. Arias from (a) "Werther" and "Manon" (Massenet), (b) "Lakmé" (Delibes), (c) "Fortunio" (Messager), (d) "Mireille" (Gounod). 5. La Feria (Lacome). VIENNA. Radio-Wien. WL 576 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Programme relayed by Graz on 357.1 m. (840 kc), Innsbruck 294.1 m. (1,020 kc) and Klagenfurt, 272.7 m. (1,100 kc). Transmits at intervals from 10.0 a.m. 4.20 p.m.—Musical Programme for Children. 4.40 p.m.—Talk. 5.0 p.m.—Talk, "From the Life of a Mountaineer." 5.30 p.m.—Commerce Talk. 6.0 p.m.—Italian Lesson. 6.30 p.m.—Health Talk. 7.5 p.m.—English Literature Lesson. 7.30 p.m.—"Trug und Liebe"—Comedy (Holberg). WARSAW. Polskie-Radio. WL 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 11.0 a.m. 3.20 p.m.—Review of Periodicals. 3.40 p.m.—Talk on "The Art of Selling." 4.20 p.m.—Art Talk. 4.45 p.m.—Programme from Kattowitz. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.30 p.m.—Talk, "Children's Gardens in America and Poland." 6.55 p.m.—Music Talk. 7.15 p.m.—Symphony Concert. In the interval: News in French. 9.0 p.m.—Time and Aviation Report. 9.5 p.m.—News, Police News and Sports Notes. 9.30 p.m. (approx.)—Close Down. WILNO. Radio-Pologne. WL 435 m. (689 kc); 0.5 kw. Transmits at intervals from 3.40 p.m. 4.20 p.m.—Talk. 4.45 p.m.—Orchestral and Solo Concert. 6.0 p.m.—News. 6.25 p.m.—Time and Variety. 6.35 p.m.—Letter Box. 7.15 p.m.—Programme from Warsaw 9.30 p.m.—News. 9.45 p.m. (approx.)—Close Down.

Advertisement for 'DON'T WASTE YOUR L.T.' featuring a Ruby Light Signal Lamp. Includes an illustration of the lamp and text describing its benefits for radio sets, such as providing a sure indication of whether the valve is alight or not, and acting as a fuse and safeguards.

Advertisement for 'SAXON GUIDE TO WIRELESS' 1928 Edition. A 192-page book entirely revised, focusing on valve loud-speaker sets. It includes a price of 1/3 post free and is published by Saxon Radio Co. in Blackpool.

Advertisement for 'THE CROWNING GLORY OF SUCCESS' featuring the 'Radielle' H.T. Supply Units. Includes an illustration of the unit, a graph showing output for Model C.P., and contact information for The Radielle Company Ltd. in Haverstock Hill, N.W.3.

# PROGRAMMES FOR SATURDAY

(March 3)

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

**BARCELONA.** Radio Barcelona (E.A.J.). W.L. 344.8 m. (870 kc); 1.5 kw.

11.0 a.m.—Chimes and Weather.

1.30 p.m.—Concert—Selections by the Iberia Trio, Gramophone Records and Recitations.

5.30 p.m.—Concert—Quintet Selections, Gramophone Records and Recitations.

6.0 p.m.—Exchange Quotations and News.

8.30 p.m.—Elementary French Lesson.

9.0 p.m.—Chimes and Weather.

9.10 p.m.—"Der Rosenkavalier"—Suite (Strass).

9.20 p.m.—Dance Music by the "Demons Jazz Orchestra." 1. Bet's—Spanish March (Bruselas). 2. T. e Kintajou (Tierney). 3. Caring for you (Lang). 4. Mi ranchito (Palau). 5. Babilonia (Demon). 6. Down South (Middleton).

10.0 p.m.—Exchange Closing Prices.

10.5 p.m.—Programme relayed from Madrid (E.A.J.7).

**BERGEN** Kringkastingselskap. W.L. 370.4 m. (810 kc.); 1.5 kw. Transmits at intervals from 10.15 a.m.

6.30 p.m.—Vauderville Programme

8.0 p.m.—Talk.

8.30 p.m.—Concertina Music.

9.0 p.m.—Weather, News and Time.

9.15 p.m.—Jazz Concert by "Honduras."

9.45 p.m.—Dance Music.

**BERLIN.** Koeningwusterhausen. W.L. 1,250 m. (240 kc); 8 kw. Transmits at intervals from 10.50 a.m.

2.0 p.m.—Talk, "The Technique of Speaking."

2.35 p.m.—Weather and Exchange.

3.0 p.m.—Education Talk.

3.30 p.m.—Talk on "The War against Tuberculosis."

4.0 p.m.—Programme from Hamburg.

5.0 p.m.—Theatre Talk.

5.30 p.m.—French Lesson.

5.55 p.m.—Talk on "Faust."

6.20 p.m.—Talk on "Johann Sebastian Bach."

7.10 p.m.—Programme relayed from Vauxhaus on 1,250 m. (240 kc); and 35 kw.

**BERLIN.** Voxhaus. W.L. 484.6 m. (619 kc); 4 kw.

Transmits at intervals from 9.10 a.m.

3.0 p.m.—The Eighth Symphony (Gustav Mahler). Relayed from the Playhouse.

5.20 p.m.—Medico-Hygiene Talk.

5.45 p.m.—Talk on "Legal Questions for Motorists."

6.10 p.m.—Talk for Landlords.

6.35 p.m.—Talk, "The Indian Ocean"

7.10 p.m.—"La Sonnambula"—Opera (Bellini).

9.15 p.m. (approx.)—Weather, News, Time and Sports Notes.

9.30 p.m.—Dancing Lesson followed by Dance Music.

11.0 p.m. (approx.)—Close Down.

**BERNE.** Radio-Berne. W.L. 411 m. (730 kc); 1.5 kw.

12.0 noon.—Time, Weather, Sports Notes, Winter Sports Bulletin and Gramophone Records.

2.56 p.m.—International Time Signal from Neuchâtel.

3.0 p.m.—Kursaal Orchestra.

3.45 p.m.—Children's Corner.

4.0 p.m.—Kursaal Orchestra.

6.30 p.m.—Time and Weather.

6.35 p.m.—Talk on "Careers."

7.0 p.m.—Popular Programme.

8.20 p.m.—Kursaal Orchestra, News and Weather in the interval.

9.30 p.m.—Dance Music.

11.0 p.m. (approx.)—Close Down.

**BRESLAU.** Schlesische Funkstunde. W.L. 322.6 m. (930 kc); 4 kw.

Programme relayed by Gleiwitz on 250 m. (1,200 kc).

Transmits at intervals from 10.15 a.m.

1.15 p.m.—Agricultural Report.

2.30 p.m.—Concert of Dance Songs and Folk Songs.

3.0 p.m.—Programme from Voxhaus.

4.30 p.m.—Film Talk.

4.45 p.m.—Talk, "Cable Communications in War and Peace."

5.30 p.m.—Programme from Koenigswusterhausen.

5.55 p.m.—Weather.

6.0 p.m.—Talk, "German Commercial Correspondence."

6.25 p.m.—English Lesson.

7.0 p.m.—Memorial Concert for Fallen Soldiers (Breslau only). 1. Introduction. 2. Elegy on the Death of a Friend (Kornauth). 3. The Memory of the Fallen (Gerhard). 4. Bass Solos: (a) Austrian Cavalry Song, (b) On a Soldier's Grave (Niek). 5. Talk. 6. To My German Land (Zischer). 7. Epilogue.

7.0 p.m.—Popular Concert (Gleiwitz only).

9.30 p.m.—Programme from Voxhaus.

10.0 p.m.—Dance Music.

11.0 p.m. (approx.)—Close Down.

**BRUENN.** Komarov. W.L. 443 m. (676.8 kc); 3 kw.

Transmits at intervals from 11.15 a.m.

6.40 p.m.—English Lesson.

7.0 p.m.—Bulgarian Concert.

8.0 p.m.—Military Concert.

9.0 p.m.—Programme from Prague.

**BRUSSELS.** Radio Belgique. W.L. 508.5 m. (590 kc); 1.5 kw.

5.0 p.m.—Dance Music relayed from the "Taverne Royale."

6.0 p.m.—English Lesson.

7.45 p.m.—Radio Chronique.

8.15 p.m.—Orchestral Concert. 1. "Le Caid"—Overture (Thomas). 2. "Hans the Flute Player"—Selections (Ganne). 3. Song. 4. Chasse aux papillons (Keler-Bela). 5. Caprice et variations for trumpet (Arban). 6. Egyptian Ballet (Luigini). 7. Topical Talk. 8. "I Pagliacci"—Selections (Leoncavallo). 9. Flute Solos (Gaubert). 10. Une fête à Aranjuez (Demessemann). 11. Rondo original (Lorenz). 12. La corcade de Mimi Pinson (Goublier). 13. Spanish Serenade—Cello Solo (Glazounov). 14. Nutcracker Suite (Tchaikovsky).

10.15 p.m.—Dance Music—relayed from the "Saint Sauveur Palais de Danse."

11.0 p.m.—News.

11.15 p.m. (approx.)—Close Down.

**COPENHAGEN.** Copenhagen Radio. W.L. 337 m. (890 kc); 1 kw.

Programme relayed by Kalundborg on 1,153.8 m. (260 kc).

6.30 a.m.—Exercises.

2.0 p.m.—Concert.

5.0 p.m.—Chimes.

5.2 p.m.—Horticultural Talk.

5.30 p.m.—English Talk.

6.0 p.m.—News, Exchange and Time.

6.20 p.m.—Programme Announcements in Esperanto.

6.30 p.m.—Talk.

7.0 p.m.—Concert of Old Dance Music. 1. Amerikansk Tappensreg (Dahl). 2. Dinka Valse (Jespersen). 3. Philippa Polka (Jensen). 4. Quadrille from "Round the World in Eighty Days" (Lumbye). 5. Trippel valse (Nielsen). 6. Suzanne Mazurka (Möller). 7. Saturday afternoon (Mortensen). 8. Anna—Waltz (Lumbye). 9. Sophus—Polka (Jensen). 10. Mazurka (Möller). 11. Duminy Champagne Galop (Dahl).

8.0 p.m.—News.

8.15 p.m.—"Afdansning" Play (Lehmann).

8.45 p.m.—Concert. 1. Hoch Wien—March (Bayer). 2. Dronning Alexandrine—Waltz (Rasmussen). 3. Torch Dance No. 1 (Meyerbeer). 4. Reading. 5. Lotus bloom—Waltz (Ohlsen). 6. Dance of the Dervish (Siede). 7. Wellington March (Zehle).

9.45 p.m.—Dance Music from the "Industri" Restaurant.

11.0 p.m.—Chimes and Close Down

**CORK.** Cork Broadcasting Station (6CK). W.L. 400 m. (750 kc); 1.5 kw.

2.30 p.m.—Weather, Stock Market Prices and Gramophone Selections.

7.20 p.m.—Programme from Dublin.

**DUBLIN.** Dublin Broadcasting Station (2RN). W.L. 319.1 m. (940 kc); 1.5 kw.

1.30 p.m.—Weather and Gramophone Selections.

7.20 p.m.—News.

7.30 p.m.—Talk by Patricia Hoy.

7.45 p.m.—Irish Talk by Seamus O. Duirinne.

8.0 p.m.—The Station Orchestra. 1. Overture—Men of Prometheus (Beethoven). 2. Intermezzo—Dorabella from Enigma Variations (Elgar). 3. Finale.

8.30 p.m.—Lecture Recital by Fedora Turnbull (London).

9.0 p.m.—Hubert Maguire and Company in Sketch.

9.30 p.m.—Songs at the Piano by Alfred Deale.

9.45 p.m.—Humorous Monologues by Pat Hayden.

10.0 p.m.—The Station Orchestra and Joseph O'Neill (Tenor).

10.30 p.m.—News, Weather and Close Down.

**FRANKFURT-am-MAIN.** Südwestdeutscher Rundfunk. W.L. 428.6 m. (700 kc); 4 kw.

Programme relayed by Cassel, 252.1 m. (1,190 kc).

Transmits at intervals from 12.0 noon.

3.0 p.m.—Programme from the Playhouse, Berlin.

5.30 p.m.—"The Letter Box."

5.45 p.m.—Talk: "German Drama and Theatre from the 17th century up to the Present Day."

6.15 p.m.—Shorthand Lesson.

6.45 p.m.—Astronomy Talk.

7.15 p.m.—Concert with Peter von der Osten: 1. Im Volkston: (a) Dort unter'm Baum (Künkel), (b) Weist du (Gus), (c) Rätsel-Lied, (d) Das hat der Held sich anders vorgestellt (Stolz). 2. Gipsy Songs: (a) There was Once a Gipsy (Eineg), (b) Russian Gipsy Song, (c) "Komm Zigan" from "Gräfin Mariza" (Kalman).

8.15 p.m.—Variety Concert.

9.30 p.m.—Programme from Voxhaus.

10.0 p.m. (approx.)—Close Down.

**GRAZ.** Oest-Radio-Verkehrs. W.L. 357.1 m. (840 kc); 0.5 kw.

10.0 a.m.—12.0 noon.—Programme from Vienna.

3.10 p.m.—Concert. 1. Flammo empör—March (Fieseler). 2. Polletta (Nemeti). 3. Schönbrunner—Waltz (Lanner). 4. "Modell"—Overture (Suppé). 5. Maritana—Foxtrox (Platon). 6. Wau, wau stomp (Huntley). 7. Selection from "Robert le Diable" (Meyerbeer). 8. (a) Lieben möcht ich die ganz Welte—Waltz (Meyer), (b) Flugpost Galop (Meyer). 9. Papa Offenbach—Potpourri (Morena). 10. March (Harke).

5.0 p.m.—Programme from Vienna.

5.30 p.m.—Shorthand Lesson.

6.0 p.m.—Lesson in Serbo-Croatian.

6.45 p.m.—Programme from Vienna.

**HAMBURG.** Norag (na, in Morse). W.L. 396 m. (757 kc); 4 kw.

Programme relayed by Bremen, on 252.1 m. (1,190 kc); Hanover, 297 m. (1,009 kc); and Kiel, 256 m. (1,172 kc).

Transmits at intervals from 5.55 a.m.

3.0 p.m.—Programme from Berlin.

4.15 p.m. (Hamburg, Bremen and Hanover)—Talk: "The Trombone."

5.0 p.m. (Hamburg and Kiel)—Variety Concert.

5.55 p.m. (Hamburg, Hanover and Bremen)—Talk, "Winter Sports in Zermatt."

6.15 p.m.—The Week's Events.

6.35 p.m.—Legal Talk.

6.55 p.m.—Weather.

7.0 p.m.—"The Lady of the Rose"—Operetta (Gilbert). News.

9.30 p.m. (approx.)—Concert from Restaurant Ostermann.

10.25 p.m.—Hamburg, Bremen and Hanover)—Ico Report.

10.30 p.m.—Dance Music.

11.30 p.m. (approx.)—Close Down.

**HILVERSUM.** Algemeene Vereeniging Radio Omroep. W.L. 1,069 m. (280.5 kc.); 5 kw.

11.40 a.m.—Police News.

12.10 p.m.—Trio Concert.

2.40 p.m.—Talk.

3.40 p.m.—Lessons in Italian, German and French.

5.40 p.m.—Concert: 1. French Comedy Overture (Keler-Bela). 2. The Blue Danube (Joh. Strauss). 3. Lawn Tennis Games (Lincke). 4. Selection from "La Traviata" (Verdi). 5. Spanish Jazz Interlude (Klose). 6. Seeman's Los (Petrie). 7. Grandmother (Langer). 8. Selection from "Countess Mariza" (Kalman). 9. Beatrice—Tango (Freudenthal). 10. Galop of the Aether waves (Lulling).

6.55 p.m.—Talk.

7.25 p.m.—Police News.

7.45 p.m.—Programme arranged by the Workers' Radio Society. Talk and Concert.

9.55 p.m.—Weather and News.

10.10 p.m.—Concert relayed from the Royal Cinema, Amsterdam.

11.10 p.m. (approx.)—Close Down.

**HUIZEN.** W.L. 340.9 m. (880 kc); 4 kw. (Until 5.40 p.m.). Transmits from 5.40 p.m. on 1,950 m. (154 kc).

12.10 p.m.—Time, and Trio Concert.

2.40 p.m.—Children's Corner.

4.40 p.m.—Gramophone Selections.

5.40 p.m.—Literary Programme.

6.10 p.m.—Gramophone Selections.

6.40 p.m.—Dutch Lesson.

7.10 p.m.—Talk.

7.40 p.m.—Vocal and Trio Concert. Talk in the interval.

10.10 p.m.—News.

**KATTOVITZ.** Polskie-Radio W.L. 422 m. (710 kc); 10 kw.

3.20 p.m.—Finance Notes.

3.40 p.m.—Talk.

4.0 p.m.—Programme from Wilno.

4.45 p.m.—Children's Corner,

5.55 p.m.—News and Announcements.

6.35 p.m.—Talk.

7.30 p.m.—Programme from Warsaw.

9.0 p.m.—Time and News.

9.30 p.m.—Concert from the Café Astoria.

**KOENIGSBERG.** Ostmarken Rundfunk. W.L. 330.3 m. (908 kc); 1 kw.

Programme relayed by Danzig on 272.7 m. (1,100 kc).

Transmits at intervals from 8.0 a.m.

3.30 p.m.—Orchestral Concert.

5.35 p.m.—Talk, "The Care of Infants."

6.0 p.m.—Talk: "Gold in the History of the World."

6.30 p.m.—English Lesson.

7.10 p.m.—Concert: 1. "Semiramide"—Overture (Rossini). 2. Aria from "Don Juan" (Mozart). 3. Die Medici (Leoncavallo). 4. Arias: (a) Madame Butterfly (Puccini); (b) Eugen Onegin (Tchaikovsky). 5. Rhapsody No. 6 (Liszt). 6. Im Walde Suite (Popper). 7. Undine (Lortzing). 8. Salut d'amour (Elgar). 9. Songs. 10. Waltz (Kozzak). 11. Der Bittestudent (Millocker). News in the interval.

9.35 p.m.—Dance Music.

10.30 p.m. (approx.)—Close Down.

**KOVNO.** Radio-Kaunas. W.L. 2,000 m. (150 kc); 15 kw.

4.0 p.m.—Children's Corner.

4.30 p.m.—German Talk.

5.10 p.m.—Radio Patatejas.

6.0 p.m.—Time, Weather and News.

6.5 p.m.—Press Announcements.

6.20 p.m.—Programme Notes for the following week.

6.30 p.m.—Relay from the National Theatre.

**LANGENBERG.** Westdeutscher Rundfunk. W.L. 470 m. (638 kc); 25 kw.

Programme also relayed by Aix-la-Chapelle, 401 m. (748 kc); Cologne, 283 m. (1,060 kc); and Muenster, 241.9 m. (1,240 kc).

Transmits at intervals from 9.30 a.m.

12.5 p.m.—Concert from Cologne. 1. Unter dem Dreizackstern March (Mönc). 2. Donauesingen Waltz (Fueck). 3. Donna Juanita—Overture (Suppé). 4. Melodies from "La Bohème" (Leoncavallo). 5. Baritone Solo. 6. Toscanetta (Becc). 7. Quintessenzen Potpourri (Morena). 8. Rhapsody No. 14 (Liszt).

1.30 p.m.—Talk.

2.40 p.m.—Wireless Talk from Elberfeld.

3.0 p.m.—Programme from Voxhaus.

5.35 p.m.—English Lesson from Muenster.

6.15 p.m.—Literary Talk from Duesseldorf.

6.45 p.m.—Talk, "The New Turkey," from Cologne.

7.15 p.m.—"Der Rhein, Der Wein und Die Magdelein"—Musical Play (Palm), from Cologne. Followed by News, Sports Notes, Concert and Dance Music.

12 midnight (approx.)—Close Down.

**LAUSANNE.** Société Romande de Radiophonie (HB2). W.L. 680 m. (441 kc); 0.6 kw.

Transmits at intervals from 6.45 a.m.

7.1 p.m.—Orchestral Concert. 1. "Martha"—Overture (Flotow). 2. La voix des cloches (Luigini). 3. Delirium—Waltz (Strauss). 4. "Manon Lescaut"—Selection (Puccini). 5. Abendlied (Schumann). 6. "Les saltimbanques"—Selections (Ganne).

8.0 p.m.—Dramatic Selection.

8.30 p.m.—Dance Music from the Old India Restaurant.

**LEIPZIG.** Mitteldeutscher Rundfunk. W.L. 366.3 m. (819 kc); 4 kw.

Programme relayed by Dresden on 275.2 m. (1,090 kc).

Transmits at intervals from 9.0 a.m.

2.0 p.m.—Musical Selections.

3.0 p.m.—Programme relayed from Voxhaus.

5.0 p.m.—Talk relayed from Koenigswusterhausen.

5.30 p.m.—Technical Talk.

5.45 p.m.—Taxation Talk.

6.0 p.m.—Weather and Time.

6.15 p.m.—Talk, "Frederick the Great."

6.45 p.m.—Talk, "Art of the People."

7.20 p.m.—Concert of Light Music for Pianoforte and Voice.

9.15 p.m.—Dancing Lesson, "The Foxrot."

9.30 p.m.—Dance Music, and Orchestral Selections.

11.0 p.m. (approx.)—Close Down.

**MADRID.** Union Radio (E.A.J.7). W.L. 375 m. (800 kc); 1.5 kw.

Transmits at intervals from 11.45 a.m.

2.0 p.m.—Orchestral and Vocal Concert.

7.0 p.m.—Organ Recital. 1. Lyric Pieces (Grieg), (a) Hunting Song, (b) Lonely Traveller, (c) Song, (d) Dance, (e) Waltz. 2. "L'Arlesienne"—Selection (Bizet). 3. Badinage (Mally). 4. Scherzo (Guilman), followed by Concert by the "Lasalle Orchestra"—relayed from the "Palace of Music."

9.30 p.m.—Talk, "The Home Education of the Child."

9.45 p.m.—Oceanography Lesson.

10.0 p.m.—Programme relayed by San Sebastian, 335 m. (895 kc). Time.

10.5 p.m. (approx.)—Selection from "La Linda Tapada"—Farco (Alonso).

12.20 a.m. (Sunday)—News.

12.30 a.m. (approx.)—Close Down.

**MILAN.** Unione Radiofonica Italiana (MI). W.L. 541 m. (554 kc); 7 kw.

11.15 a.m.—News.

4.0 p.m.—Exchange Quotations.

4.5 p.m.—Orchestral Concert, with Variety Interludes.

4.50 p.m.—Children's Corner.

7.0 p.m.—French Lesson.

7.30 p.m.—Wireless Lesson.

7.50 p.m.—Time.

7.52 p.m.—Variety Concert. 1. Orchestral Selections: (a) Le Maschere—Selection (Mascagni), (b) "Faust"—Dance (Gounod). 2. Talk, "The Ethics of Music." 3. "La Gioconda"—Selection (Ponchielli). 4. Violin Solos. 5. Andrea Chenier—Selections (Giordano). 6. Trio in E minor (Zanella). 7. Norma—Selection (Bellini). 8. (a) "Louisa Miller"—Aria (Verdi), (b) Carrettiera siciliana (De Luca). 9. "Rienzi"—Selection (Wagner).

9.55 p.m.—News.

10.0 p.m.—Quintet Music. 1. Tounjours on jamaïs—Waltz (Waldteufel). 2. Stornellata (Biffi). 3. Il fabbro del villaggio (Seibold).

10.30 p.m. (approx.)—Close Down.

**MUNICH.** Deutsche Stunde in Bayern. W.L. 535.7 m. (560 kc); 4 k.w.

Programme relayed by Nuernberg on 803 m. (990 kc); and Augsburg 566 m. (530 kc).

Transmits at intervals from 10.45 a.m.

2.30 p.m.—Programme from Berlin.

4:35 p.m.—Reading.

5.15 p.m.—Market Prices.

5.30 p.m.—Wireless Talk.

6.0 p.m.—Letter Box.

6.30 p.m.—Orchestral Concert. 1. "Le Mariage de Figaro"—Overture (Mozart). 2. Selection from "The Barber of Seville" (Rossini). 3. Three Mezzo-Soprano Solos (Tchaikovsky). 4. Concerto for Viola and Orchestra (Forsyth). 5. Hungarian Dance (Brahms). 6. Arias from (a) "The Prophet" (Meyerbeer); (b) "Mignou" (Thomas). 7. Selection from "Tiefland" (d'Albert).

8.0 p.m.—Variety Programme.

8.5 p.m.—News.

9.20 p.m.—Orchestral Concert from the Regina Palace Hotel.

11.0 p.m. (approx.)—Close Down.

**NAPLES.** Unione Radiofonica Italiana (INA). W.L. 407 m. (737 kc); 1.5 kw.

Transmits at intervals from 12.0 noon.

7.20 p.m.—Wireless Notes.

7.40 p.m.—News.

7.45 p.m.—Harbour Notes.

7.50 p.m.—Programme relayed from the "San Carlo Theatre." In the Interval: Dance Music from the Studio.

9.55 p.m.—Calendar and Programme Notes.

**OSLO.** Kringkastingselskapet. W.L. 461.5 m. (650 kc); 1.5 kw.

Programme relayed by Hamar on 566 m. (530 kc); Porsgrund, 524 m. (572 kc); Fredrikstad, 434.8 m. (690 kc); Notodden, 423 m. (709 kc); and Rjukan, 448 m. (670 kc).

Transmits at intervals from 10.10 a.m.

4.45 p.m.—Children's Corner.

6.15 p.m.—News.

6.30 p.m.—Recital of Norwegian Melodies on the Hardanger Violin.

7.30 p.m.—Time.

7.30 p.m.—Orchestral Concert: 1. "Poet and Peasant"—Overture (Suppé). 2. Intermezzo from the Third Act of "L'Amico Fritz" (Mascagni). 3. Selection from "Carmen" (Bizet). 4. Elva Souper bei Suppé (Morena). 5. Mariska (Lehar).

8.30 p.m.—Song Recital (Tenor).

CONTINUED ON NEXT PAGE

**PROGRAMMES FOR SATURDAY—(Cont.)**

9.0 p.m.—News, Weather and Sports Notes.  
 9.15 p.m.—Topical Talk, and Dance Music from the Grand Hotel.  
 11.0 p.m. (approx.)—Close Down.  
**PARIS.** Eiffel Tower (FL). W.L. 2.050 m. (113 kc); 5 kw.  
 7.56 a.m.—Time Signal (on 32 m. 9,375 kc).  
 9.26 a.m.—Time Signal.  
 5.45 p.m.—Le Journal Parlé. Talks on "The Debut of Mussolini," "The Week in Paris," "The Music Hall," etc.  
 7.10 p.m.—Weather.  
 7.30 p.m.—Concert. Tenor Songs by the Icelandic Tenor Eggert Stefansson. 1. Leidsla (Kalalons). 2. Heiddjalajolan (Jónsson). 3. Kvöldbaen (Gudmundsson). 4. Tarentella Sincera (de Crescento). 5. Annie Laurie. 6. Cello Solo, "Le Poème de l'Amour et de la Mer" (Chausson). 7. Violin Solo, Bérceuse (Karyiresky). At 7.56p.m. Time Signal (on 32 m. 9,375 kc).  
 8.30 p.m.—Educational Programme. Talks on "Psycho-analysis and the Child," "New Social Doctrines of the East," "The Evolution of Human Industry."  
 10.26 p.m.—Time Signal.  
**PARIS.** Petit Parisien. W.L. 340.0m. (880 kc); 0.5 kw.  
 9.0 p.m.—Concert of Popular Airs: 1. Sur la route il faut chanter. 2. Laurier du bois. 3. Hollalaika. 4. L'amour de moy. 5. Petit soldat de France. 6. Mon père avait cinq cents moutons. 7. Miren à dit à son berger. 8. Là-haut dans la montagne. 9. Aquellos montagnos. 10. A Magali, ma chantant. 11. La Violette. 12. Chant des adieux.  
**PARIS.** Radio-Paris (CFR). W.L. 1,750 m. (171 kc); 3 kw.  
 Transmits at intervals from 7.30 a.m. 12.30 p.m.—Concert of Classical Quartets.  
 1.50 p.m.—Market Prices.  
 3.30 p.m.—Dance Music.  
 4.45 p.m.—News.  
 7.0 p.m.—Agricultural Report.  
 8.0 p.m.—Talk, "The National Campaign against Infant Mortality."  
 8.30 p.m.—Concert of Instrumental Music, Songs and Variety. News in the interval.

**PITTSBURGH.** Westinghouse Electric (KDKA). W.L. 315.6 m. (950 kc); 50 kw.  
 Transmits at intervals from 3.45 p.m. 11.0 p.m.—Time.  
 11.10 p.m.—Yellow Cab Theatrical Calendar.  
 11.15 p.m.—The Westinghouse Band, relayed from the William Penn Hotel.  
 12 midnight—Time, and Address arranged by the University of Pittsburgh.  
 12.15 a.m. (Sunday)—Weekly Meeting of the Home Radio Club.  
 12.30 a.m.—Variety Programme.  
 12.45 a.m.—"Gems of American Literature."  
 1.0 a.m.—"The R.C.A. Radiotrons" from WJZ, New York.  
 2.0 a.m.—"Phileo Hour" from WJZ.  
 3.0 a.m.—Weather and Time.  
 3.15 a.m. (approx.)—Close Down.  
**POSEN.** Polskie-Radio. W.L. 3.4 m. (872 kc); 1.5 kw.  
 Transmits at intervals from 12 noon. 5.45 p.m.—Variety.  
 6.15 p.m.—French Lesson.  
 6.35 p.m.—Talk, "Romanowski, Poet and Rebel."  
 7.0 p.m.—Finance Notes.  
 7.30 p.m.—Programme from Warsaw.  
 9.0 p.m.—Time, Weather and News.  
 9.30 p.m.—Dance Music from the Palais Royal.  
 11.0 p.m. (approx.)—Close Down.  
**PRAGUE.** Stranice. W.L. 348.9 m. (860 kc); 5 kw.  
 Transmits at intervals from 10.0 a.m. 7.0 p.m.—Popular Concert.  
 8.0 p.m.—Literary Review.  
 8.30 p.m.—Pianoforte Recital.  
 9.0 p.m.—Orchestral Music.  
**ROME.** Unione Radiofonica Italiana (IRO). W.L. 451 m. (665 kc); 3 kw.  
 Transmits at intervals from 11.30 a.m. 4.30 p.m.—Vocal and Instrumental Concert. 1. Sonata for Cello (Eccles). 2. Gia il sole dal Gange (Scarlatti). 3. Ich liebe dich (Grieg). 4. Se-Baritone Song (Denza). 5. Dinorah—Selections (Meyerbeer). 6. Selections (Debussy): (a) Reverie, (b) Minuet. 7. Faust—Selection (Gounod). 8. L'Amico Fritz—Selection (Mas-

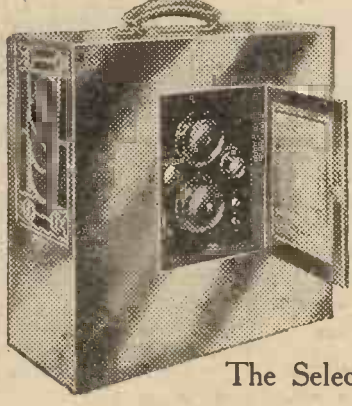
cagn). 9. Kovancina (Moussorgsky). 10. Le Flieuse (Popper).  
 6.0 p.m.—Wireless Notes.  
 7.0 p.m.—German Lesson.  
 7.30 p.m.—Time, News, Exchange and Weather.  
 7.45 p.m.—"The Elixir of Love"—Opera (Donizetti). In the Interval: Talk.  
 9.55 p.m.—News.  
 10.0 p.m. (approx.)—Close Down.  
**SCHENECTADY, N.Y.** General Electric Company (WGY). W.L. 379.5 m. (790 kc); 50 kw. Programme relayed by 2XAF on 32.77 m. (9,155 kc) from 11.30 p.m. Transmits at intervals from 11.45a.m. 11.30 p.m.—Dinner Music from the Hotel Onondaga, Syracuse, N.Y. 12.30 a.m. (Sunday)—3.0 a.m.—Programme from New York.  
 12.30 a.m.—Statler's Pennsylvanians. 1.0 a.m.—The High Jinkers.  
 2.0 a.m.—Time and "The Little Orchestra."  
 2.30 a.m.—The Tuneful Troupe.  
 3.0 a.m.—Organ Recital from the Eastman Theatre, Rochester, N.Y. 4.0 a.m.—Dance Music from the Hotel Kenmore, Albany, N.Y. 5.0 a.m. (approx.)—Close Down.  
**STAMBOUL.** Radio-Stamboul. W.L. 1,180 m. (154 kc); 5 kw.  
 3.0 p.m.—Orchestral Concert.  
 5.0 p.m.—Concert of Turkish Music.  
 7.0 p.m.—Exchange Quotations and Market Prices of Wheat.  
 7.10 p.m.—Orchestral Concert. 1. "Phèdre"—Overture (Massenet) 2. Clair de Lune (Debussy). 3. "Lakmé"—Selection (Delibes). 4. Violin Solo. 5. Grossmütterchen (Langer).  
 7.50 p.m.—Weather and Time.  
 8.0 p.m.—Dance Music.  
 8.30 p.m.—News by the "Agence Anatolie"  
 8.45 p.m. (approx.)—Close Down.  
**STOCKHOLM.** Radiotjänst (SASA). W.L. 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1315.5 m. (228 kc); Göteborg, 416.7 m. (720 kc); Malmö, 260.9 m. (1,150 kc); and Sundsvall, 545.6 m. (550 kc).  
 Transmits at intervals from 11.35a.m. 4.0 p.m.—Concert of Light music.  
 5.0 p.m.—Children's Corner.  
 5.30 p.m.—Revue from Göteborg.  
 6.30 p.m.—Topical Talk.  
 6.45 p.m.—Song and Recitation.  
 7.15 p.m.—Band Music.

8.15 p.m.—News and Weather.  
 9.45 p.m.—Dance Music.  
 11.0 p.m. (approx.)—Close Down.  
**STUTTGART.** Süddeutscher Rundfunk. W.L. 380.7 m. (788 kc); 4 kw.  
 Transmits at intervals from 11.30a.m. 3.0 p.m.—Programme from the Playhouse, Berlin.  
 5.0 p.m.—Time and Weather.  
 5.15 p.m.—Talk from Freiburg, 573.6 m. (523 kc).  
 5.45 p.m.—Talk from Karlsruhe.  
 6.15 p.m.—Talk, "Public Welfare."  
 6.45 p.m.—Time, Weather and Sports Notes.  
 7.15 p.m.—Cabaret Concert from Reutlingen. News.  
 9.30 p.m.—Programme from Voxhaus.  
 11.30 p.m. (approx.)—Close Down.  
**TOULOUSE.** Radiophonie du Midi. W.L. 391 m. (767 kc); 3 kw.  
 Transmits at intervals from 10.15 a.m. 12.45 p.m.—Concert. 1. Marche des Marmousets (Ganne). 2. Puzzle (Berger). 3. Tarentella sincera (de Crescento). 4. Just a memory (Henderson). 5. Les Bavards (Offenbach). 6. Valse (Ewart). 7. Danse égyptienne (Deffès). 8. Only in Dreams (Marsden). 9. Smiles—Foxtrot. 10. Selection from "Mireille" (Gounod). 11. Les Cigarettes (Philippucci). 12. Florencia—Tango (Luechesi). 13. Premier nocturne (Piercé). 14. Michel, où es-tu?—One-Step (Raiter).  
 2.15 p.m.—Agricultural Report from Agen.  
 8.0 p.m.—Talk on "The Fur Industry."  
 8.45 p.m.—Concert. Part One—Selection from "Pelleas and Melisande" (Debussy). Part Two—Hawaiian Guitar Selections: (a) Dream of Hawaii, (b) For You First Kiss, (c) Sweet Hawaiian Moonlight, (d) One, Two, Three, Four (Jacovacci).  
**VIENNA.** Radio-Wien. W.L. 576 and 517.2 m. (520 and 580 kc); 0.75 and 5 kw. Programme relayed by Innsbruck on 294.1 m. (1,020 kc); Klagenfurt, 272.7 m. (1,100 kc); and by Graz on 357.1 m. (840 kc), from 6.45 p.m.  
 Transmits at intervals from 10.0 a.m. 3.15 p.m.—Orchestral Concert. 1.

"Prince Methusalem"—Overture (Strauss). 2. Pester Walzer (Lanner). 3. Selection from "I Pagliacci" (Leoncavallo). 4. Entr'acte from "Coppelia" (Delibes). 5. Selection from "Das Fürstentum" (Lehár). 6. Songs from "Eine einzige Nacht" (Stolz). 7. Potpourri (Komzak). 8. March (Smetana).  
 5.0 p.m.—Concert. 1. Songs: (a) Aria from "Der Waffenschmidt" (Lortzing), (b) The Two Grenadiers (Schumann), (c) Falstaff's Drinking Song, from "The Merry Wives of Windsor" (Nicolaï). 2. Pianoforte Solos: (a) Concerto Etude in F minor (Liszt), (b) Au lac de Wallenstein, (c) Valse oubliée. 3. Songs: (a) Loreley (Liszt), (b) drei Zigeuner, (c) Wieder möcht' ich dir begegnen. 4. String Quartet in F minor, Op. 20, No. 5 (Haydn).  
 6.0 p.m.—Talk, "The Cathedrals of Austria."  
 6.30 p.m.—Legal Talk.  
 7.0 p.m.—"John Gabriel Borkman"—Play (Ibsen).  
**WARSAW.** Polskie-Radio. W.L. 1,111.1 m. (270 kc); 10 kw.  
 11.0 a.m.—Time, Aviation Report.  
 2.0 p.m.—Weather and Agricultural Report.  
 3.0 p.m.—Talk.  
 3.25 p.m.—News.  
 3.35 p.m.—Radio-Chronique.  
 4.0 p.m.—Relay from Wilno.  
 4.45 p.m.—Children's Corner from Cracow.  
 6.5 p.m.—Agricultural Report.  
 6.15 p.m.—Variety.  
 6.35 p.m.—Literary Talk.  
 7.30 p.m.—Operetta. In the interval: News in French.  
 9.0 p.m.—Time, Aviation Report.  
 9.5 p.m.—News, Police News and Sports Notes.  
 9.30 p.m.—Dance Music.  
 10.30 p.m. (approx.)—Close Down.  
**WILNO.** Radio-Pologne. W.L. 435 m. (689 kc); 0.5 kw.  
 3.40 p.m.—News in White Ruthenian.  
 3.55 p.m.—Agricultural Talk.  
 4.20 p.m.—Programme from Warsaw.  
 6.0 p.m.—News.  
 6.25 p.m.—Time and Variety.  
 6.35 p.m.—Talk.  
 7.30 p.m.—Programme from Warsaw.  
 9.0 p.m.—News.  
 9.30 p.m.—Dance Music.  
 10.30 p.m. (approx.)—Close Down.



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# STATIONS IN ORDER OF WAVELENGTHS AND FREQUENCIES.

## EUROPEAN.

| M.     | Kc.   | Station   |
|--------|-------|---|
| 4000   | 75    | Berlin (Koenigswusterhausen) AFP, 8 kw.   |
| 2900   | 103   | Paris (Eiffel Tower), PL, 5 kw.   |
| 2650   | 113   | Berlin (Wolff's Bureau). Intermittent News during the day.  |
| 2525   | 119   | Berlin (Wolff's Bureau). Intermittent News during the day.  |
| 2000   | 150   | Kovno (Lithuania), 15 kw.   |
| 1950   | 154   | Scheveningen Haven (Holland), 2.5 kw.   |
| 1870   | 169   | Kosice (Czecho-Slovakia), 5 kw. DAILY—6.30—9.0 p.m.   |
| 1950   | 154   | Huizen (From 5.15 p.m. till closing down.)  |
| 1829   | 164   | Norddeich (Germany). WEEKDAYS—12.0 mid-night, Weather Report.   |
| 1800   | 167   | Angora (Turkey), 6 kw.  |
| 1750   | 171   | Paris (Radio-Paris) CFB, 3 kw (Aer.)  |
| 1700   | 176   | Kharkov Narkompshtel (Russia), 1.5 kw.  |
| 1604.8 | 187   | Daventry (5XX), 25 kw. (Aer.)   |
| 1450   | 207   | Moscow (Old Komintern), RA1, 20 kw. DAILY—2.0 p.m.  |
| 1315.5 | 228   | Motala (Sweden), 20 kw. (Aer.) Relays Stockholm   |
| 1250   | 240   | Koenigswusterhausen (Zeesen), 35 kw. in Aerial.   |
| 1200   | 250   | Boden (Sweden), 1 kw  |
| 1180   | 254   | Stamboul (Turkey) 5 kw.   |
| 1153.8 | 260   | Kalundborg, 7.5 kw. (Aer.)  |
| 1150   | 261   | Ryvang (Denmark), 1 kw.   |
| 1117   | 269   | Novosibirsk (Russia), RA 33, 4 kw. 5 p.m.   |
| 1111.1 | 270   | Warsaw (Poland), 10 kw. (Aer.)  |
| 1100   | 273   | Basle (Switzerland), 0.25 kw. DAILY—7.30—9.5 p.m.   |
| 1100   | 273   | De Bilt (Holland), WEEKDAYS—8.15 p.m., Weather.   |
| 1089   | 280.5 | Hilversum (Holland) ANRO, 5 kw. (Aer.)  |
| 995.5  | 301.4 | Leningrad (Russia), 10 kw. WEEKDAYS—5 p.m., Lecture: 6.0 p.m., News. 6.30 p.m. Concert or Opera. SUNDAY—5.0 p.m., Lecture, 6.0 p.m., News. 6.30 p.m. Concert. |
| 870    | 345   | Tiflis (Russia), 4 kw.  |
| 860    | 349   | Nijni Novgorod (Russia), 1.2 kw.  |
| 850    | 353   | Rostov/Don (Russia), 4 kw. 3.10 p.m.  |
| 820    | 366   | Kiev (Russia), 1 kw.  |
| 760    | 395   | Geneva (Radio-Geneve), 0.5 kw. WEEKDAYS—1.40 p.m., Concert and News.  |
| 720    | 416   | Ostersund (Sweden), 2 kw. Relays Sundsvall.   |
| 680    | 441   | Lausanne (Switzerland), HB2, 0.9 kw, DAILY—8.0 p.m., Concert. Talk.   |
| 575    | 444   | Moscow (Popoff).  |
| 588.2  | 510   | Zurich (Switzerland), 2 kw.   |
| 576    | 520   | Vienna (Stubenberg), 0.75 kw.   |
| 573.6  | 523   | Freiburg (Germany), 0.75 kw.  |
| 568    | 530   | Augsburg (Germany), 1.5 kw. Relays Munich.  |
| 566    | 530   | Bloemendaal (Holland), 0.05 kw. SUNDAYS—9.40 a.m. and 4.40 p.m., Church Service.  |
| 560    | 530   | St. Michel (Finland).   |
| 566    | 530   | Hamar (Norway), 0.7 kw.   |
| 566    | 530   | Cracow (Poland), 1.5 kw.  |
| 555.6  | 540   | Budapest (Hungary), 3 kw.   |
| 545.6  | 550   | Sundsvall (Sweden), 1 kw.   |
| 541    | 554   | Milan, 7 kw.  |
| 535.7  | 560   | Munich (Germany), 4 kw. SUNDAY—10.30 a.m. Concert.  |
| 528.5  | 570   | Riga (Latvia), 2 kw. DAILY—10.35—11.0 a.m. and 5.0—8.30 p.m., Concert, News, Weather.   |
| 524    | 572   | Porsgrund (Norway), 1 kw. Relays Oslo.  |
| 517.2  | 580   | Vienna (Kosenhugel), 5 kw.  |
| 508.5  | 590   | Brussels, 1.5 kw.   |
| 500    | 600   | Aberdeen (2BD), 1.5 kw.   |
| 500    | 600   | Uppsala (Sweden), 0.25 kw. Relays Stockholm.  |
| 500    | 600   | Linköping (Sweden), 0.25 kw. Relays Stockholm.  |
| 491.8  | 610   | Daventry Experimental (6GB), 25 kw. in Aerial.  |
| 487    | 616   | Kharkov (Russia) 4 kw.  |
| 484.6  | 619   | Berlin (Witzleben), 4 kw.   |
| 477.7  | 628   | Lyon (France) (La Doua), PTT, 1 kw. MON., WED., and FRI.—9.45 p.m., Concert. SUN., TUES., THURS., and SAT.—Relays Ecole Supérieure.                           |
| 470    | 638   | Langenberg (Germany), 25 kw.  |
| 462    | 649   | Barcelona (Spain) (Radio Catalana) EAJ13, 1 kw.   |
| 461.5  | 650   | Oslo (Norway), 1.5 kw.  |
| 458    | 655   | Paris (Ecole Supérieure), FPTT, 0.5 kw.   |
| 453.8  | 661   | Stockholm, 1.5 kw.  |
| 451    | 665   | Rome (14U), 3 kw.   |
| 450    | 666   | Moscow (Trades Union), RA2, 4 kw. 3.0 a.m.—8.0 p.m.   |
| 448    | 670   | Rjukan (Norway), 0.1 kw. Relays Oslo.   |
| 443    | 676.8 | Bruenn (Czecho-Slovakia), 3 kw. DAILY—6.0 p.m., Concert and News. THURS.—4.40 p.m., Talk for Women. SUN.—10.0 a.m., Concert.                                  |
| 435    | 689   | Wino (Poland) 0.5 kw.   |
| 434.8  | 690   | Seville (Spain) (Union Radio), EAJ5, 2 kw.  |
| 434.8  | 690   | Fredrikstad (Norway), 0.7 kw. Relays Oslo.  |
| 428.8  | 700   | Frankfurt-on-Main (Germany), 4 kw.  |
| 423    | 709   | Notodden (Norway), 0.7 kw. Relays Oslo.   |
| 422    | 710   | Kattowitz (Poland), 10 kw.  |
| 416.7  | 720   | Göteborg (Sweden), 1 kw.  |
| 411    | 730   | Berne (Switzerland), 1.5 kw.  |
| 408    | 735   | Tallinn (Reval), Estonia, 2.2 kw.   |
| 407    | 737   | Naples (INA), 1.5 kw.   |
| 405.4  | 740   | Glasgow (BBC), 1.5 kw.  |
| 405    | 741   | Salamanca (Spain), EAJ22, 1 kw. DAILY—9.30 p.m., Concert. 10.30 p.m., Dance Music.  |
| 401    | 748   | Aix-la-Chapelle (Germany) 0.75 kw.  |
| 400    | 750   | Cadiz (Spain), EAJ3, 0.5 kw.  |
| 400    | 750   | Mont de Marsan (France), 4 kw.  |
| 400    | 750   | Madrid (Radio Espana) (EAJ2), 0.5 kw.   |
| 400    | 750   | Cork (Irish Free State), 6CK, 1.5 kw.   |
| 400    | 750   | Plymouth (6PY), 0.2 kw.   |
| 400    | 750   | Tammerfors (Finland), Relays Helsingfors, 0.25 kw.  |
| 400    | 750   | Bilbao (Spain) EAJ9, 0.5 kw.  |
| 396    | 757   | Hamburg (ha, in Morse), 4 kw.   |
| 391    | 767   | Toulouse (France) (Rad. du Midi), 3 kw. DAILY—12.40 p.m., Concert. 8.50 p.m., Concert.  |
| 384.6  | 780   | Manchester (ZZY), 1.5 kw.   |
| 380.7  | 788   | Stuttgart (Germany), 4 kw.  |
| 375.9  | 798   | Helsingfors (Finland), 1.2 kw. 8.0 a.m. Exchange Quotations. DAILY—4.0—7.0 p.m. Concert.  |
| 375    | 800   | Madrid (Union Radio), EAJ7, 1.5 kw.   |
| 370.4  | 810   | Bergen (Norway), 1.5 kw.  |
| 170    | 811   | Paris (Radio LL), 0.5 kw. MONDAY, WEDNESDAY, and FRIDAY—10.0 p.m., Concert.   |

| M.    | Kc.  | Station   |
|-------|------|---|
| 366.3 | 819  | Leipzig (Germany), 4 kw.  |
| 361.4 | 830  | London (2LO), 3 kw.   |
| 357.1 | 840  | Graz (Austria), 0.5 kw. Usually relays Vienna.  |
| 355   | 845  | Falun (Sweden), 2 kw.   |
| 353   | 850  | Cardiff (5WA), 1.5 kw.  |
| 348.9 | 860  | Prague (Czecho-Slovakia), 5 kw. DAILY—7.0 p.m., Concert.  |
| 344.8 | 870  | Barcelona (Spain) Radio Barcelona, EAJ1, 1.5 kw.  |
| 344   | 872  | Posen (Poland), 1.5 kw.   |
| 340.9 | 880  | Paris (Petit Parisien), 0.5 kw.   |
| 340.9 | 880  | Huizen (Holland), 4 kw. (till 5.40 p.m.).   |
| 337   | 890  | Copenhagen, 1 kw.   |
| 335   | 895  | San Sebastian (Spain), EAJ8, 0.5 kw.  |
| 335   | 895  | Cartagena EAJ16, 1 kw.  |
| 333.3 | 900  | Reykjavik (Iceland), 1 kw.  |
| 330.3 | 908  | Koenigsberg (Germany), 1 kw. DAILY—7.10 p.m., Concert.  |
| 328.1 | 920  | Bournemouth (6BM), 1.5 kw.  |
| 323.9 | 926  | Almeria (Spain), EAJ15, 1 kw.   |
| 322.6 | 930  | Breslau (Germany), 4 kw.  |
| 319.1 | 940  | Dublin 2KN, 1.5 kw.   |
| 318   | 943  | Lahti (Finland)   |
| 312.5 | 960  | Newcastle (5NO), 1.5 kw.  |
| 310.2 | 967  | Marseilles PTT, 0.5 kw. WEEKDAYS—9.0 p.m. Concert.  |
| 310   | 967  | Zagreb (Yugoslavia), 0.35 kw. DAILY—6.0 p.m.  |
| 310   | 967  | Oviedo (Spain), 0.1 kw.   |
| 309.1 | 980  | Belfast (2BE), 1.5 kw.  |
| 304   | 986  | Björneberg (Finland). Relays Helsingfors.   |
| 303   | 990  | Nürnberg (Germany), 4 kw. Relays Munich.  |
| 302   | 993  | Paris (Radio Vitus), 1 kw. WEDNESDAYS, FRIDAYS, and SUNDAYS. From 9—10.45 p.m., Concert.                                      |
| 300   | 1000 | Bratislava (Czecho-Slovakia), 0.5 kw.   |
| 297   | 1010 | Agen (France), 0.25 kw. TUES. and FRI.—9.30 a.m., Concert.  |
| 297   | 1010 | Liverpool (6LV), 0.2 kw.  |
| 297   | 1010 | Varberg, 0.2 kw. Relays Göteborg.   |
| 297   | 1010 | Jyväskylä (Finland), 0.2 kw. Relays Helsingfors.  |
| 297   | 1009 | Hanover (Germany), 0.7 kw. Relays Hamburg   |
| 295   | 1016 | Rennes (France), 0.5 kw.  |
| 294.1 | 1020 | Hull (6KH), 0.2 kw.   |
| 294.1 | 1020 | Dundee (2DE), 0.2 kw.   |
| 294.1 | 1020 | Stoke (6ST), 0.2 kw.  |
| 294.1 | 1020 | Swansea (5SX), 0.2 kw.  |
| 294.1 | 1020 | Uddevalla (Sweden), 0.25 kw. Relays Göteborg.   |
| 294.1 | 1020 | Innsbruck (Austria), 0.5 kw. Relays Vienna.   |
| 289   | 1038 | Lyon (Radio-Lyon), 1.5 kw. WEEKDAYS—7.15 p.m., News. WEEKDAYS (except MON.), 7.45 p.m., Concert.                              |
| 288.5 | 1040 | Edinburgh (2EH), 0.2 kw.  |
| 287.9 | 1042 | Lille, 0.5 kw. PTT.   |
| 283   | 1060 | Cologne (Germany), 4 kw.  |
| 278.8 | 1076 | Trollhättan (Sweden), 1 kw. Relays Göteborg   |
| 278   | 1079 | Grenoble, 1 kw. WED. and SAT. only.   |
| 277.8 | 1080 | Leeds (2LS), 0.2 kw.  |
| 275.2 | 1090 | Dresden (Germany), 0.7 kw. Relays Leipzig.  |
| 275.2 | 1090 | Jacobstad (Finland).  |
| 275.2 | 1090 | Nottingham (England), 5NG, 0.2 kw.  |
| 275.2 | 1090 | Norrköping (Sweden), 0.25 kw. Relays Stockholm.   |
| 275   | 1090 | Bordeaux (Lafayette), PTT, 1 kw.  |
| 273   | 1098 | Limoges (France), 0.5 kw.   |
| 272.7 | 1100 | Sheffield (6FL), 0.2 kw.  |
| 272.7 | 1100 | Danzig, 0.75 kw. DAILY—10.0 a.m., Weather. 10.30 a.m., Concert. 1.15 p.m., Exchange Quotations. 3.0 p.m., Relays Koenigsberg. |
| 272.7 | 1100 | Hudiksvall, 0.25 kw. Relays Stockholm.  |
| 272.7 | 1100 | Klagenfurt (Austria), 1.5 kw. Relays Vienna.  |
| 260.9 | 1150 | Malmö (Sweden), 1 kw.   |
| 259   | 1160 | Toulouse (France) PTT, 0.5 kw.  |
| 256   | 1172 | Kiel (Germany), 0.7 kw. Relays Hamburg.   |
| 254.2 | 1190 | Kalmar (Sweden), 0.25 kw. Relays Stockholm.   |
| 252.1 | 1190 | Cassel (Germany), 0.7 kw. Relays Frankfurt.   |
| 252.1 | 1190 | Bradford (2LS) 0.2 kw. Transmits Leeds Programmes.  |
| 252.1 | 1190 | Montpellier (France), 0.25 kw. WEEKDAYS—8.45 p.m., News. 9.0 p.m., Concert or Talk.   |
| 252.1 | 1190 | Bremen (Germany), 0.75 kw. Relays Hamburg.  |
| 252.1 | 1190 | Säille (Sweden), 0.5 kw. Relays Stockholm.  |
| 250   | 1200 | Eskestuna (Sweden), 0.25 kw. Relays Stockholm.  |
| 250   | 1200 | Gleiwitz (Germany), 0.7 kw. Relays Breslau.   |
| 250   | 1200 | Uleaborg (Finland). Relays Helsingfors, 0.2 kw.   |
| 243.9 | 1230 | Trondhjem (Norway).   |
| 241.9 | 1240 | Muenster (Germany) m.s. in Morse, 1.5 kw.   |
| 238.1 | 1260 | Kiruna (Sweden), 0.25 kw. Relays Boden.   |
| 237   | 1265 | Bordeaux, 1.5 kw.   |
| 236.7 | 1267 | Stettin (Germany). Relays Berlin, 0.75 kw.  |
| 236.2 | 1270 | Orebro, 0.25 kw. Relays Stockholm.  |
| 236   | 1271 | Juan les Pins (Nice) (France), 0.25 kw.   |
| 230.2 | 1303 | Boras (Sweden), 1 kw. Relays Göteborg.  |
| 229   | 1310 | Helsingborg, 0.25 kw. Relays Malmö.   |
| 229   | 1310 | Umea, 0.2 kw. Relays Stockholm.   |
| 225.6 | 1330 | Belgrade (Serbia), 2 kw.  |
| 222.2 | 1350 | Strasbourg, 0.1 kw. TUESDAY and THURSDAY —10.0 p.m., Concert, Talk and News.  |
| 220.6 | 1360 | Karlstad (Sweden), 0.25 kw. Relays Stockholm  |
| 217.4 | 1380 | Luxembourg, 0.25 kw.  |
| 215.8 | 1390 | Halmstad (Sweden), 0.25 kw. Relays Malmö.   |
| 214.3 | 1400 | Viborg (Finland), 0.7 kw.   |
| 204.1 | 1470 | Gävle (Sweden), 0.25 kw. Relays Stockholm.  |
| 202.7 | 1480 | Kristinehamn (Sweden), 0.1 kw. Relays Stockholm   |
| 201.3 | 1490 | Jönköping (Sweden), 0.5 kw. Relays Stockholm.   |
| 200   | 1500 | Biarritz (Côte d'Argent), 0.25 kw.  |
| 196   | 1530 | Karlskrona (Sweden), 0.25 kw. Relays Stockholm.   |
| 187.5 | 1600 | Ornskoldsvik, 0.25 kw. Relays Sundsvall.  |
| 158   | 1899 | Beziere (France), 0.5 kw.   |

## U.S.A.

| M.    | Kc. | Station                            |
|-------|-----|------------------------------------|
| 535.4 | 560 | Des Moines, Ia. (WHO), 5 kw.       |
| 526   | 570 | Chicago, Ill. (KYW), 2.5 kw.       |
| 526   | 570 | Chicago, Ill. (KFXX), 2.5 kw.      |
| 508.2 | 590 | Omaha, Neb. (WOW), 1 kw.           |
| 499.7 | 600 | San Antonio, Tex. (WOAI), 5 kw.    |
| 499.7 | 600 | Fort Worth, Tex. (WBAP), 5 kw.     |
| 491.5 | 610 | New York, (WEAF), 50 kw.           |
| 491.5 | 610 | Portland, Ore. (KGW), 1 kw.        |
| 483.6 | 620 | Berrien Spgs., Mich. (WEMC), 1 kw. |

| M.    | Kc.   | Station                           |
|-------|-------|-----------------------------------|
| 483.6 | 620   | Chicago, Ill. (WCFL), 1.5 kw.     |
| 475.9 | 630   | Atlanta, Ga. (WSB), 1 kw.         |
| 468.5 | 640   | Los Angeles, Cal. (KFI), 5 kw.    |
| 461.3 | 650   | Shenandoah, Ia. (KFN), 2 kw.      |
| 454.3 | 660   | Bound Brook, N.J. (WJZ), 30 kw.   |
| 447.5 | 670   | Seattle, Wash. (KFOA), 1 kw.      |
| 440.9 | 680   | Detroit, Mich. (WJR), 5 kw.       |
| 440.9 | 680   | Detroit, Mich. (WCX), 5 kw.       |
| 428.3 | 700   | Cincinnati, O. (WLW), 5 kw.       |
| 422.3 | 710   | Newark N.J. (WOR), 3.5 kw.        |
| 416.4 | 720   | Chicago, Ill. (WLIB), 1.5 kw.     |
| 405.2 | 740   | Minneapolis, Min. (WCCO), 5 kw.   |
| 399.8 | 750   | Cleveland, O. (WTAM), 3.5 kw.     |
| 394.5 | 760   | St. Col., N.M. (KOB), 5 kw.       |
| 389.4 | 770   | Chicago, Ill. (WBMM), 5 kw.       |
| 384.4 | 780   | Oakland, Cal. (KGO), 5 kw.        |
| 379.5 | 790   | Schenectady, N.Y. (WGY), 50 kw.   |
| 374.8 | 800   | Davenport, Ia. (WOC), 5 kw.       |
| 361.2 | 830   | Cincinnati, O. (WSAI), 5 kw.      |
| 348.6 | 860   | Seattle, Wash. (KJR), 2.5 kw.     |
| 344.6 | 870   | Chicago, Ill. (WLS), 5 kw.        |
| 344.6 | 870   | Zion, Ill. (WCB), 5 kw.           |
| 336.9 | 890   | Nashville, Tenn. (WSM), 5 kw.     |
| 333.1 | 900   | Springfield, Mass. (WBZ), 15 kw.  |
| 325.9 | 920   | Denver, Colo. (KOA), 5 kw.        |
| 319   | 940   | Council Bluffs, Ia. (KOLL), 5 kw. |
| 319   | 940   | Lincoln, Neb. (KFAB), 5 kw.       |
| 315.8 | 950   | Pittsburgh, Pa. (KDKA), 60 kw.    |
| 309.1 | 970   | New York (WABO), 2.0 kw.          |
| 305.9 | 980   | Chicago, Ill. (WIBO), 5 kw.       |
| 305.9 | 980   | Chicago, Ill. (WHT), 5 kw.        |
| 299.8 | 1000  | St. Louis, Mo. (KMOX), 5 kw.      |
| 285.5 | 1050  | Baltimore, Md. (WBAL), 5 kw.      |
| 285.5 | 1050  | Boise, Idaho (KFAU), 2 kw.        |
| 282.8 | 1060  | Columbus, O. (WAIU), 5 kw.        |
| 280.2 | 1070  | Rochester, N.Y. (WHAM), 5 kw.     |
| 275.1 | 1090  | Chicago, Ill. (WTAS), 3.5 kw.     |
| 272.6 | 1100  | Atlantic City, N.J. (WPG), 5 kw.  |
| 265.3 | 1130  | Ames, Ia. (WOD), 2.5 kw.          |
| 265.3 | 1130  | San Antonio, Tex. (KTSB), 2 kw.   |
| 263   | 1140  | Mt. Prospect, Ill. (WJAZ), 5 kw.  |
| 260.7 | 1150  | Spokane, Wash. (KGA), 2 kw.       |
| 256.3 | 1170  | Muscatine, Ia. (KTNT), 2 kw.      |
| 252   | 1190  | Batavia, Ill. (WORT), 5 kw.       |
| 252   | 1190  | Chicago, Ill. (WOK), 5 kw.        |
| 252   | 1190  | Homewood, Ill. (WBBB), 5 kw.      |
| 247.8 | 1,210 | Miami Beach, Fla. (WIOD), 1 kw.   |
| 239.9 | 1250  | Portland, Ore. (KEX), 2.5 kw.     |
| 228.9 | 1310  | Fort Wayne, Ind. (WOWO), 2 kw.    |
| 202.6 | 1480  | Mt. Vn. Hills, Va. (WTFP), 10 kw. |
| 202.6 | 1480  | Gainesville, Fla. (WHBN), 5 kw.   |

## CANADA.

| M. | Kc. | Station |
|----|-----|---------|
|    |     |         |



**Canning  
Town Floods  
fail to harm Adico**

Read this astounding unsolicited testimonial:—  
(Original can be seen on application.)

"I bought a 60v. ADICO on December 27th, 1927, and used it regularly until the floods, when the battery was standing in seven to eight inches of water. In fact, the cardboard and paper covering fell off when I picked it up after the floods subsided. I stood it away to dry. It has since been working again for 6 days on a 3-valve set, and it shows 50v. under load.  
"Thanking you for a really good battery."  
"A.E.M., Canning Town. 18.1.28."

**POSITIVELY THE FINEST  
VALUE IN THE WORLD**

And this from the wireless expert of one of the leading London dailies:—  
(Original can be seen on application.)

"I have to acknowledge receipt of one 60-volt H.T. battery for testing purposes. Under normal conditions of working I find this gives a very silent and steady H.T. supply, and is thoroughly satisfactory in every way. I will certainly bring it to the notice of those raising questions of inexpensive batteries."

**60v. 7/6. 100v. 12/6.**

**ADICO  
BATTERIES**

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Every day brings us fresh news of the splendid achievements of Fellows Premier Sets.

They are amazingly selective and powerful, exceptionally reasonable in price, and *wonderfully easy to operate.*

Stations simply tumble in, one after the other, all round the dial.

Prices, including Royalty, Valves and all Batteries:—  
**Cash Price (in oak).**

|                  |                  |                  |
|------------------|------------------|------------------|
| Premier 3 Valve. | Premier 4 Valve. | Premier 5 Valve. |
| <b>£11 6 0</b>   | <b>£15 16 6</b>  | <b>£20 17 6</b>  |

Mahogany 25/- extra.

Or 12 Monthly Payments of:

**Oak**

|               |               |                |
|---------------|---------------|----------------|
| <b>£1 1 0</b> | <b>£1 9 6</b> | <b>£1 18 9</b> |
|---------------|---------------|----------------|

**Mahogany**

|               |                |               |
|---------------|----------------|---------------|
| <b>£1 3 3</b> | <b>£1 11 9</b> | <b>£2 1 0</b> |
|---------------|----------------|---------------|

Extra Pair Tuning Units 500-1,200 Metres 11/-.

Hear one of these splendid sets demonstrated at any of our branches.  
Our beautiful fully illustrated catalogue free on request.

Please send me, on 7 days' approval, a Premier  $\frac{3}{4}$  Valve  $\frac{5}{5}$

Set, in  $\frac{\text{Oak}}{\text{Mahogany}}$  for which I enclose full cash price of  $\frac{\text{1st instalment}}{\text{1st instalment}}$  of  
£ s. d.

It is clearly understood that, should I decide to return the set undamaged at the end of 7 days, I incur no obligation whatever.

Name .....

Address .....

Branches where these sets can be obtained:—

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- BIRMINGHAM: 248, Corporation Street.
- BRIGHTON: 31, Queen's Road.
- BRISTOL: 38, Narrow Wine Street.
- CARDIFF: Dominions Arcade, Queen Street.
- GLASGOW: 4, Wellington Street.
- LEEDS: 65, Park Lane.
- LIVERPOOL: 37, Moorfields.
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WIRELESS**  
PARK ROYAL, LONDON,  
N.C. 143. N.W. 10.



# SILENCE!

Clear reception at long distance depends largely on the background provided by your H.T. Battery. The "mush," the crackle, the distortion—are all caused by Internal Resistance—*Internal Resistance choking your battery.* Buy the "Regenerator," the battery with the smooth silent discharge—the battery which is never choked by Internal Resistance.

|     |  |      |
|-----|--|------|
| 54  | Volts with lead for grid bias ....(Post 6d.) | 6/-  |
| 60  | Volts tapped every 3 volts ....(Post 9d.)    | 6/3  |
| 108 | Volts tapped every 6 volts .....(Post 1/-)   | 11/- |
| 9   | Volt grid-bias .....(Post 3d.)               | 1/3  |

Please use this coupon when ordering your "Regenerator." It will ensure that your order will receive immediate attention.

To Fellows Manufacturing Co., Ltd., Park Royal, N.W. 10.  
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for which I enclose .....

Name .....

Address .....

## FELLOWS WIRELESS

PARK - ROYAL, LONDON, N.W. 10

For full list of branches, see page 295.

M.C. 109.

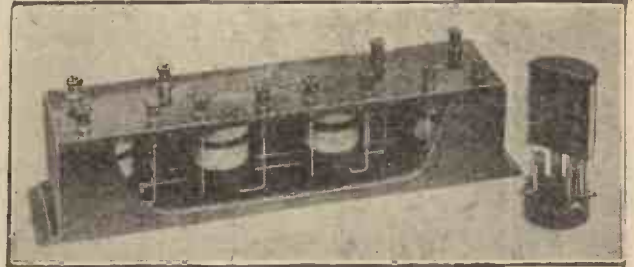
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BRITISH MADE RADIO

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Will receive ANY STATION at will, not by accident, including AMERICAN and AUSTRALIAN, at good loud speaker strength. NOTE.—2 TUNING CONTROLS ONLY.

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The "Liberty" will give you continuous tuning from 10 to 3000 metres, and in this respect is unique in the world's wireless components.

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Unit Complete with long wave Oscillator 750/3000, medium Oscillator 250/800, short wave Oscillator 10/200, and Oscillator holder,

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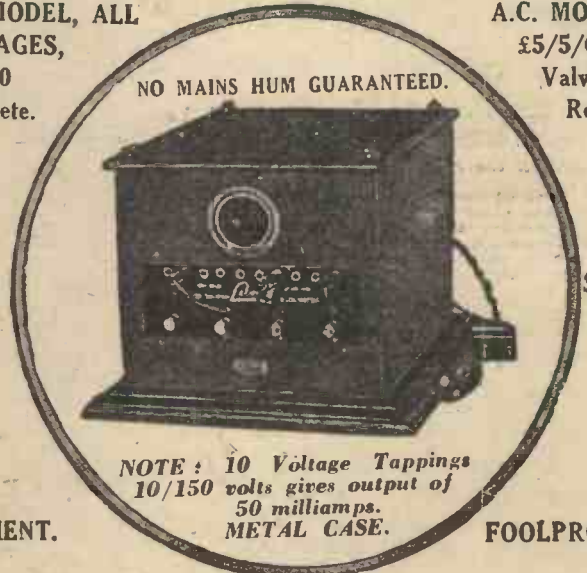
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D.C. MODEL, ALL VOLTAGES, £2/5/0 Complete.

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SILENT



NOTE: 10 Voltage Tappings 10/150 volts gives output of 50 milliamps. METAL CASE.

EFFICIENT.

FOOLPROOF.

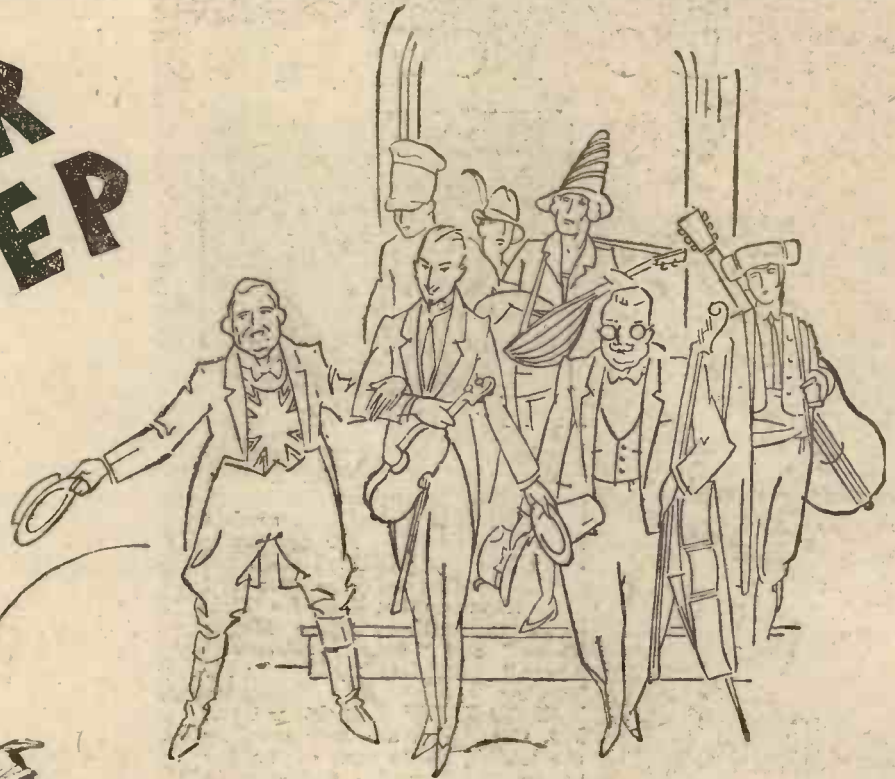
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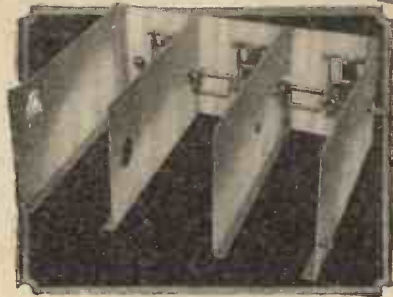
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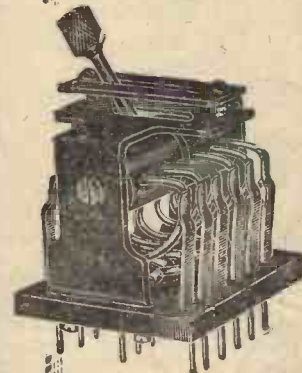
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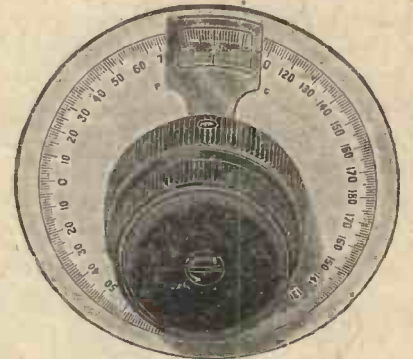
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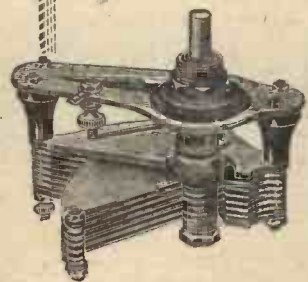
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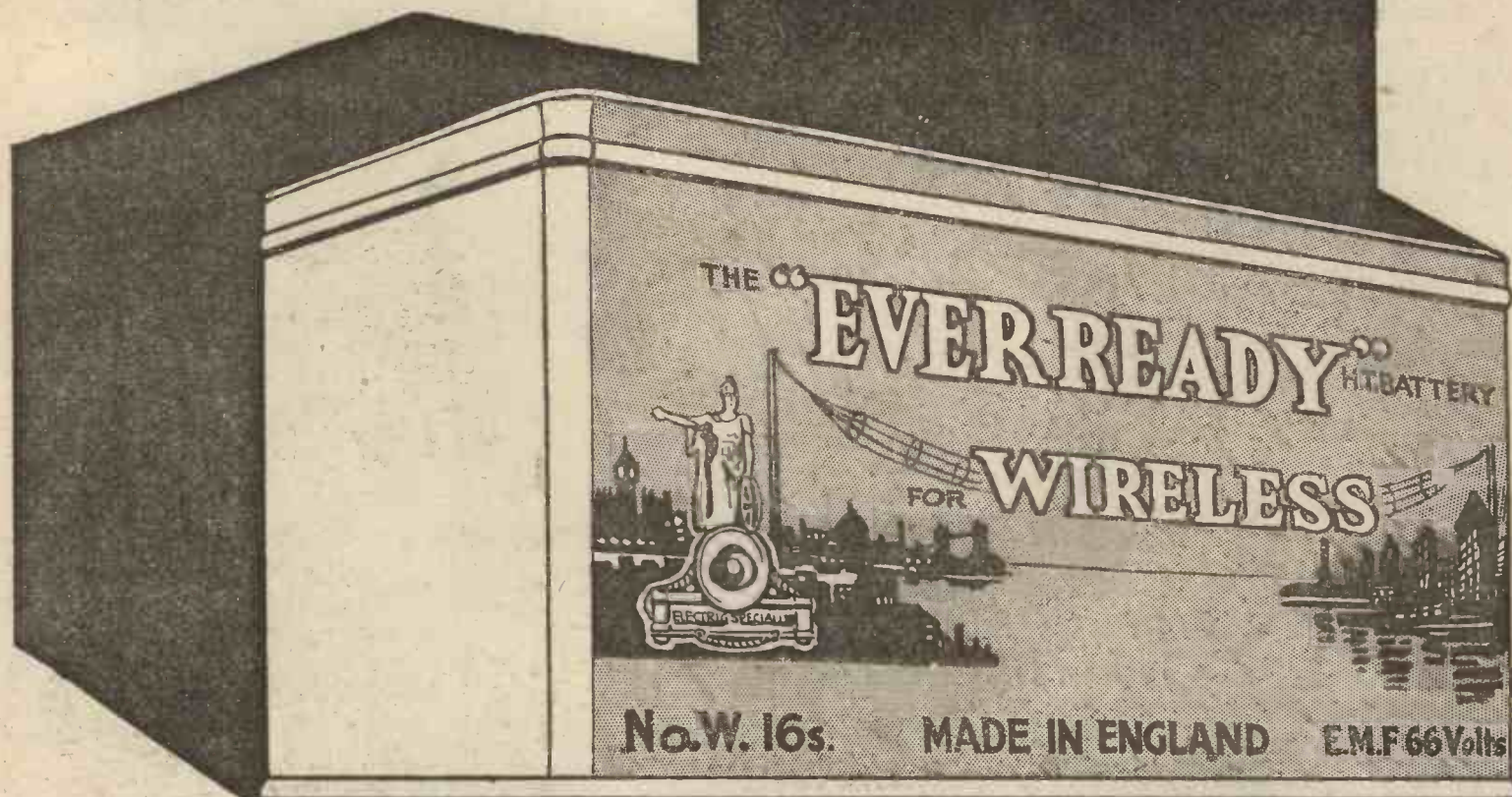
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