



Vol. VI. No. 138.

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FRIDAY, MARCH 16, 1928.

Two Pence.

## WORLD-RADIO

Station Identification Panel

Königswusterhausen (Zeesen).  
Germany

(Revised)

Wavelength : 1250 m. Frequency :  
240 kc. Power : 35 kw.

Approximate Distance from London :  
575 miles.

Call : "Achtung! Achtung! Hier die  
Deutsche Welle, Berlin-Königswus-  
terhausen." (Sometimes wavelength  
given : "... auf Welle zwölf hun-  
dert und fünfzig," when call re-  
peated.) When relaying : "Ferner  
Übertragung auf" ... (name of  
relaying stations).

Interval Signal : Metronome. Forty  
beats in ten seconds.

Interval Call : "Achtung! Königs-  
wusterhausen. Der Vortrag von  
[name of lecturer] über [title of  
lecture] ist beendet. Auf Wieder-  
hören in ... Minuten." When  
relaying : "Auf Wiederhören für  
Königswusterhausen in  
Minuten ; für Breslau und Gleiwitz  
[or as the case may be] nach eigenem  
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Closes down at the same time as the  
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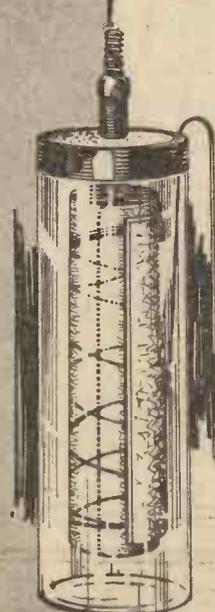
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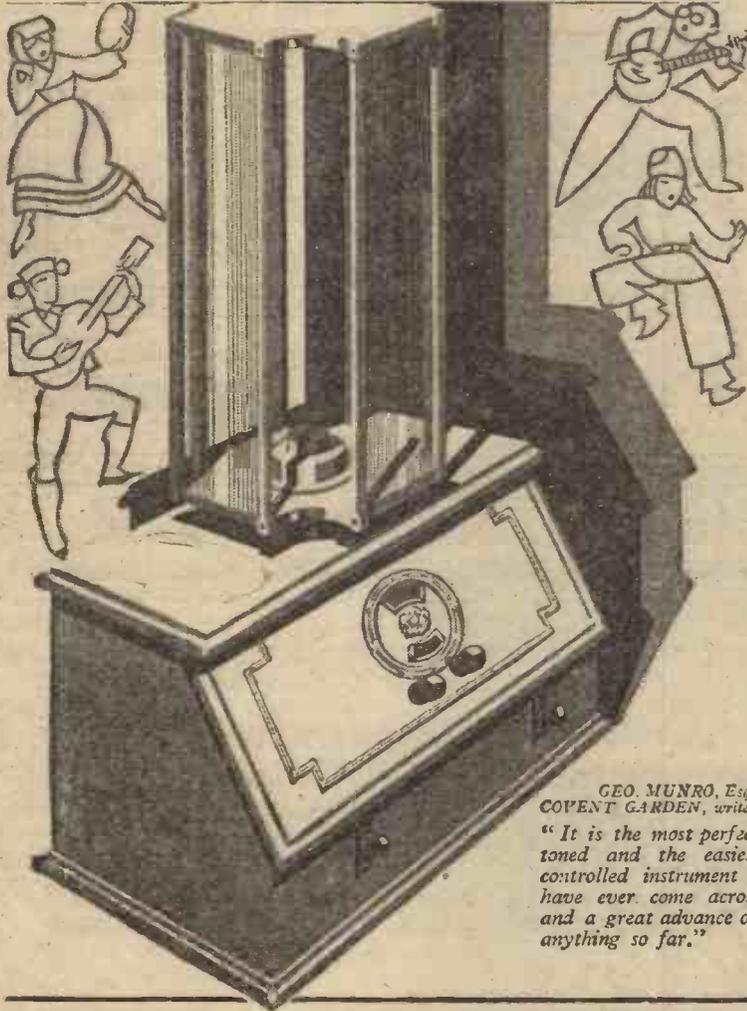


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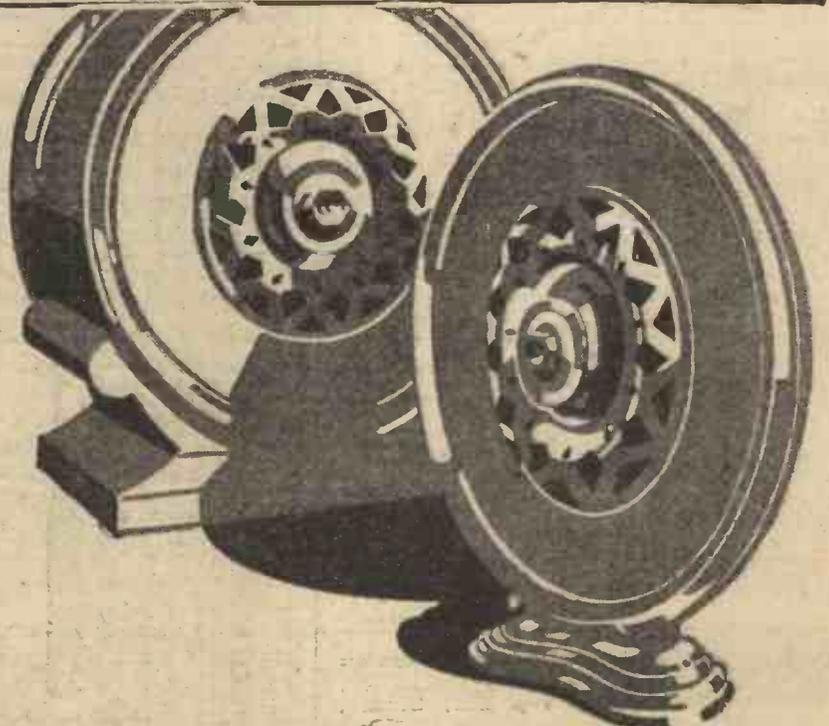
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# WORLD-RADIO

Vol. 6. No. 138.

FRIDAY, MARCH 16, 1928.

Two Pence.

From the Right Hon. H. M. Pollock, D.L., M.P., Minister of Finance for Northern Ireland.



The Right Hon. the Viscount Craigavon.

In the absence of our Prime Minister, Lord Craigavon, it is my pleasing duty to convey through the medium of the "Irish" issue of *World-Radio* very cordial greetings from the Government of Northern Ireland.

We in Ulster pride ourselves on our close connection with the United Kingdom, of which our province is a federal State. As such, we do not possess complete autonomy since certain services of general application over the whole

of the United Kingdom remain under the control of the Imperial Parliament. Of these "Reserved Services," the Post Office is one of the most important, and so it was fitting that in August, 1924, the British Broadcasting Co., Ltd., over which the Postmaster-General, even at that time, had certain powers of control, should have established in Northern Ireland a studio and transmitting station. The transfer of the company's assets to the British Broadcasting Corporation on January 1, 1927, brought the undertaking even more under the aegis of the Imperial Government.

The fact that the Government of Northern Ireland exercises no direct control over broadcasting in Ireland places me in the happy position of being able frankly, and without reserve, to express my views on the subject.

Our province cannot be likened to the Valhalla of wireless engineers. In the first place, it is mountainous, and, of course, it is a well-known fact that mountains frequently interfere with wireless waves and so cause difficulties in reception in certain localities. Moreover, a large proportion of the total population is concentrated in Belfast and its suburbs, and as this industrial area is on the coast at some distance from the geographical centre of the province, it is difficult to arrange a satisfactory broadcast service for the whole territory.

When both of these negative factors are considered, I cannot help feeling that the B.B.C. is to be congratulated on the success with which it has tackled the problem up to the present. More-

## Northern Ireland

over, I understand that within the course of the next few years there is every chance of our present station being replaced by one of considerably higher power. This is part and parcel of the scheme of general reorganisation known as the "Regional Scheme." When this new development comes into being, there is little doubt that reception in the more-remote areas of our province will be very greatly improved, with the result that the cost of maintaining wireless receiving apparatus in these areas will be reduced.

The value of this broadcasting service to those responsible for government is in ordinary circumstances not quite so obvious as is the case during abnormal times. When one considers the condition existing under a state of national emergency, such as existed in 1926, as a result of the General Strike, it is impossible to say how we should have fared without the aid of wireless, but I am convinced that the risk of a national disaster would have been considerably greater than it actually was had not every man and woman in the United Kingdom been kept informed in a clear, concise and cool-headed manner of the progress of

events, and of the emergency measures adopted to meet them. For this service alone, broadcasting deserves to be universally recognised as an asset of incalculable value.

In normal times the true value of a broadcasting service to the community must necessarily depend to a very large extent on the way in which it is handled, and it seems to me that the matter at present being transmitted into the homes of our people is the outcome of a practical and sincere idealism. In this connection, the nation could not have chosen a better man to manage its broadcasting affairs than Sir J. C. W. Reith, the Director-General of the B.B.C.



The Right Hon. H. M. Pollock, D.L., M.P.

His wonderful personality, lofty ideals, tenacity of purpose, and sound business acumen have made him equal to the task.

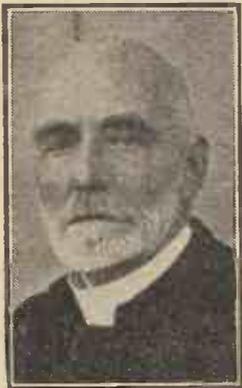
The educational possibilities of wireless are almost unlimited, and I observe with great satisfaction that the corporation is taking pains to develop them. I am informed that in many districts the loud-speaker has become a *sine qua non* to the training of the child mind. A few schools in the north of Ireland are already equipped with receiving apparatus, and it is to be hoped that in the near future the practice will become more general throughout the province. The youthful imagination cannot fail to be stimulated and the outlook widened by this new means of contact with the nation's greatest

teachers. In the realm of general culture the effect of broadcasting is already showing itself, but it may take another twenty years before we realise the full force of its influence on the nation. A live appreciation of good music, drama, and literature is being created where it never existed before; intellectual interests are being stimulated in the home; news is disseminated in country districts beyond the effective scope of the daily papers, and the consolation of religion is brought to the homes of the aged and the sick, who, through infirmity, are unable to attend Divine worship. Our culture is advancing with more rapid strides than ever before, and, though due credit must be given to other organisations for their share in the movement, we must recognise in broadcasting the greatest civilising influence of the age.



An aerial view of Belfast, showing the City Hall in the centre.

### A Message from the Rt. Rev. the Lord Bishop of Down, Connor and Dromore.



Right Rev. the Lord Bishop of Down, Connor and Dromore.

I am glad of this opportunity of paying to the B.B.C. a tribute for all they are doing to advance by their wireless communications the moral tone of the community.

When "wireless" was first brought within our reach there was not unnaturally some anxiety felt as to its effect upon the character of society. It was felt that here, in this invention, was a new and powerful factor that

would deeply influence for good or ill; and not until it was known what was the attitude to be adopted towards moral and spiritual questions could uncertainty be removed. I do not know who at the beginning was responsible for the attitude which was then adopted and has been so loyally continued; but I do know that the various branches of the Christian Church and the many organisations that are interested in the uplifting of our social life have long since felt their anxieties removed, and now feel under a deep debt of gratitude to the B.B.C. for the high tone and moral helpfulness of all that is broadcasted.

Some doubt was felt at first also regarding the wisdom of broadcasting religious services on Sundays. Would religions thus be made too cheap? Would people be tempted to lounge in their chairs while listening to worship instead of going to church, and would the numbers attending divine service thus be lessened? Such fears have, I believe, been found to be quite groundless. Not only is the gain to those who cannot attend church been very great; but also it is recognised that even listening to divine truth at home may bring the careless face to face with what had been forgotten, and might cause them as they listen to leave their chairs and fall upon their knees and ultimately to become obedient to the call of "not forsaking the assembling of themselves together." The inherent power of truth safeguards itself.

In conclusion may I again thank the B.B.C. for the good work it is doing towards strengthening the moral character of the community and remain, with all regards, yours very sincerely,

CHARLES T. P. DOWN,  
Bishop.

Bishop's House, Antrim Road, Belfast.  
March 2, 1928.

one large family—it has put them in living touch with all parts of the British Isles, and I believe the time is not far distant when contact with Europe, our distant Dominions and possibly the whole world will become to us a daily experience, thus enlarging and strengthening the bond of friendship and citizenship.

As the Announcer in closing the programme says "Good Night Everybody," so, in concluding these few observations, I wish with all my heart the Belfast Station continued and ever-increasing success.

W. G. TURNER,  
Lord Mayor.

### From the Rt. Hon. the Lord Mayor of Belfast, The Rt. Hon. Sir W. G. Turner, D.L.

As Lord Mayor of Belfast, I had the honour of presiding at the formal opening of the Belfast Broadcasting Station on March 24, 1924, when the ceremony was performed by his Grace the Governor of Northern Ireland, in the presence of a large and distinguished company.

Since then, I have followed, with pleasure and interest, the progress of wireless in our midst. The advance has been steady and gradual until at the present time wireless has reached a high state of efficiency.

Four years ago the broadcast installation came to us as a very welcome visitor; it is now an established institution which cannot be done without.

We are very fortunate in having a broadcasting Station in Belfast, and as evidence of our appreciation of it, I might point out that in this city there are about 22,000 holders of licences. It is interesting to know that in 1924 the number was 13,278; 1925, 16,510; 1926, 21,400; and now the number, as I have stated, is 22,000.

The Belfast station has been a real boon to innumerable homes. Family circles have been cheered and brightened and many social parties have been lifted out of the commonplace into an atmosphere of delight and happiness. During the week we have the privilege of listening to varied and interesting music; topical talks; eloquent speeches; educational addresses and religious services—all of which have inspiring and elevating influences. We can always listen with the utmost confidence that there will be nothing to offend our susceptibilities. Everything that reaches us is calculated to inform, to instruct, and to amuse.

Whether on valve or crystal set, the reception in Belfast is invariably good, and when any slight fault does occur, the listeners are so impressed by the desire of those at the local station to do their best, that they usually attribute imperfections to "atmospheric pressure." In the evenings especially, the voices through the wireless are frequently as clear as a bell, and everything transmitted to us is heard clearly and distinctly.

I am sure that wireless will always be regarded as one of the world's greatest achievements, and in no city has it more faithful devotees than in Belfast. All the advantages and benefits promised at the inauguration of the station have been fully realised, and I feel that the citizens may congratulate themselves on having a first-class station organised and equipped on the most up-to-date lines and run by an able director and obliging staff, with the result that the broadcast gives complete satisfaction.

In my opinion, wireless is fulfilling its high destiny here. It has brought the people of Belfast and of Ulster more closely together as

(Continued at end of col. 1.)

(Continued from Page 385.)

times it now exceeds 12,000, with a weekly wages bill of over £20,000. Among this mass of stocks and gentries, the "Britannic," "Olympic," "Baltic," "Oceanic," "Majestic" and other ocean monsters were born. Down these slips slid the gigantic "Titanic," which was to meet with such a tragic end on her maiden voyage.

Belfast not only possesses the world's greatest shipyard, but the largest linen mill, the largest ropeworks, the largest tobacco factory and the largest distillery. The peculiar merit of Irish whisky has been so often proclaimed in poetry and in prose that the point need not be emphasised here. It is enough to say that for 300 years distilling has been one of the typical industries of the province. The course of distilling in the North of Ireland has been by no means smooth. In the seventeenth and the early eighteenth centuries, Excise officers were perpetually searching for illicit stills, which were given short shrift when they were found. To carry on their trade at all, the illicit distillers often sought out the wildest and most remote parts of the country, and it is surprising that they could have found either the means of producing whisky or an opportunity of disposing of it. Yet with all the restrictions to which they were subject, the old North of Ireland "poteen" men must have done a good trade, for a considerable quantity of it was smuggled away. One of the North of Ireland's famous whisky concerns to-day occupies a site which was once the scene of the manufacture of smugglers' whisky.

Strangely enough Ulster is nearly as famous for its non-intoxicating beverages as for its whisky. Large quantities of aerated water are made in Northern Ireland and exported all over the world.

Belfast is renowned for the textile machinery which is made there, and the versatility of this city's commerce would be even more striking were it possible to give a list of its many other activities. One instance must suffice. There is no natural connection between a far-off city and the preparation of tea for the world's market. But in point of fact the greater proportion of the tea grown in India, Ceylon and China is dried and otherwise treated in devices invented and made in Belfast.

Ulster has been the home of many important inventions which have led to the advancement of the world's knowledge and civilisation.

The pneumatic tyre, for instance, which superseded the old solid tyre or "bone shaker" was first thought of by an Ulsterman. His invention converted the bicycle into a vehicle which could be ridden with both speed and comfort. Prior to the introduction of the pneumatic tyre the cycle industry was a very small one, but afterwards it grew to immense proportions and spread all over the globe. It is perhaps unfortunate that Ulster did not benefit more directly from Mr. Dunlop's invention.

Ulster is not rich in mineral wealth, although some coal and salt are mined in Tyrone and iron ore in Antrim. In view of the practical non-existence of coal and iron in Ireland, it is amongst the most extraordinary of economic phenomena that Ulster manufacturers have been able, not merely to exist, but to maintain their position of relative equality with those of the most favoured island.

It is announced that five new stations are to be erected in Italy—namely, in Genoa, Turin, Rome, Trieste, and Palermo, working on powers of 1.5, 5, 25, 7 and 3 kw. The stations in Genoa and Turin are expected to be ready in 1928, the new Rome station in 1929, and the two stations in Trieste and Palermo in 1930. Italy is also to have a high-power station. Transmissions from the old broadcasting station of Milan, wavelength 315.8 m. were discontinued on February 12.

# Industrial Ulster

By CLIFFORD R. CARTER

**S**TRANGERS generally visualise Ulster as a dark country covered with mills, factories, and smoke, and are invariably surprised when they discover the rural beauty of the Imperial province. It is a far cry from Belfast with its clang of riveters and clatter of looms to the reed-fringed and bird-haunted silence of vast Lough Neagh.

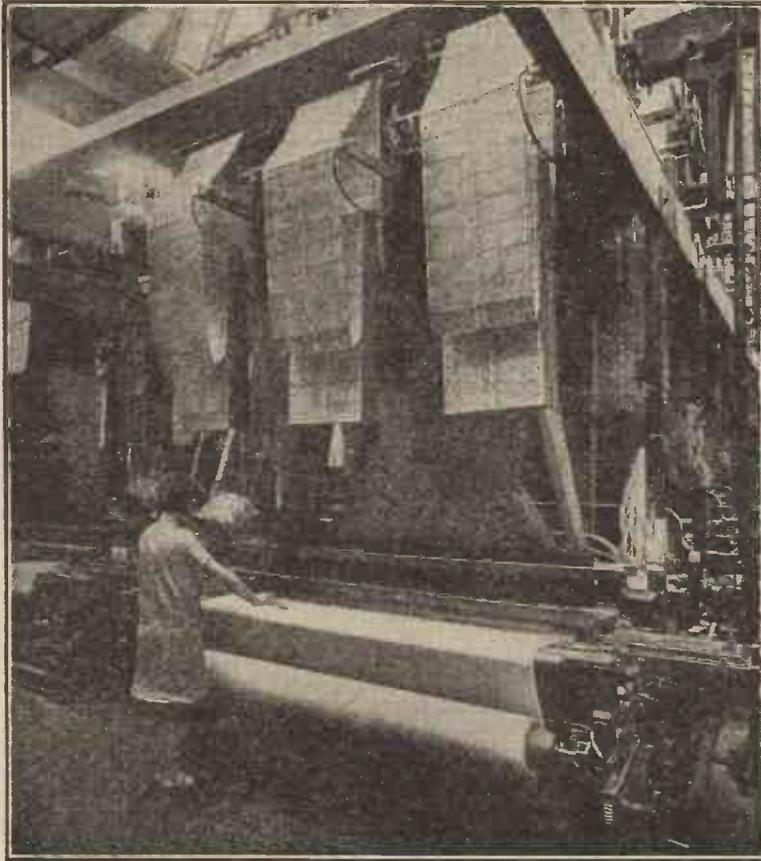
Ulster's three staple industries are agriculture—which employs more than all the other industries combined—shipbuilding, and linen. Agriculture is the main occupation of the people outside the great industrial cities of Belfast and Londonderry, not forgetting such flourishing townships as Newry, Portadown, Lurgan, Lisburn, Ballymena, Coleraine, and Strabane.

One of the most curious sights to strangers visiting the province for the first time is the white linen stretched out to bleach, which covers the green meadows. From the train the traveller will see field after field, white as snow with bleaching webs, which will remind him that Ulster is the home of the linen trade.

This important industry is of very ancient origin here, and is said to have flourished as early as the thirteenth century. The trade was greatly improved at the end of the seventeenth century, when Huguenots, fleeing from France, settled in Northern Ireland in large numbers. These people, chief among whom were the Crommelins, were very highly skilled linen workers who placed the Ulster industry on a sound footing and started it on its prosperous career. The development of the power loom and spinning machinery gave another great impetus to the Ulster linen trade, which has now attained vast proportions.

There were once numerous cotton mills in Ireland, and in the eighteenth century the industry thrived in Ulster. The first steam engine in Ireland—about 1800—was erected near Belfast, and was used to drive the spindles of a large cotton mill. At this period the cotton industry of Ulster greatly exceeded the linen trade in importance, but after thirty years of comparative prosperity it began to decline, and when the spinning of flax by machinery was introduced it fell rapidly into decay, the American Civil War in the late 'sixties being one of the determining factors in its final extinction. To-day linen is king of "Linenopolis."

Within and around modern Belfast are the greatest linen concerns in the world. Table linen, diapers, cambrics, lawns, sheetings, thousands of miles of linen thread, and, in fact, everything that can be made from spun flax, emanates from the factories of the city, the district, and the neighbouring towns. Lurgan, Banbridge, Portadown, Randalstown, Bessbrook, Newtownards, and



Weaving Linen Damask in Ulster.

[Photo. Hogg, Belfast.]

Ballymena deserve special mention. In fact, any industrial map covering the counties of Antrim, Down, Armagh, and Londonderry conveys exactly the same impression of an all-pervading activity as does one of Manchester and its surrounding districts.

The Ulster linen trade proved its value to the Empire at the time of its direst need. Lord French said that "the War was won on Belfast wings," for Belfast provided the bulk of the aeroplane linen for those machines which proved of such service to us in maintaining mastery

in the air. While not so obvious or spectacular as the construction of battleships, guns, or explosives, the provision of clothing and footwear for our soldiers and sailors, tents, cloth, and thread was indispensable. When the Government expressed the desire to have an output of one and a half million yards of aeroplane cloth per week, it was considered an impossibility, but the energy of Ulster manufacturers accomplished the impossible. In 1917 the output was 574,000 yards per week. In October, 1918, 1,662,750 yards were produced in one week.

Belfast, the centre of the linen trade, owes its prosperity to the fact that economically it does not put its eggs into one basket.

Thus, while shipbuilding provides occupation for the male section of the population, spinning, weaving and the associated trades give employment simultaneously to their feminine folk. The manufacture of handkerchiefs, shirts, collars, cuffs, blouses, etc., gives employment to an army of Belfast girls and women in stitching, embroidering, folding, and laundering.

One hundred years ago Belfast was a tiny town on the mud banks of the Lagan. To-day, it is the capital of Ulster and the first commercial city in Ireland. The valuation in 1841 was £135,000; to-day it is £1,817,727. The change is, indeed, marvellous. No other city in Ireland, or perhaps even in the United Kingdom, has made such rapid progress from utter insignificance to considerable importance. Within living memory most of the older streets have been rebuilt and widened where necessary, and great buildings

have replaced small and irregularly built houses.

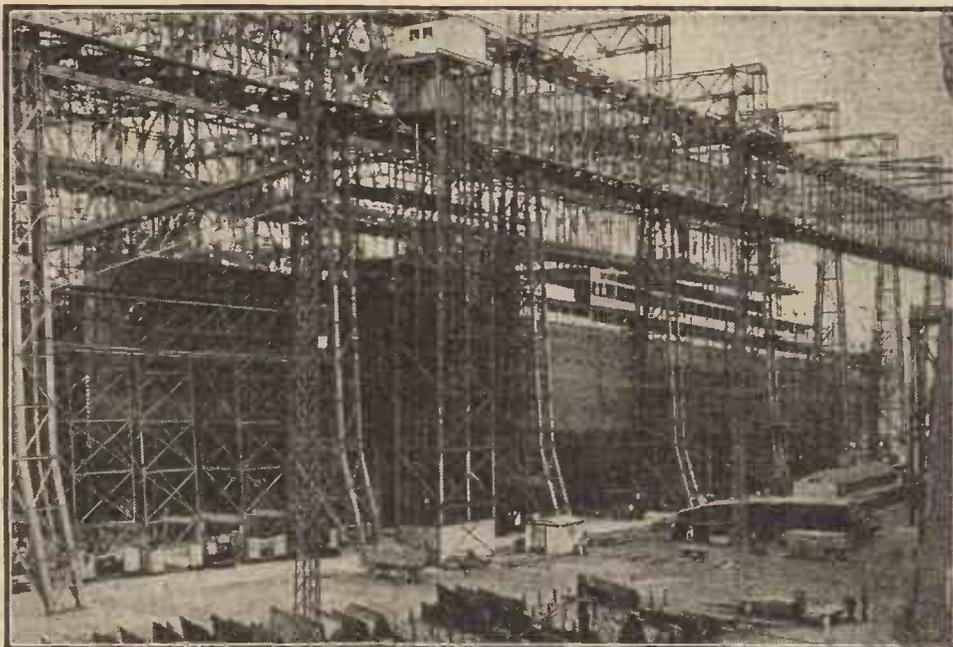
The city's centre was made out of a marsh and the substratum of almost the whole of the business portion of Belfast consists of about 30 feet of river mud, so that when a large building is to be built, it is found necessary to drive by steam-piling engines many hundreds of piles 40 to 50 feet long through this substratum into the solid clay, to obtain a sound foundation. Courses of heavy timber are then bolted on top of the piles, and each course filled in with cement.

In this way as much money is sunk underground as is spent on the upper structure.

The atmosphere of Belfast, except during dark winter days, is singularly clear and smokeless and quite unlike that of Manchester or Sheffield for instance. In consequence it has a brighter and more animated appearance than is common with busy and industrial towns.

Strictly speaking, Belfast has few fine buildings, and, perhaps, its most imposing structures are those vast fabrics which rise in the dockyards; giant ships which are marvels of symmetry and strength. Here is the greatest shipyard in the world. From 100 hands at the commencement, the number of employees of this one establishment has increased until in busy

(Continued on page 384.)



An Ulster Shipyard: s.s. "Doric" on the Stocks.

# Folklore and Broadcasting

By RICHARD HAYWARD, F.R.S.A. (Ire.)

With two illustrations by J. HUMBERT CRAIG, A.R.H.A.

WE are fortunate, in Ireland, in our possession of a vast and beautiful background of legend and tradition, a background that reacts powerfully upon the daily lives of our people, however little some of them may know it. The old heroic stories and cycles, and the ballads and come-all-ye's of the countryside, have woven themselves inextricably into the fabric of our common life, and there is not living an Irish man or woman of any sensibility who does not feel a kind of remote enlargement of being at their recital. . . . a moving across to some world of half-pagan colour and texture, peopled by gods and demi-gods, fairies and leprechauns; enshadowed by the great mass of some age-old fort or dun; and perchance strewn with the white blossoms of a fairy thorn, or pervaded by its heavy unforgettable fragrance.



H. Richard Hayward.

These old heroic legends have formed the raw material of all that is best and most distinctive in Irish literature, and although some of them are of immemorial age, others are comparatively modern; but all have one great quality in common—the quality of supreme narrative. They grew, I have no doubt, out of actual happenings, and the oldest versions are but bare skeletons of plot-interest intended for the use of the poets and bards and story-tellers of the years to come. And with what a fine gusto did these story-tellers address themselves to their labours. Their powers of invention and narrative are made manifest by the diverse and beautiful forms of one central legend which happily has come down to us through the years of strife and upheaval and change . . . surprisingly come down to us through the stormy eventful years. But the Irish always loved a good story and a good story is the very thing one would expect them most lovingly and faithfully to preserve.

In Ancient Ireland there was no system of writing except the cumbersome Ogham, and that appears to have been used only for memorial purposes; certainly for the inscription of tombstones and monuments—possibly (in this case cut on a stick) for the transmission of important State messages to distant parts of the country. But all culture was handed down

orally from generation to generation, and the scholastic system was highly complicated and not at all lacking in completeness. History seems to have been the principal subject of education in those days, and it was taught in the very form of those legends and stories which we are now discussing. The average boy would know several hundreds of these stirring and lovely stories by heart, and one can well imagine the stimulus to a youthful awakening imagination afforded by these tales of national heroism, devotion and endurance.

In this verbal manner was Irish history preserved until the advent of Christianity and the Roman alphabet, when the monkish and secular scholars, becoming aware of the value of their ancient national literature, collected together great masses of legends, stories, poems, songs and genealogies, and set them down in immense books with, it must not be overlooked, such alterations and suppressions as would render the Pagan tellings inoffensive to the Christian ear. But one must not be too hard on the monks for a very human and understandable discretion, because without their pious compilations many of these marvellous old tales must of necessity have perished and vanished for ever from the memory of man.

With the introduction of Christianity conditions of life in Ireland changed very rapidly and very markedly. The system of oral education completely disappeared. But the habit lingered and is with us to this day, and it is yet possible, in the remoter parts of our island, to take down fragments of song and story from the not too easily persuaded lips of the older peasant folk. Many a pleasant hour have I spent in this way, especially when I was collecting material for my "Anthology of Ulster Songs and Ballads." Perhaps the little country public-house is the ideal place for the collection and study of these old songs and stories, for there the lips and heart of the narrator can the more surely be coaxed.

I have remarked on the skeletal form of the older legends; a form devoid of ornament or embellishment of any kind; a bare and simple recital of the main facts of the story. But when history was being declaimed at a public gathering, or before the High King, the bard or story-teller would clothe the rough skeleton of his memorised history with whatever flesh and blood and colour and ornament his individual genius afforded, and the eloquent inventive bard was a man greatly honoured in the ancient land of Ireland.

Given this background of legend and tradition—this immensely powerful atmosphere that pervades Irish thought and life—is it not obvious that a wide field opens out before the broadcast dramatist? A few well-chosen words call into being a vast other-world of half-lights and half-shadows; a significantly written play creates afresh a whole cultural epoch . . . an entire and complicated civilisation. It was thoughts such as these that led me to seek some of the Ulster stories that might submit

and bend themselves to the rigid discipline of the radio dramatist, and I found them in plenty. The first one I used dealt with the celebrated Ulster champion, Cuchulainn—a warrior of the wisdom and endurance of Ulysses and of the courage and feats of Achilles. I took only the bare skeleton of the legend and in the manner of the ancient bards clothed it with whatever seemed proper and fitting to my mind. The story is dramatic enough. Cuchulainn is resting in his dun at Dundualgan (the modern Dundalk in the County Louth) after his victorious battle with Queen Maeve of Connacht and the united hosts of Ireland. He is sitting at table with his wife, Emer, and his King, Conor, feasting and talking pleasantly. A ship approaches the land "and it is a fine ship like the ship of a king," and a young warrior is seen to be in the place of command. He is a stranger, and immediately the King orders forth one of his champions to question the young man courteously about his country and his business in Cuchulainn's land of Muirthemhne. The stranger leaps ashore and before the astonished eyes of the three feasters engages his questioner in combat and slays him with a magnificent feat of arms. The



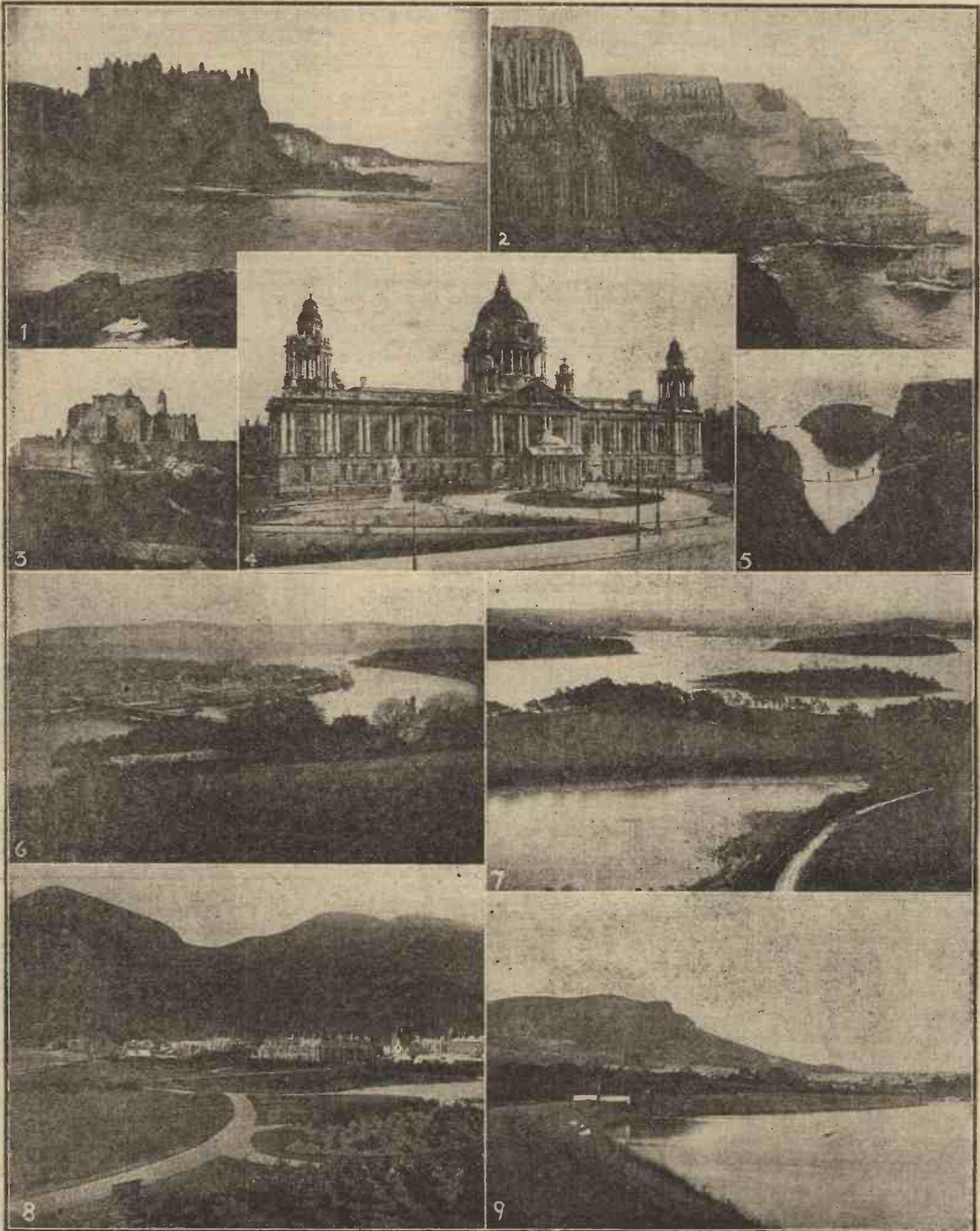
"The ideal place for the collection of these old songs."

King is highly enraged and orders a great chief to the punishment of the impudent stripling, but this great chief meets with the same fate. Thereat the King calls upon Cuchulainn to avenge his slain Companion Knights of the Red Branch, but for once the greatest warrior of Ireland feels no joy in the approaching combat; his mind is afflicted with a great dread and a strange heaviness falls upon him. But he goes forth and eventually slays the youth . . . and it is then that his great madness comes upon him, for it has been revealed to him by a token that the youth was none other than his only son . . . the son he had prayed for and longed for with a great longing . . . the son who was to take his place and he slipping into his old age. The dénouement is highly dramatic and the old story lends itself admirably to the peculiar technique of radio drama.

This first essay of mine in a new form, and in material of undoubted but unexplored possibilities, was most successful in production, and was honoured by several repeat performances. I am now engaged in the dramatic treatment of other legends of our province, and I think I have said enough in this short article to show how the study of these legends may aid and enrich native broadcast drama, and how, in turn, this drama may stimulate an interest in these lovely old tales of our Golden Age.



" . . . a fairy thorn."



[Photos: Lawrence, Dublin.]

1. Dunluce Castle, Co. Antrim. 2. The Amphitheatre, Giants Causeway. 3. Ruins of Cashel. 4. The City Hall, Ulster. 5. Rope Bridge, Carrick-a-Reds. 6. Londonderry. 7. Typical Northern Lake Scenery. 8. Newcastle, Co. Down. 9. Cave Hill, Belfast.

# St. Patrick's Bell

By ALFRED S. MOORE

"RICH and rare were the gems she wore." In the diadem of Erin there is no treasure more rare, and of more entrancing beauty, than the shrine of the famed Bell of St. Patrick, which now rests in the National Museum, Dublin. Does the general reader realise what an epitome of history, what romance, this shrine symbolises? It is a direct link with Ireland's patron saint, St. Patrick, and establishes the reality of him who trod the green sod of Erin just as you and I may to-day:—

"Many shall be the kings who will treasure it,  
Woe to the person who hides it,  
Woe to the house, and woe to the tribe."

So the writings of Columcille (Columba), the successor of St. Patrick, still proclaim from the Bodleian Library, Oxford. Can one-tenth of



Front view of Shrine of famous Bell of St. Patrick, now in National Museum, Dublin.

the legion of perils which menaced its existence through fifteen kaleidoscopic centuries be visualised mentally? I trow not. As far back as 1020 A.D. and 1074 A.D. it escaped the two ravaging fires which laid Armagh, Ireland's ecclesiastical capital, in grey ashes, when even the altar vessels were melted to amorphism. Yea, when five centuries later, its companion, St. Patrick's *Baschall* (Crozier) met the same fate as "the brazen serpent which Moses had made," the Bell escaped. How, then, was it preserved?

Like the Ark of the Covenant, it had its special guardians, by whom its safety was ever cherished more than life itself.

Columcille puts this enjoiner into the mouth of his predecessor:—

"I command, for the safe keeping of the bell,  
Eight, who shall be noble, illustrious,  
A priest and a deacon among them,  
That my bell shall not deteriorate."

While the saint endowed, so legend records, 365 churches in Ireland with bells, this *clog en achta* (Bell of Armagh) was a special sacerdotal appanage accompanying him in his wanderings. And it had as its bodyguard the clan of the *O'Maelchallans* (modern Mulholland), though for nigh a century it was spirited away beyond their ken.

These guardians had many fiduciary and other privileges. They were always exempt

from the edicts laid on the people in general, and even on the chieftains. They might claim from their neighbours tithes in the "firstlings of the flocks"; and they had claims on a townland in County Tyrone, still known as Ballyclog, or "Town of the Bell." Moreover, the Bell was ever a hallowed treasure, and so entitled to veneration. Forsooth, to profane it was *anathema marantha* not confined merely to banning by "bell, book and candle." Thus according to the "Annals of Ulster," Niall of the Nine Hostages waged a predatory war and carried off 1,200 cows and many captives from a Meath chieftain who had so sinned.

Frankly, it is impossible to trace in detail the vicissitudes of the Bell of St. Patrick. Probably handed down, from father to son, by the O'Mulchallin (Mulholland) clan, during each generation of that family, from its resurrection in 1455 onwards, we know little concerning its situation until the Irish Rebellion of 1708.

They were stirring times, then, in Ireland and now the Bell's revival reads like true romance. In the village school of Henry Mulholland at Eden-duv-Carrig, Co. Antrim (at Shanes Castle, "on Lough Neagh's bank as the fisherman strays") there had been a pupil, Adam MacClean. Alas, the dominie imprudently had dealings in the 1798 Insurrection and, being apprehended, would have been executed but for the influential appeal promoted by his ever grateful pupil, MacClean, now a leading Belfast merchant. A few years later the Belfast merchant was hastily summoned to the sick bed of his old dominie to find life ebbing fast from the old man, the last of his line:—

"My dearest friend," began the dying man. "My end is here. You were ever noble to me, not alone my benefactor in saving my life but in maintaining my existence itself, against want and famine. I have no child, alas, to whom I might leave the little I possess. . . . But to you I give that which I hold dear as my heart's blood. When I am gone, dig in the garden, where this writing directs, and there you will find a box. Preserve it for my sake."

So passed the last of the O'Mulchallins, the end of a chain extending through ages from 482 A.D. to 1800 A.D.

An oaken chest was accordingly found. It contained the Bell of St. Patrick and its magnificent shrine, together with Bedell's quarto Irish Bible. Mr. MacClean had no sons, so on his demise, in 1850, the bell was bought by an Irish divine, Rev. Dr. Todd, of Armagh, for £150. It seemed a sorry object, but when a jeweller had removed the encrusted grime of centuries it revealed itself in its pristine glory as a treasure which could have no rival even in the famed Baghdad palace of Haroun al Raschid. Indeed, the beauty of the shrine so charmed the French nation that they clamoured for it to be displayed at the Paris Exposition of 1867. Unfortunately, during that visit a curious bronze chain, attached to the side of the shrine, was stolen—probably for a charm against sin or sickness. The French were distressed beyond measure at the loss. But out of evil came good. Regrettably the Bell was returned to Ireland—and with it a very beautiful replica. Hence when the original bell and shrine were acquired by the Royal Irish Academy for £500—though all the gold of London and New York could not pay for it now!—the replica went to the Belfast Municipal Gallery. Thus are served the national aspirations of Ireland's two States.

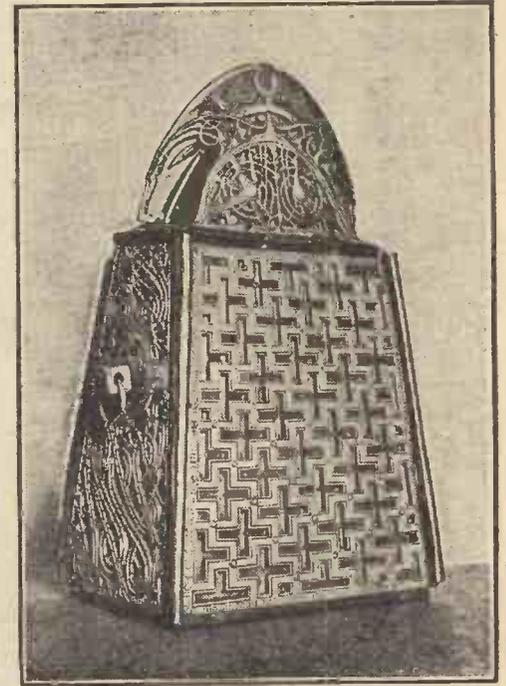
Was it not, indeed, in accord with its miraculous fate through eleven centuries that the upheavals in Dublin during recent years left it unscathed?

The covering shrine and the Bell of St. Patrick present a vivid contrast: while the shrine is superb in its splendour, the bell is

modest to the point of meanness. Indeed the bell itself consists merely of two bent plates of wrought iron riveted at their edges. Fashion two ordinary kitchen grate shovels, face to face, and you have a rough idea of it. (The cow bells of Austria and Switzerland are practically identical with it.) But the beauty of the shrine instantly evokes admiration from all who see it. Words cannot hope to do justice to its elegant panels and graceful curves, its gold filagree and interlaced patterning, the whole remarkably free from formality and yet in every detail graceful and dignified.

Curiously enough, no shamrock whatever appears in the design of the shrine, and personally I doubt if the association of the trefoil with Ireland's saint has any authenticity beyond invented legend.

Truly, Dublin has treasure trove worthy of the envy of the famous cities of the world, in two objects of rare beauty—this shrine and the Book of Kells. Indeed, Dr. Alof Maria Mahr, the erudite keeper of the Dublin National



Shrine of St. Patrick's Bell (back). Early Irish Art—Eleventh Century.

Museum, claims that the collection of Celtic archaeological objects there proves Ireland's traditional past to go back further than that of any other European history.

## Irish Folk Music

(Continued from page 289.)

nights invariably calls forth letters of appreciation from all over the Highlands and Islands, and even from distant Orkney and Shetland. The Irish Uilleann pipes (the "woollen bagpipes" of Shakespeare, so called from *uilleann*, the elbow) were almost extinct, but are now heard regularly from both 2RN and 6CK. Traditional fiddlers we have with us in fair number; and singers of our native folk-songs, both in Gaelic and English, are being discovered from time to time.

The preservation of the old Irish style of folk singing is, however, the most important part of the distinctively national work being done by the Dublin station. This distinctive style is most easily noted in the slow airs, and closely resembles the singing of the Oriental nations. It is now heard in Ireland only in the Gaelic speaking districts.

Very many letters of appreciation of the purely native music included in the Dublin programmes have reached us from all parts of England, Scotland, and Wales. To those of *World-Radio* readers who have shown us such encouragement, I, on behalf of the staff of the Dublin Broadcasting Station, wish to return our very sincere thanks.

# The Free State.

## Irish Life

By STEPHEN GWYNN

SO much has been written about Irish Life in terms of romance or of caricature, or exaggeration—either for good or bad—that it seems worth while to try to make readers of *World-Radio* understand what Ireland really is like.

You might as well judge England by a visit to the Black Country as Ireland by a tour in Connemara. In either case what you saw would be characteristic and a true impression—but misleading if you took it to stand for the whole.

Between an English countryside and an Irish countryside there is not a great difference to the eye, and a Wexford farmer is very like a farmer somewhere round Milford Haven, allowing for the difference made in the Anglo-Welsh by a dozen generations of Protestantism. That difference is easily exaggerated, but it is true that the Free State, unlike the other Dominions, is a Catholic country. The far more real difference is this. Rural England is like enough to rural Ireland, in its way of life; but most of England is not rural. The farmer is everything in the life of Ireland: in England his industry is a sideshow in the nation's interests. Our towns are distributing centres, not manufacturing; and we have scarcely any suburbia. Almost right up to the edge of Dublin, all is farm land.

South and south-west of the city is a range of heather-covered mountains, in parts almost as wild as Donegal or Kerry; and among these are innumerable tiny farms laboriously cultivated. The nearest approach to a well-to-do man here, as in Connemara, will be a sheep-farmer. On the other hand, go north from Dublin along the coast, and you are in a region of prosperous tillage such as you will find all down the east coast and in a great part of the centre. But go west from Dublin, with the mountains on your left, and you are soon in the grass ranches, permanent pasture, covered with sheep and cattle. This is the fringe of a rich vein of soil running from Meath into Kildare—as rich land as in Europe; but it gives very little employment, and this is one of our main problems.

Practically all our problems in Ireland are connected with the use of land. Even those who live in our towns have generally some contact with the land; they have some relative who owns land or works land; and in this respect Ireland is much liker to France than to England. In another way the resemblance is even more remarkable. In Ireland, as in France, a man nearly always owns the land that he farms. It is a country of peasants. A farmer with us is often no better off than an agricultural labourer—often, indeed, not nearly so well off; but it is almost impossible in Ireland to separate a family from the farm that it has been brought up on. In reality, the family, rather than the master of the family, owns the farm, which has been held from one generation to another. The passion for the ownership of land is the ruling passion in Ireland.

This means that our people as a whole, whether in town or country, are not cut off from the land as they are so largely in Great Britain. The average man in England thinks of a farm only as a way of losing money. In Ireland anybody who has a farm is counted to have a way of living—though we do not expect him to get rich by it. We do not expect anyone to get rich in Ireland, though some people make a very decent income there. But it all comes back to farming. If farming is down in the dumps, the big farmers regard a Dublin specialist as too costly a luxury, even though they are seriously ill; if they were so ill that they must go to him, he has to wait long for payment. The last thing

on which an Irish farmer will economise is law, for they are a litigious people; but even the Irish Bar feels it when the price of cattle falls. And the big shops feel it, of course.

We are even more dependent on the prosperity of agriculture than we used to be under the old order, when we were governed from Westminster. In those days there were a great many officials paid on the British scale, and they kept up the British standard of expenditure—more or less. Now there are just as many officials, but they are paid on the Irish scale, and they conform to a way of living which is more like that of provincial France or South Germany. The great changes, however, socially, in the way of living have been caused by the withdrawal of the British Army. Politics apart, this has been much regretted. The British Army liked being in the land, and British officers and soldiers made themselves liked. But wherever there was a British garrison there was the British standard of living.

The old way of life still continues among us: there are Irish country houses such as the old landlord class maintained, though nowadays there are practically no landlords in Ireland. It is a great country for sport, and all that has to do with horsemanship, and this brings to us rich people from England, from America, and latterly even Indian princes; and the old families are attached to the country and the old way of life. But I am writing now about Ireland, not as a place where people come for their pleasure or as tourists, but as a country with its own way to make in the world, and bound to make it chiefly by agriculture. In the finest country house that I have entered of late years the son of the house, an ex-officer of the British Army, was running a dairy to supply the town near which he lived: the man who took me there had been a most distinguished soldier, but he was now farming on a very large scale, and in addition to that was directing two big enterprises for dealing with the produce of farms. These men came out of the old order, but were taking their part in the new, alongside of every other farmer.

Now, what is the new? We have a Parliament of our own now, exactly like the other Dominions, and it is up to us to make good. What is that Parliament doing? Chiefly, trying to make farming pay; and this works out to ensuring that Ireland's supply to Ireland's great market, which is England, shall be first-class in quality. One result of the revolution in Ireland is that no trader dare ship a bad egg, or even a dirty egg, from Ireland to Great Britain. If he is caught doing so, he forfeits his licence to export. The Irish Government has not lacked courage. It may be said freely that they have knocked on the head an old superstition that Irishmen could govern everywhere but in Ireland.

There is another aspect of Ireland to-day. It is an agricultural country, thinly populated in comparison to Great Britain, where there is a pleasant sense of elbow-room and you may motor anywhere on good roads and not be jostled as you are in England. But we do not wish to have always a country that breeds citizens for export to the United States or elsewhere; and we have no coal, iron, or other mineral resources to make it easy to start industries. The Shannon scheme is one of the great facts of modern Ireland. By next year it will be supplying electricity enough to light every town in the Free State—enough to do more than all that is now being done by electricity in the Free State; and in further developments it will supply a great deal more. Will factories start where the power is cheapest, close to Limerick? Will the Irish people as a whole learn to use electric light instead of paraffin lamps? Will they be able to cheapen farm working by electric appliances? These

are questions which many people at once answer in the negative. We are not far off from that. The new Ireland will, I think, owe a great deal to electricity. Certainly there is no place in which I have found wireless valued more than along our Irish West Coast, when men would rather dispense with newspapers than with their wireless set.

## Irish Folk Music

Its Place in Dublin's Radio Programmes

By SEAMUS GLANDILLON, Director,  
Dublin Broadcasting Station (2RN)

In addition to being the Director of the Dublin Broadcasting Station, Mr. Seamus Glandillon is a recognised authority on Irish Folk Song.

AMONG European nations Ireland holds a leading place for the wonderful variety and the high artistic merit of her folk music. From the earliest times the Irish harpers were renowned for their skill, and Giraldus Cambrensis, or Gerald Barry, Archdeacon of St. David's, who came to Ireland in 1183, writes of them:—"They are incomparably more skilful than any other nation I have ever seen, for their manner of playing is not slow and harsh . . . but lively and rapid, while the melody is both sweet and pleasing" (History of Irish Music, Grattan Flood, p. 61). The last faltering notes of the few Irish harpers who still remained in 1792 were collected by Edward Bunting, and published by him in 1796. As the harpers, however, were a distinct professional class, the term folk music should not perhaps be applied in strictness to the tunes attributed to them; but in the subsequent collections taken down by Petrie and Joyce in all parts of Ireland, and by O'Neill in Chicago, from the Irish pipers and fiddlers there, as well as from singers, we have a wealth of folk music which can scarcely be excelled.

Many causes contribute to the peculiar excellence and unspoiled quality of Irish folk tunes. In the first place, Ireland, being an island, was not much influenced by Continental culture in matters musical. The use of the Irish language—Gaelic—common in almost every part of the country up to the middle of the last century, had the effect of preserving the old songs. The compositions of the Gaelic poets, who abounded during the eighteenth century, were almost invariably set to music, and as these poems formed almost the only literature of the people from the accession of William III down to the second quarter of the last century, the tunes with which they were associated were sung and played all through the Gaelic-speaking parts of the country.

Cut away as they were from the outside world, and driven in upon themselves and upon their own resources for their musical and literary culture, it is small wonder that the folk-songs of the Irish Gaels display a wonderful variety, and echo every phase of the national life, from the light rollicking airy hunting song, through the half-wistful and half-warlike Jacobite songs, to the tender love songs and the poignant intensity of the caoine or death lament. Every great event had its song to celebrate it. Every well-known family of worth had its song of praise. No local beauty but had her grace immortalised in verse. The boatmen, the ploughmen, the spinners, and weavers, all had their occupation songs, and a common qualification in engaging a dairy-maid was that she should be a good singer, as the cows were supposed to yield milk more freely to the accompaniment of the milkmaid's croon. There is, indeed, a very close similarity between the lighter songs of occupation common in the Irish "Gaelteacht" and those we find in the Hebrides and the Highlands of Scotland.

To preserve for the world this fast disappearing instrumental music and folk-song of the Western Gaels is one of the tasks which the Dublin Broadcasting Station has undertaken, and up to now with a considerable amount of success. Our Ceilidh dance music on Monday

(Continued on page 288.)

# The Abbey Theatre

**I**N a side street near O'Connell Bridge, in Dublin, stands a building which, but for a small portico springing from its doorway, you would pass unnoticed—an insignificant, even shabby, building, but one which has made history. It is the Abbey Theatre, once the Dublin Mechanics' Institute and home of penny gaffs.

For a modest fee we may take an orchestra stall—there are no boxes—and see a good play.



Abbey Theatre: The Auditorium.

But let us, instead, visit it (since we are so fortunate as to have the opportunity) during the daytime and in the company of one who has been identified with its fortunes for many years, who has taken many a part in its plays, and to whom its history and traditions are part of the stuff of life.

We will go first of all to the Green Room. This historic spot, we are told, was originally no part of the theatre, but was added, like so much else in connection with the building, through the generosity of Miss Horniman. A small room, but full of interest. Over the mantelpiece hangs an oil painting of Lady Gregory, and on the walls one sees well-known sketches: portraits of W. B. Yeats, J. M. Synge, and others—the original pictures, of course, and all the handiwork of the poet's father, J. B. Yeats. In a bookcase against the wall is the theatre's library, and one's eye naturally travels along the titles of the books and finds just the volumes one would expect, Bernard Shaw's plays, W. B. Yeats, and the rest.

In this room we absorb the very atmosphere of the place and its history, and we learn that the building, then the Mechanics' Institute, was purchased by Miss Horniman and that considerable additions were made to it for the purpose of converting it into the home of the Irish Repertory Players. This company of artists was the result of the genius and foresight of W. B. Yeats and Lady Gregory. Before the Abbey Theatre came into being as an artistic entity, however, Irish plays were being produced at the Molesworth Hall and other Dublin buildings; but, with a definite home of their own, repertory plays could be arranged and produced in more encouraging and congenial circumstances.

The history of Irish repertory is briefly this. In 1898 a letter was composed jointly by W. B. Yeats, Lady Gregory, and Edward Martyn asking for a guarantee to cover the expenses of performing Irish plays in Dublin. A part of the letter is worth quoting:—

"We propose to have performed in Dublin, in the spring of every year, certain Celtic and Irish plays

which, whatever be their degree of excellence, will be written with a high ambition, and so build up a Celtic and Irish school of dramatic literature. We hope to find in Ireland an uncorrupted and imaginative audience trained to listen by its passion for oratory, and believe that our desire to bring upon the stage the deeper thoughts and emotions of Ireland will ensure for us a tolerant welcome, and that freedom to experiment which is not found in theatres of England and without which no new movement in art or literature can succeed. We will show that

Ireland is not the home of buffoonery and of easy sentiment, as it has been represented, but the home of an ancient idealism. We are confident of the support of all Irish people, who are weary of misrepresentation, in carrying out a work that is outside all the political questions that divide us."

It is satisfactory to know that the object of the letter was fulfilled. The necessary money was guaranteed and the introduction of Irish plays in regular succession was made possible. All this, of course, was before the advent of the Abbey Theatre. The first play to be produced here was W. B. Yeats's *The Countess Cathleen*. Up to 1902, with a single exception, the plays had been performed by English

professionals. At that juncture two brothers, William and Frank Fay, who had a company of Irish National Players, became interested in the new venture, and during the succeeding year six new plays were produced by W. G. Fay's Irish National Dramatic Company in St. Teresa's Hall. Shortly after this came the formation of the Irish National Theatre Society, who produced in the Molesworth Hall such plays as J. M. Synge's *In the Shadow of the Glen*, *Riders to the Sea*, and Lady Gregory's first play. In 1904 the success of the Irish players came to the notice of Miss Horniman, of Manchester, who provided for them a national home in the Abbey Theatre, and not merely so, but added to the gift an annual subsidy for a term of years.

During the years that have followed the Irish National Theatre Society have produced for the first time very many plays, some of them of world-wide fame and by authors whose names have since become household words Sean O'Casey for one. It is pleasant to be able to record that Irish theatrical art as represented by the Abbey Theatre has been so far recognised by the Free State Government as to receive an annual subsidy.

So much—and more—one learned in the appropriate atmosphere of the Green Room.

With added interest and curiosity one explored the building. The actual stage is narrow and would be

inappropriate for elaborate stage settings. The auditorium, of which we give a picture, holds, we believe, about 600. There is nothing ornate about it, and the interior is now very much as it was in the days of the old Mechanics' Institute. By way of various stair-cases and passages we come to a doorway opening into another theatre in miniature—a most cheerful little hall with large windows, all the decorations, including the leather-covered seats, being in peacock blue. This is known as the "Peacock Theatre" and is used as a school of acting and a school of ballet. It is also employed for private performances of plays and one can hardly imagine for them a more delightful venue. The auditorium holds exactly 102. The stage, of course, has definite limitations in respect of space, but by an ingenious arrangement of curtains and of the placing of spot lights (there are no foot-lights) the necessary effects can be adequately produced.



Lady Gregory.

So back to "The Abbey."

No exploration of the theatre would be complete, of course, which did not include a glimpse of what was formerly the library of the Mechanics' Institute, and is now the refreshment room. The philosophic mind will possibly meditate—although without gloom—on the fate which has ordained that the very shelves which formerly supported the people's mental *pabulum* should now be adorned by a cheery array of biscuit jars and—yes—bottles.

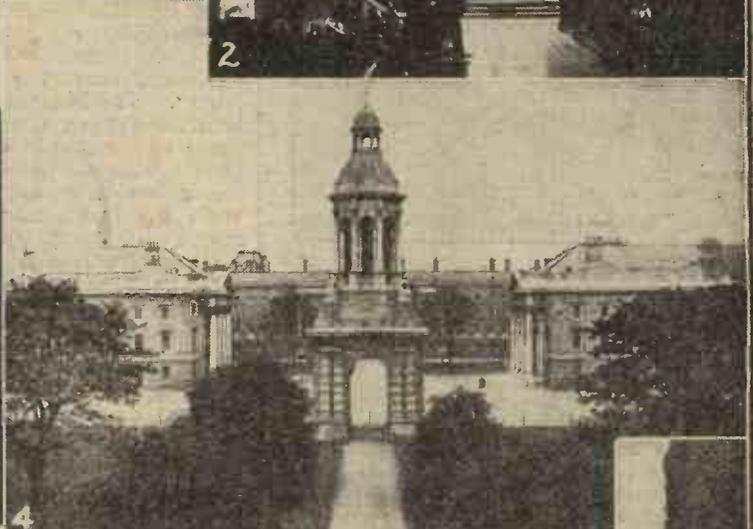
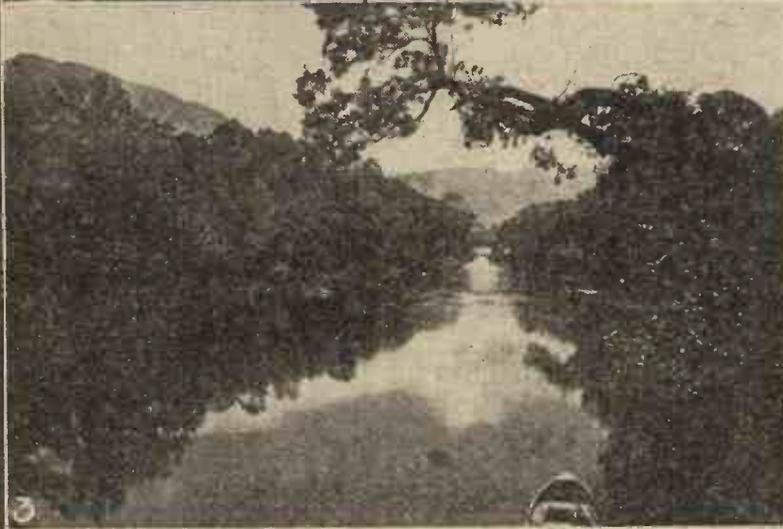
It is impossible to hurry out of the *foyer*, for here one's attention is caught and held by a number of oil paintings, principally by Mr. J. B. Yeats, among which one sees portraits of the brothers Fay. There is here, too, an old play-bill, framed, of very many years ago, concerning a play produced at the theatre which apparently occupied the same spot as the present "Abbey" and claimed by some to be identical. There are other play-bills—modern ones—in a number of European languages including Russian and Czech, of plays originally produced at the Abbey Theatre, which have since been performed throughout the civilised world.

One leaves the building reluctantly and with a deep sense of the privilege of having been so much behind the scenes, with a renewed interest in and respect for the genius and artistic effort which are identified with the place, and full of good wishes for its future prosperity and for the maintenance of so high a standard.

O. E. L.



Scene from "Playboy of the Western World." Mr. A. Shields as the Playboy, Miss M. Deane as the Widow Quinn, Miss May Craig as Honor Blake.



[Photos: Lawrence, Dublin.]

1. Stephens Green, Dublin. 2. St. Patrick's Cathedral, Dublin. 3. Meeting of the Waters, Killarney. 4. Campanile, Trinity College, Dublin. 5. Light House, Valentia. 6. River Blackwater, Lismore. 7. Four Courts, Dublin. 8. Lismore Castle, Co. Waterford.

# The Dublin Broadcasting Station



Mr. Seamus Clandillon, Director

THE Dublin Broadcasting Station was inaugurated on January 1, 1926, when Dr. Douglas Hyde, Professor of Irish in the National University of Ireland, and formerly President of the Gaelic League, broadcast a message in the Irish language addressed to Gaels all the world over. Since that date the station has steadily progressed, and its programmes compare favourably with those of stations in other countries possessing greater means and material at their disposal. As usual there were sporadic outbursts of criticism in the Press; but that listeners on the whole are well satisfied with the programmes provided is evidenced by one striking fact. The Advisory Board, which was appointed to represent the

interests of various classes of listeners, invited criticisms from all licence-holders in the Free State, the invitation being published in the Press and broadcast from the station. The result was that, of 27,000 licence-holders, only 38 sent in letters of criticism or suggestions; and of the 38 no two were agreed as to the improvements suggested.

From the musical standpoint 2RN maintains a high standard, and the Station Orchestra, in charge of Miss Terry O'Connor, will bear comparison with other orchestras of its size in Europe. The accompanist, Miss Kitty O'Doherty, has won golden opinions from artists who have sung at many B.B.C. and Continental Stations. Dublin has also the advantage of having at its disposal at frequent intervals some famous bands:—the No. 1 Army Band, conducted by Colonel F. Brase, who sometimes conducts the Augmented Station Orchestra, in pieces of his own composition; the Civic Guards' Band under Supt. Delaney, from the Depot in the Phoenix Park, and the Band of the Civic Guards (Metropolitan Division), conducted by Supt. Norris. The No. 2 Army Band is relayed from Cork Station. Some of the best-known singers in England and Scotland visit the station at regular intervals; while the first Friday of each month is devoted to an all-Welsh programme in the Welsh language, in which appear prize-winners at the various Eisteddfodau. Scottish Gaels also broadcast from time to time.

The Director, Mr. Seamus Clandillon, is the foremost exponent of Gaelic singing, both Scotch and Irish, in Ireland at the present day, and is the joint-editor with Margaret Hannagan (Mrs. Clandillon) of "Songs of the Irish Gael," a volume of Gaelic folk songs with English metrical translations, recently published by the Oxford University Press. Thus, it will be seen that Dublin station, while sufficiently catholic in its musical tastes, does not neglect the Celtic note, giving as it does

special attention to Gaelic singing; traditional fiddle-playing, the Uilleann pipes, and such matters of peculiarly Irish culture which were in danger of extinction.

Language lessons are given weekly in Irish, French, German, Spanish, and Italian, while talks range from poultry-keeping to Irish archaeology. A successful venture on the part of the station authorities has been the series of symphony concerts produced under the conductorship of the Musical Director, Mr. Vincent O'Brien, who discovered the world-famed Irish tenor John MacCormack. These concerts serve



Dr. F. E. O'Connell,  
Assistant-Director



Dublin Artists' Room

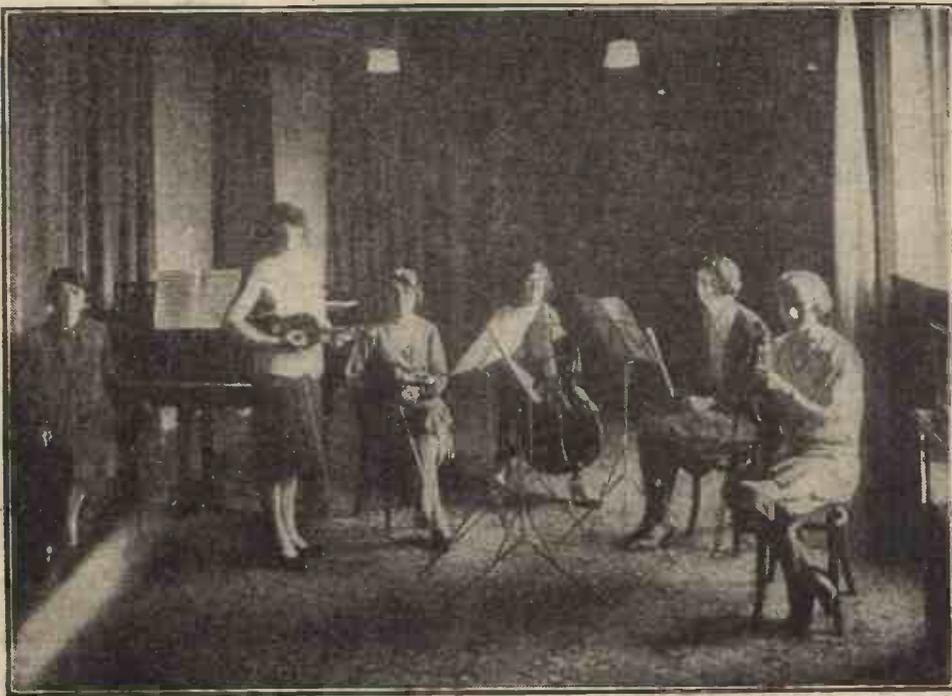
the two-fold purpose of entertaining listeners throughout the country and of placing within reach of the music-lover of small means the works of Beethoven, as played by a Symphony Orchestra of sixty performers.

The Station at present occupies temporary premises in Denmark Street, but on completion of the work in progress towards the restoration of the old General Post Office palatial quarters will be at the disposal of staff and artists.

The transmitting station is situated near Phoenix Park. It is of the type of several of the B.B.C. transmitters. The aerial is of a T-shape, consisting of four wires stretched between two wooden masts at a height of 130 ft. from the ground. The power applied to the anode of the principal oscillator is one of 1.5 kw.

At first 2RN worked on a wavelength of 390 metres; but at the request of the International Radio Union, this was changed to 397 m. on March 11, 1926. Since then the wavelength has been again changed to 319.1 m. (940 kilocycles).

Mr. Hinkler, who recently flew to Australia in a light aeroplane, spoke from 2FC Sydney (Short Wave) Station on Saturday last, March 10. An attempt to re-broadcast his speech from 2LO and 5XX was not successful. The Sydney station was received at sufficient strength for re-broadcasting purposes, but unfortunately the Morse jamming from an ultra short-wave station of high power was such that a re-broadcast was rendered impossible.



Dublin Station Orchestra

# Broadcasting and Languages

## GERMAN.—No. V

(To be broadcast through Daventry from the London Station by Mr. Norman on Monday, March 19, at 7.25 p.m.)

### SELECTIONS FROM HEBEL

#### BÖSER MARKT

Viele seltsame Geschichten kommen auf der Welt vor, aber eine der seltsamsten, von der ich je gehört habe, begegnete einem vornehmen und reichen Engländer. An einem schönen Sommertag, als die Sonne lustig auf die Welt schien, waren der König und viele andere vornehme Herren und Frauen in einem grossen königlichen Garten versammelt. Die gewundenen Gänge dieses Gartens verloren sich in der Ferne in einem dichten Wald.

Man ass und trank, man spielte und tanzte; man ging spazieren in den schönen Gängen und zwischen den duftenden Rosenbüschen. Unterdessen kam ein wohlbekleideter Mann mit einer Pistole unter dem Rock, und stellte sich an einen Baum, da wo der Garten an den Wald grenzte. Er dachte: bald wird jemand kommen. Wie gesagt, so getan. Da kam ein Herr den Weg her mit einem funkelnnden Fingerring, mit klingenden Uhrketten, mit diamantnen Schnallen, mit breitem Ordensband und goldenem Stern. Indem er in dem kühlen Schatten spazieren ging und an nichts dachte, kam der Kerl plötzlich hinter dem Baum hervor. Er machte dem Herrn ein bescheidenes Kompliment, zog die Pistole heraus, richtete sie auf die Brust des Herrn, und bat ihn höflich, keinen unnötigen Lärm zu machen. „Denn niemand braucht etwas davon zu wissen“, sagte er, „was wir miteinander zu reden haben.“ Man muss übel daran sein, wenn man vor einer Pistole steht, weil man nicht weiss, was darin ist. Der Herr dachte vernünftig: „Der Leib ist kostbarer als das Geld; lieber möchte ich den Ring verlieren als den Finger.“ und er versprach zu schweigen. „Gnädiger Herr,“ fuhr der Kerl fort, „wollen Sie nicht Ihre zwei goldnen Taschenuhren gegen gute Bezahlung verkaufen? Unser Schulmeister richtet die Uhr jeden Tag anders; man weiss nie, wie spät es ist, und an der Sonnenuhr sind die Zahlen ganz verwischt.“ Ob es dem reichen Herrn recht war oder nicht, musste er dem Halunken die Uhren verkaufen für ein paar Groschen. Und so kaufte der Spitzbube Ring und Schnallen und Ordensstern, Stück für Stück um geringes Geld, und immer mit der Pistole in der linken Hand. Als endlich der Herr nichts mehr zu verkaufen hatte und dachte: „Gott sei dank! jetzt bin ich den Mann los,“ fing der Spitzbube wieder an: „Gnädiger Herr, weil wir so gut miteinander einverstanden sind, so möchte ich Sie fragen, ob Sie nicht auch etwas von meinen Waren kaufen möchten?“ Der Herr dachte an das Sprichwort: man muss zu einem bösen Markt ein gutes Gesicht machen, und sagte deshalb: „Lassen Sie mich sehen, was Sie haben.“ Der Kerl zog allerlei Kleinigkeiten aus der Tasche, die er gefunden oder auch um billiges Geld gekauft hatte. Und der gute Herr musste alles kaufen, Stück für Stück um teures Geld. Als endlich der Spitzbube nichts mehr als die Pistole übrig hatte, und sah, dass der Herr noch ein paar Schillinge in dem Geldbeutel hatte, sagte er: „Gnädiger Herr, wollen Sie nicht für das übrige Geld die Pistole kaufen? Sie ist vom besten Büchsenmacher in London und viel mehr Geld wert.“ Der Herr dachte in der Ueberraschung: „Du dummer Dieb!“ und kaufte die Pistole. Als er aber die Pistole gekauft hatte, kehrte er sie um und sagte: „Nun halt, schöner Geselle, und geh' augenblicklich voraus, wohin ich dich heissen werde“

I HAVE discovered a remarkable method of learning Foreign Languages—a method for which I have been looking all my life. I only wish I had known of it before; what toil, what drudgery, what disappointments I should have been saved!



It has sometimes been said that the British people do not possess the "gift of tongues." Certainly I never possessed that gift. At school I was hopeless.

When the subject was French or German, Latin or Greek, I was always somewhere near the bottom of my Form. And yet in other subjects—English or History or Mathematics—I held my own quite well. I have now come to the conclusion—my recent experience has convinced me of this—that the reason I failed to learn languages was that the method of teaching was wrong.

Now, although I never could "get on" with Foreign Languages I have always wanted to know them—especially French. I have wanted to read the great French authors in the original. I have wanted to read Anatole France, Proust and Balzac, and that great critic whom Matthew Arnold so much admired, Sainte Beuve, in French, and not merely through the medium of a characterless translation. Besides, I have wanted to spend holidays abroad without being tied to a phrase-book. So I have often tried to find a method which would really teach me a Foreign Language. And at last I have found it.

#### How to Learn Languages.

Some time ago I saw an announcement entitled "A New Method of Learning French, Spanish, Italian and German." Of course, I read it, and when I saw that this method was being taught by the well-known Pelman Institute, I wrote for their book, "How to Learn French," and this so interested me that I enrolled for the course in that language. And frankly it has amazed me. Here is the method I have wanted all my life. It is quite unlike anything I have seen or heard of before, and its simplicity and effectiveness are almost startling.

Consider, for example, this question with which the book (which, by the way, can be obtained free of charge) opens.

"Do you think you could pick up a book of 400 pages, written in a language of which you do not know a syllable—say, Spanish, Italian, German or French—and not containing a single English word, and read it through correctly without referring to a dictionary?"

Most people will say that such a thing is impossible. Yet this is just what the Pelman method of language instruction enables one to do, and so remarkable is this method that I am not surprised to hear that it is revolutionising the normal method of teaching languages in this and other countries.

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By ANTHONY SOMERS.

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oder ich schiesse dich auf der Stelle tot!" Der Spitzbube aber nahm einen Sprung in den Wald und sagte: „Schiessen Sie nur, gnädiger Herr, sie ist nicht geladen!"

N.B.—Listeners are advised to provide themselves beforehand with paper and pencil, as a short dictation test in German will be given at the end of the talk.  
The text of the dictated matter will appear in the next issue of "World-Radio."

## GRAMMAR AIDS

## DECLENSION OF GERMAN NOUNS.

## Feminine Nouns.

I.	Singular.	Plural.
N.	die Frau.	die Frauen.
A.	die Frau.	die Frauen.
G.	der Frau.	der Frauen.
D.	der Frau.	den Frauen.
II.	Singular.	Plural.
N.	die Taube.	die Tauben.
A.	die Taube.	die Tauben.
G.	der Taube.	der Tauben.
D.	der Taube.	den Tauben.
III.	Singular.	Plural.
N.	die Hand.	die Hände.
A.	die Hand.	die Hände.
G.	der Hand.	der Hände.
D.	der Hand.	den Händen.
IV.	Singular.	Plural.
N.	die Mutter.	die Mütter.
A.	die Mutter.	die Mütter.
G.	der Mutter.	der Mütter.
D.	der Mutter.	den Müttern.

## FRENCH DICTATION

C'est jour de fête à Paris. Il fait beau et nous pouvons parcourir les promenades. Quelle immense population s'agite dans les jardins publics, sur les quais, sur les boulevards, dans les Champs-Élysées! quelle fourmilière d'hommes! Que de rendez-vous donnés! que de parties arrangées! Tout le monde veut se divertir.

Translation of the two test sentences:

(a) He missed his footing, and came very near breaking his leg.

Le pied lui manqua, et peu s'en fallut qu'il ne se cassât la jambe.

(b) Did they ask you if you had everything you wanted?

Vous ont-ils demandé s'il ne vous manquait rien? (or si nous ne manquiez de rien?)

## SPANISH

## Aids and Hints for Students—XII.

By W. F. BLETCHER

As I stated in my last article, *ought to have*, followed by a past participle, is generally expressed in Spanish by *debia haber* or, when a definite time or event is referred to, by *debió haber* or simply *debió*; thus:

El dependiente *debió* notar (or *debió haber notado*) el error cuando hizo la factura. (The clerk *ought to have noticed* the error when he made out the invoice.)

Now if in the above sentence we insert *de* after *debió*, the sense is completely altered, for *debió de notar* does not mean "ought to have noticed" but "must have noticed," and it could also be rendered by *debe de haber notado*. A similar sentence is: *Debió de morir* (or *debe de haber muerto*) instantáneamente. (He must have died instantaneously.)

A correspondent asks me whether it is correct to use the future indicative after *esperar* (to hope). He thinks the subjunctive should always be used, though he often sees the indicative, even in books. Yes, it is quite correct to use the indicative when there is no doubt about the event expressed by the verb, but if there is a doubt the subjunctive should be used. Take the sentence: "I hope he will do his buying—or make his purchases—before prices go up again." Here there is no doubt about his *buying*; the only doubt is about the *time* when he will buy. So we may use the future indicative and say: "Espero

que *hará* sus compras antes que *vuelvan a subir los precios*." If, however, there were some doubt as to whether he would buy at all, the subjunctive should be used, thus:—

"Esperamos que Vds. *compre*n esta tela, pues es una ganga." (We hope you will buy this cloth, as it is a bargain.)

And now, to return to the verbs *ser* and *estar*.

I once heard a teacher of Spanish tell his pupils that *ser* indicates *what* a thing is and *estar* indicates *how* or *where* it is. This is a very incomplete exposition of the rule, but it covers the majority of cases. Note as an exception that *SER* is always used with *feliz*, *infeliz*, *pobre* and *rico*. With the adverbs *bien* and *mal* *ESTAR* must be used, thus:—

El or ella *está bien*—He or she is well.

La factura *está bien*—The invoice is correct.

El or ella *está mal*—He or she is ill.

El importe *está mal*—The amount is wrong.

I advise students to study very carefully the following pairs of sentences illustrating the use of *ser* and *estar* respectively. The meaning of a sentence is often changed completely by using *ser* for *estar* or *vice versa*:—

Ese hombre *es* muy bueno.

¿Ya *está* Vd. bueno (bien)? No del todo (not quite), pero estoy mucho mejor.

¿Qué malo (*wicked*) *es* Vd.!

¿*Está* Vd. malo (mal)? Sí, tengo dolor de cabeza.

Ese chico (muchacho) *es* muy listo (*smart*).

Ya *estoy* listo (*ready*): vamos.

"*Ser* limpio" is "to be cleanly in habits";

"*estar* limpio" is "to be clean at the moment";

—Nuestra criada *es* muy limpia.

Ahora sí que *estoy* limpio (now I *am* clean): me he bañado.

"*Ser* alegre" means "to be naturally cheerful"; "*estar* alegre" implies temporary merriment:—

Todos le quieren, porque *es* tan alegre.

*Está* un poco alegre; se le ha subido el vino a la cabeza.

"*Ser* bonito" is "to be naturally pretty"; "*estar* bonito" means "to look nice, to be prettily dressed or adorned":—

Su hija de Vd. *es* muy bonita; cualquiera se enamora de ella.

¿Qué bonita *está* ella con ese vestido tan precioso!

Las piezas *están* muy bonitas con esas etiquetas doradas (*gilt or gold tickets*).

In the two latter sentences the prettiness depends on the dress or adornment of the person or article.

Las manzanas que da este árbol *son* agrias (*sour—de clase agria*). Todavía *están* agrias (*unripe*) estas manzanas; las dejaremos hasta que maduren (*ripen*).

*Es* muy cansado (*tiresome*) ese hombre; siempre viene cuando estoy ocupado.

Voy a echarme (*lie down*) un rato; *estoy* muy cansado (*tired*).

In my next article I will conclude my remarks on *ser* and *estar*.

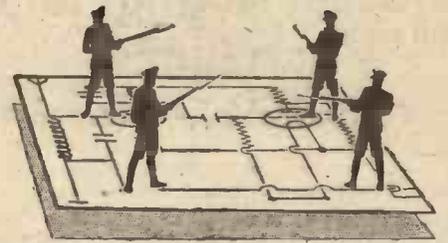
## COMPETITION.

Owing to pressure on our space, we are compelled to hold over this week's competition and the solution of the Crossword puzzle (Competition No. 7) until next week. The first correct solution of this competition to be opened was sent in by:—

Mr. M. Griffiths,  
102, Wern Street,  
Clydach Vale,  
Rhondda, Glam.,

to whom, therefore, the prize of three guineas has been awarded.

On Wednesday, March 21, at 8.30 p.m., Berlin will relay a speech by the Minister of Foreign Affairs, Dr. Stresemann, from the Bürgeraal of the New Town Hall at Schöneberg, on the occasion of the International Press Congress.



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# The Ibsen Centenary

(From our Oslo Correspondent)

ON March 20, 1928, it will be a hundred years since Henrik Ibsen, poet and dramatist, was born. Time has mitigated the pain of the stings his keen satire dealt out, and his fellow-countrymen are preparing to honour the memory of the man who has brought them honour, and, in their general rejoicing, there is uttered of the dead nothing but good.

As a Norwegian he laid his scenes in Norway; the traditions, the sagas, the legends, the tales of the trolls, the inspiration of the strange spell-bound land, all worked in shaping the nature of his genius. But in how far he directed his shafts against his own countrymen alone, and not against the human being of any race or clime, is a matter of conjecture. His own private correspondence would lead one to the conclusion that he wrote as a cosmopolitan, and troubled little as to whether the people in the land he loved best on earth regarded the cap as fitting themselves or not.



Henrik Ibsen.

Ibsen was born in the little town of Skien in the south-east of Norway, and the same chill penury that fell to the fate of Charles Dickens in his youth surrounded the Norwegian, but the latter lacked that sense of humour that the Englishman had, that saving grace which saves the genial current of the soul from frost. For seven years Ibsen worked in the small town of Grimstad as a chemist's assistant, and even at that stage of his career he chafed the provincial spirits of the townspeople by his sarcastic verse. It was here he made his first venture in drama, and sixty copies of his *Catalina* found a sale, but the remaining copies were sold as wastepaper for wrapping up parcels in the market-place.

Then Ole Bull, the Norwegian fiddler of the magnetic temperament, procured for the young aspirant to literary fame the directorship of the Bergen Theatre. For seven years Ibsen held this post and learned that skilful arrangement of stage technique for which he is remarkable. During the next seven years he was director of the Christiania (now Oslo) Theatre and produced several dramas, some of which were displeasing to the susceptibilities of his fellow-countrymen.

In 1864 circumstances induced him to leave his native country and he lived abroad, in Rome, in Dresden, and in Munich, until 1891. He then returned to take up his permanent residence in the capital of his own country. His long exile had not been spent in idleness, and he came home to be received with respectful welcome as a son of Norway, who had won by his pen a place amongst the literary men of his time.

His lyrical drama *Brand* was composed in Rome in 1866 and proved a success. It marks

the turning point of his financial condition, for it brought relief in the form of a good sale for his wares as well as aid from the Norwegian State, which was induced by his evident chance of ultimate fame to vote him a small yearly stipendium. In *Peer Gynt*, of 1867, there is reflected the improvement in his exchequer, for his heart was lightened of its money worries and he felt able to let himself go freely and independently. In many respects we are justified in regarding *Peer Gynt* as the author's favourite. It is said of Ibsen, by those who knew him best, that he dissected his own character most mercilessly. He placed his own feelings under a strong light and was inclined to find faults in himself that scarcely existed. He was a dreamer and he knew it, and he was afraid of letting his dreams become his master. He half suspected that the faults he saw, or imagined he saw, in himself were shared by his fellow-countrymen. The man, *Peer Gynt*, is a dreamer. Mother Norge, with her wild nature, has filled the boy with elusive fancies; the supernatural appears more real than the natural; the troll becomes almost an ordinary acquaintance. *Peer Gynt* goes out into the world with wonderful plans, but with no power of achievement.

Many works followed, all more or less written with the definite purpose of laying bare the secrets of failure. There is unfortunately, more pulling down than building up. Ibsen is the enemy of conventionality and hypocrisy. *The Pillars of Society* is a bitter condemnation of social pretences; his *Doll's House* is a criticism of the treatment of women of the middle classes; in *The Enemy of the People*, Dr. Stockmann finds victory only by retreating before the forces of a blind democracy.

In the 'nineties to be an "Ibsenite" was to be a pessimist and to be obscure. Ibsen was a pessimist because he recognised the limitations of his own capacity and doubted if other members



[Photos by courtesy of the Norwegian State Railways]

Ibsen's Study: where he wrote many of his Plays.

of the human family were more fortunately gifted. He refused to take a perfect world as an understood thing. Ibsen took little part in the politics of his country. He was no public speaker like his famous contemporary, Bjornson, whose centenary will occur in 1932. There are two statues outside the National Theatre in Oslo. They are in the ugly modern dress that must be the despair of the sculptor, yet each in its way is as lifelike as the skill of man could make it. Ibsen stands with hands behind him, with bowed head and shoulders, with

(Continued on Page 397.)

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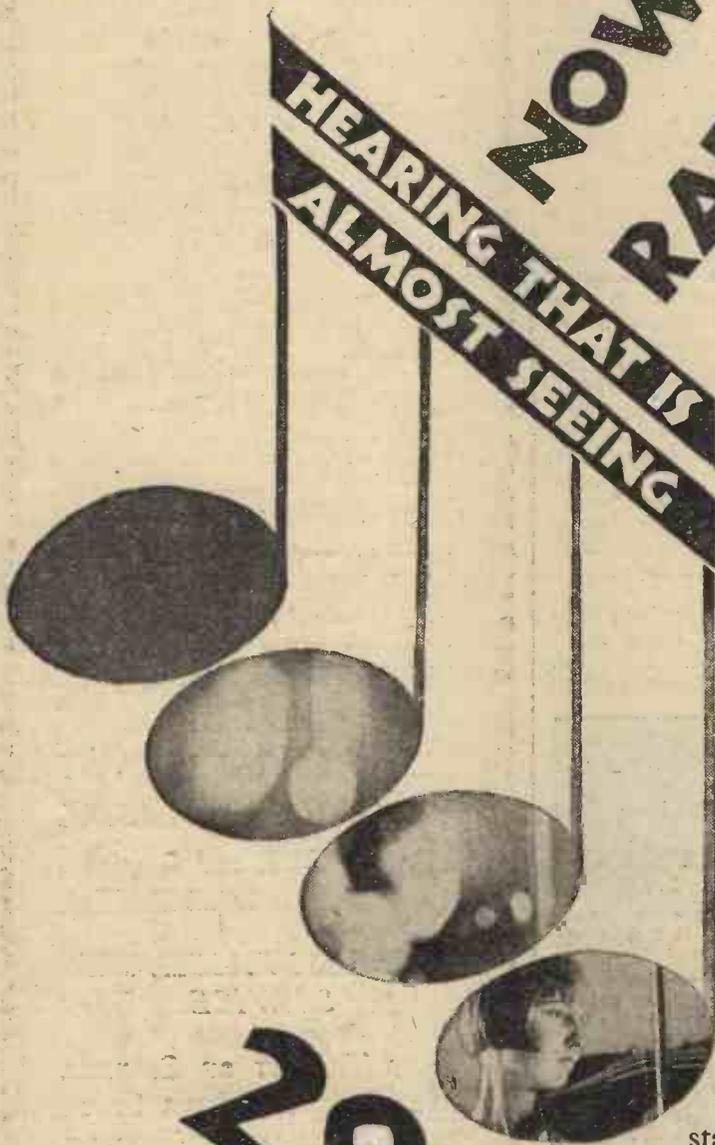
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WONDERS OF THE  
M.P.A SPEAKER

(Continued from Page 395).

pursed lips and timid eyes, telling us as clearly as possible that the wickedness of this naughty world is almost unendurable. Björnson stands a few feet away, with head up and breast forward, hands on hips, challenging the whole world and, with a bright face, hopeful of the future. Ibsen spanked the individual and placed

perfect as the physical in nature—nature in the wonderful land where he was born!

Among the Ibsen works that will be broadcast next week are "The Wild Duck" (Stockholm, March 18, 6.15 p.m.), "When We Dead Awaken" (Frankfurt, March 19, 7.15 p.m.; Breslau, March 20, 7.15 p.m.), "The Master Builder" (Königsberg, March 20, 7.10 p.m.; Daventry, 5GB, March 19, 7.30 p.m.; Daventry, 5XX, March 20, 9.40 p.m.), "Nordische Meerfahrt" (Hamburg, March 20, 7.15 p.m.), "Peer Gynt" (Leipzig, March 18, 6.30 p.m.; Munich, March 20, 7.15 p.m.; Oslo, March 23, 7.5 p.m.—Acts I-III), "Brand" (Oslo, March 20, 7.30 p.m.—Act IV; Berlin, March 20, introductory remarks, 6.45 p.m., followed by play), "John Gabriel Borkman" (Stuttgart, March 21, 7 p.m.), "The Doll's House" (Oslo, March 24, 7 p.m.).

Other special programmes in honour of Ibsen will also be broadcast, among them a transmission from Berlin on Sunday, March 18. This will be directed by Georg Széll, of the State Opera House, and will include Norwegian music played by the

Berlin Wireless Orchestra, and scenes from "Peer Gynt." The Swedish stations have arranged similar transmissions from March 20.

An order has been placed with a wireless firm by the Stadler Hotel at Boston for the installation of receiving sets in 7,700 guest rooms, at a cost of approximately a million dollars. Some time ago the management of the hotel issued a questionnaire by means of which they obtained their clients' views as to whether a broadcasting service in each room would be acceptable. During the time that opinions were taken 17,000 guests voted for wireless facilities, and this order, the largest yet placed by a single company with an American wireless firm, is the outcome.



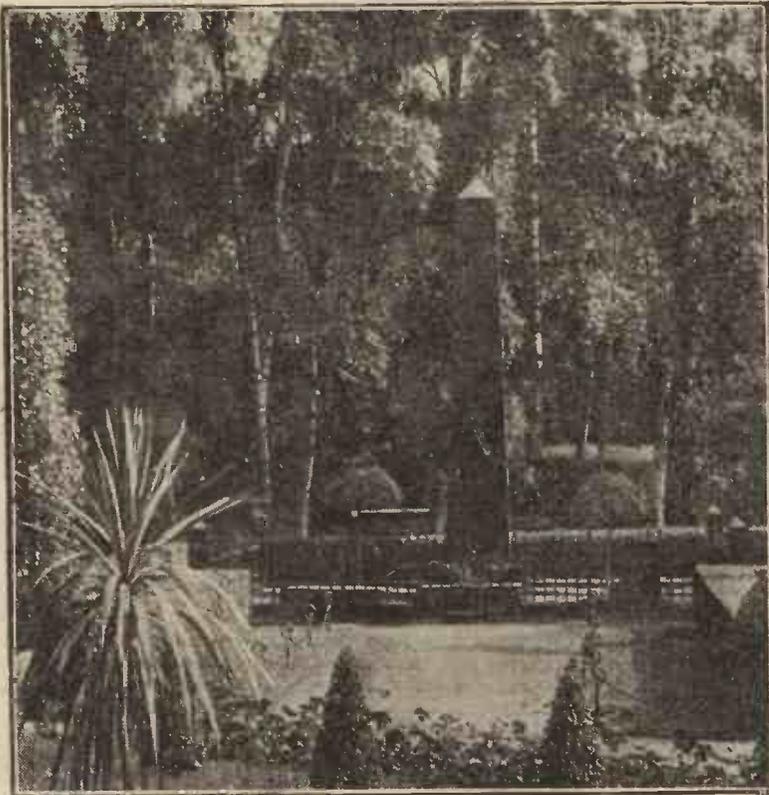
The National Theatre at Oslo, Norway.

him in a corner out of harm's way, whilst Björnson took all men by the hand to lead them forward in an organised mass.

During his last years Ibsen led a very quiet life, appearing in public only once a day when he took his morning constitutional down the main street of the Norwegian capital, generally alone and always wrapped in his own thoughts. But amongst the few friends who had been his intimates of early days he was as dear for himself alone and independent of his fame, as Dr. Johnson was to Boswell.

In 1905 Norway separated from Sweden and became a kingdom. Ibsen was full of an intense passion for his country. The sound of cow-bells in the hills of Tyrol filled him with a longing for home. But small-mindedness in the hearts of men was a perpetual nightmare to him. He was no politician as so many Norwegian writers of his time were, but he fetched from the past history of his country, from the sagas and the legends and the folklore, such encouragements as were sure to be effective in inspiring those who were looking for a king to cherish a pride in the traditions and glories of the kings of their far-off ancestors.

The prosaic informant will tell you that Ibsen was, above all, a satirist and the greatest realistic playwright of the period. But deep down within him, so deep down as to render him obscure, there is the mystical note that flashes out so brilliantly at times. "From the sunny shores of the south to the cold snow-covered mountains of the north, a rider goes forth every night." If only the spiritual in man could be as



The Tomb of Henrik Ibsen at Our Saviour's Cemetery, Oslo.

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# Wireless Step by Step

By "DICTRON"

## XLVII.—Accumulator Batteries

**T**HE accumulator, or, as it is sometimes called, the secondary battery, consists of two "active materials" as they are called immersed in an acid solution. The positive active material consists of lead peroxide and the negative of porous lead. The chemical solution consists of sulphuric acid diluted with distilled water.

The secondary battery can function in either of two directions, that is to say it can be discharged, or it can be charged. It can absorb or give out energy. The solution of sulphuric acid normally consists of about three parts of distilled water to one of sulphuric acid, giving a specific gravity of approximately 1.2.

In a cell as above described there is a difference in potential when fully charged of just over 2 volts between the positive and negative terminals. If the two terminals are joined together through a circuit having a certain resistance, steady current will flow round the circuit. The time for which this current will continue to flow will depend upon the area of active material which is immersed in the solution and upon the specific gravity of the solution.

### Ionic Action of the Cell.

Very early in our studies we learnt that the fundamental process of the flow of electrical current was the liberation of electrons which had been held separate from their positive nuclei. The function of the storage battery is to hold the electrons separated from their nuclei in a condition in which they can be readily released to respond to the attraction of the nuclei. Before a current passes through a cell, whether it is charging or discharging, it is assumed that the atoms of the acid solution are broken up into negative electrons and positive nuclei. When a current passes through the battery the electrons are attracted to the positive element and the positive nuclei to the negative element, so that there are two currents flowing in the opposite direction through the solution.

### Chemical Action of the Cell.

Roughly, the chemical action is as follows:—Before commencing to discharge the cell, that is to say before connecting the two terminals together through the associated circuit, the positive active material consists of lead peroxide and the negative active material consists of porous lead. When the discharge commences the positive active material gives off oxygen which, in combination with the sulphuric acid of the solution forms a lead sulphate. While this is going on the porous lead of the negative active material also forms a lead sulphate by combination with the acid solution. The oxygen released from the positive element mixing with the hydrogen in the sulphuric acid solution produces water, with the result that the specific gravity, of the "electrolyte," as the acid solution is termed, falls. This fall in specific gravity, combined with the fact that both the elements are being slowly converted into lead sulphate, produces a corresponding fall in potential across the terminals of the battery. If now the circuit through which the cell was being discharged is removed, and a source of electrical current flowing in the opposite direction is connected in its place, the lead sulphate, which has been created on the positive and negative elements, is reconverted into lead peroxide and porous lead respectively, with the result that the specific gravity of the cell rises again to its normal value. When the cell reassumes its normal condition and no further rise of specific gravity takes place, it is said to be fully charged, and the positive and negative elements will be found to consist of their original substances, namely, lead peroxide and porous lead. At this

point in the process of recharging it will be observed that bubbles of gas rise in the electrolyte. This is due to the fact that the applied current having restored the elements to their original state uses up its energy to break up the water which has been formed in the process of discharge. The above is a very brief outline of what takes place in charging and discharging a cell of an accumulator battery.

### Capacity of a Cell.

The capacity of a cell, that is to say, the amount of electrical energy which it will store as a result of being charged, and which is available for discharge depends upon the area of active material which is immersed in the solution. It is calculated and referred to in terms of "ampere-hours," indicating the time for which a current can be maintained at a given rate of flow, that is to say a cell which is said to have a capacity of 60 ampere-hours could maintain a current of one-ampere for 60 hours, or a current of 2 amperes for 30 hours before the voltage began to fall below 2 volts. The capacity of a cell, however, cannot be calculated as a direct progression because of a factor usually referred to as the rate of discharge. With the increased rate of discharge above a certain prescribed limit, the capacity will fall. The proper discharge rate will generally be found among the instructions printed on the side of the battery by the manufacturer, and in no circumstances should a battery be operated under conditions which exceed the discharge rate specified.

### Construction of a Cell.

The active materials of a cell are attached to the surface of the plate by various means with which we are not here concerned. In a small cell of a limited capacity there might be only one positive plate and one negative plate, that is to say one plate coated with lead peroxide and one with porous lead. If a greater capacity is required a larger number of plates must be employed. The normal arrangement is to place the plates alternately, first a positive then a negative, and so on, joining all the positives and all the negatives together and attaching each group to its appropriate terminal, the container of the whole cell being so designed that the electrolyte will cover the whole of the surface of each plate.

From this very brief theoretical outline of the action of the electrolytic cell we will, in the next instalment, proceed to some practical considerations with regard to the proper operation and maintenance of accumulator batteries

(Continued from Page 399.)

ference is much more marked here than at lower wavelengths. Without doubt the best transmissions come from 2XAD and 2XAF, with PCJJ as a good third, though I find the latter falls away after darkness. The Schenectady transmitters almost always start up on test some little time before their official starting hour, 11.0 p.m., and on Sundays commence the programme at 10.30 p.m.

### Radio Belgique's Special Programmes

On Thursday, March 22, Radio-Belgique will broadcast a special programme offered by the Théâtre Royal de la Monnaie. This concert, for which the programme will be entirely devoted to the works of Mozart, will serve as a prelude to a series of presentations of the work of this master arranged by the Monnaie. Wireless listeners will have an opportunity of hearing well-known artists, such as Mmes. Talifert, Clairbert, Mertens, MM. Thomas and Van Obbergh. Two of the directors of the Monnaie will collaborate in this evening: M. de Thoran will conduct the orchestra and M. Spaak will talk on Mozart's work.



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# Last Week's Log

By NORTHERNER

MY general impression of reception conditions during the past week or so is that on medium or long waves volume obtainable was slightly less than formerly, but on short waves reception has been decidedly improved.

Motala on his new higher wavelength is well clear of Zeesen, at least in this country, but seemed to me to be rather weaker than previously. This may be simply coincidence, and I assume that at this time of year the cold weather in Sweden, with attendant snow and ice, will make for difficulties in transmission not experienced in this country.

I have read that Zeesen has now permanently taken the place of the older Königswusterhausen transmitter, but nevertheless I find a considerable variation in signal strength from day to day. I notice that Carthage (Tunis) is given in *World-Radio* Identification Panel last week, and must endeavour to tune this transmission. I rarely listen above Radio-Paris wavelength, since I find that such stations as work in that section come in at only moderate strength. To me Huizen has always been disappointing, and since he now works early in the day on 340.9 metres morse will be a frequent source of interference.

Warsaw has been a very variable signal. At times very easy reception has been obtained, yet within twenty-four hours, strength has fallen away very appreciably. Kalundborg and Hilversum remain with their usual welcome and steady transmissions. On those evenings when I wish to listen to programmes, rather than search, I invariably use the long-wave section, for it is not often that one is unable to find some item, from one of the six or seven countries using that band, which will be really pleasant to hear.

Hilversum is, unfortunately, still heterodyned at many times, though I notice the trouble often disappears before 9 p.m.

On the medium wave-band conditions appear to be very much as in the past. Ever since the last rearrangement of wavelengths, I have regretted that Zürich was put up to 588.2 metres, for prior to that time, he was always a good transmission, at least in the winter. No doubt he still remains so, but the proximity of 600 metres shipping morse makes reception in no way pleasant, and nowadays one can scarcely hear the Saturday evening relay of the church bells of Zürich at 6 p.m. for mush.

I have found Brussels a somewhat stronger signal of late, but no doubt this is entirely accidental. These remarks may appear strange to Southern readers, but he is very much nearer to them than to me, and he has never been a strong signal in my locality since he left the neighbourhood of 265 metres some time ago.

All the now well-known German stations, such as Langenberg, Frankfurt, Hamburg, Stuttgart, and Leipzig, come over very well indeed, although Frankfurt is frequently heterodyned badly. Toulouse provides excellent material at times, and I understand that he relays from theatre or opera-house by means of a short-wave wireless link, no doubt on the same lines as was done in London some time ago.

Dropping to the real short waves—always an interesting matter—I mentioned that conditions have been even better than usual. I base this on the signal strength I have been experiencing from KDKA on 26 metres, this being such that I could listen easily to a church service on the evening of March 4 from that station, and at appreciably greater volume than I had previously had from there. Incidentally, I might mention the rather curious situation of listening to this station giving a Sunday evening programme shortly after Melbourne closes down at 6.30 Monday morning.

The latter transmission came in well on March 4, but not at such volume as on the

previous Sunday. There are now many short-wave transmissions within easy reach, some of which I have not yet identified. I have at times heard strong telephony at about 30.5 or 31 metres, for purposes of tests, the language being French.

KDKA on 62.5 metres is now good, and speech is quite clear, but atmospheric inter-  
(Continued on Page 398.)

## SHORT WAVE STATIONS

M.	Kc.	Station
65	3529	Zürich (Radio Club) EH9XD.
70	4285	Springfield (Mass.) WBZ.
70	4285	Vienna (OHK2). (Transmits on SUN. for 15 minutes after each hour from 5 p.m. till midnight.)
66.04	4542	Los Angeles (California) 6XAL from mdnt.
66.04	4542	Cleveland (Ohio) 8XF, 0.5 kw.
65.4	4587	Newark (N.J.) 2XAAQ, 0.5 kw.
65.18	4600	Newark (U.S.A.) WAAM, 0.5 kw.
65.18	4600	Newark (New Jersey), 0.5 kw. 2XBA (S.W. of WAAM). Transmits between 12 mdnt. 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) GXU.
61	4918	Paris (Radio LL) 9C.
60	5000	Russia, RFN (irregular).
59.96	5003	Bound Brook (N.J.) 3XL, 30 kw.
56.7	5291	Nauen (AGJ) occasionally after 6.0 p.m.
54.02	5553	Columbus (Ohio) 8XJ.
54.02	5553	Coney Island (N.Y.) 2XBH, 0.15 kw.
54	5555	Brooklyn (N.Y.) WCGV from 11.0 p.m.
53.54	5600	Portland (Oregon) 7XAO, 0.1 kw.
52.05	5763	Harrison (Ohio) 8XAL, 0.5 kw.
52.02	5767	Cincinnati (Ohio) WLV. Relays medium wave transmissions from 11.50 p.m. G.M.T. Except SUN. and FRI.
50	6000	Karlsborg (Sweden).
59	8000	Russia, RFN. TUES., THURS. and SAT., 12.0 noon and 1 p.m.
45	6666	Rome (Italy) IAX.
44.4	6696	Vienna, 0.24 kw.
43.35	6920	New Brunswick (N.J.) WIZ. Experiments occasionally from 11 p.m.
43	6976	Pittsburgh East (Westinghouse Electric) KDKA.
40.20	7463	Lyon (Rhône) YR. Daily except SUN. from 4.30 to 5.30 p.m.
37.8	7936	Doberitz (AFK) 5 kw.
37.5	8000	Ibarakiken (Japan) JHBB.
37	8103	Radio Vitus. WED., FRI. and SUN., 9.0 p.m. to 10.0 p.m.
33	9090	San Francisco (Cal.) 6XAR. from mdnt.
32.9	9118	Perth (W.A.) 6AG. 11.0—11.30 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) EH90C.
32	9375	Paris, Eiffel Tower. Time Signal 7.56 a.m. and 7.56 p.m.
32	9375	Sydney (2ME).
32	9375	Detroit (Mich.) 8XAO WJR, 0.75 kw.
31.4	9564	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., 0.5 kw.
31.93	9395	Bandoeng, Java (Radio Service) ANE. TUES. and THURS., 4.40 p.m. to 6.40 p.m. (G.M.T.).
31.25	9600	Bergen.
31.5	9523	Helingsfors, 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). MON. and FRI. 7 p.m. to 9 p.m.
24	12,500	New York (2XAB).
24	12,500	Chelmsford (5SW, 15 kw. Aer.). DAILY (except SAT. and SUN.) from 12.30—1.30 p.m. and from 7 p.m.
22.99	13,049	Houlton (Maine) 2XAA. after 11 p.m.
22.8	13,158	Fort Wayne (Indiana) WOWO, 1 kw. after 11 p.m.
22.2	13,392	Vienna, 0.24 kw.
22.1	13,574	Richmond Hill (N.Y.) 2XE (S.W. of WABC). after 11 p.m.
21.96	13,661	Schenectady (General Electric Co.) 2XAD SUN., 10.30 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., 6.0 p.m. to 7.0 p.m., 11.0 p.m. to 4.0 a.m. SAT. No transmission.
13	18,566	Kootwijk (Holland) PCLL. WED., 2.0 p.m. to 4.0 p.m. and occasionally on MON. and FRI.
17.2	17,441	Nauen (AGC).
17	17,647	Bandoeng, Java (Radio-Malabar) ANH, 30 kw. SAT., 12.40 p.m. to 2.40 p.m.
16.02	18,726	Rocky Point (Long Island) 2XG. MON. and FRI. after 5.0 p.m.
15.93	18,832	Bandoeng, Java (Radio Service) ANE, MON., 12.40 p.m. to 2.40 p.m.
15.5	19,354	Nancy (France).

Here's Happiness and Prosperity for You and Yours.

## £250 A YEAR FOR LIFE—FROM AGE 55

Think of it! A care-free life from age 55. An income of £250 a year absolutely secure to you for the remainder of your days—even if you live to be a centenarian.

The Plan devised by the Sun Life of Canada, the great Annuity Company with Government-supervised assets of over £62,000,000, makes this splendid prospect possible for you. You deposit with them a yearly sum you can well afford out of your income, and the money, under the care of this most prosperous Company, accumulates to your credit and to it are added extraordinarily generous profits. The figures here given assume an age of 35, and are estimated on present profits, but readers who fill in the enquiry form and send it to the Company, receive, without obligation, figures to suit their own age and circumstances. Full details of the plan will also be sent.

### £250 a Year for Life.

Just at the age when you begin to feel you ought to take things more easily, the Sun of Canada makes it possible for you to do so. From 55 years of age you will receive £250 a year for life. If you prefer it a cash sum of £3,000 will be given you instead of the yearly income.

### £20 a Month if Unable to Work.

Supposing you adopted this plan now, and next week, next year, or any year until you are 55, you become—through illness or accident—permanently incapacitated for earning a living, £20 a month will be paid to you until the £250 a year becomes due. And from the time of such incapacity no further deposits need be made by you.

### Income Tax Rebate.

If Income Tax remains as now, you will save nearly £250 during the run of the arrangement. This is additional to the profit you can make on the transaction.

### £2,000 for Your Family if Anything Happens to You.

Should you not live to the age of 55, £2,000 plus accumulated profits will be paid to your family. If death result from an accident the sum will be increased to £4,000 plus the profits.

### Any Age, Any Amount.

Though 35, and £250 a year for life have been quoted here, the plan applies at any age and for any amount. Whatever your income, if you can spare something out of it for your and your family's future, this plan is the best and most profitable method to adopt.

### £82,000,000 Assets.

The Sun of Canada has Assets of over £82,000,000, which are under Government supervision.

FILL IN AND POST THIS FORM TO-DAY.

To J. F. JUNKIN (Manager), SUN LIFE ASSURANCE CO. OF CANADA, 111, Suit of Canada House, Victoria Embankment, London, W.C.2. (Nr. Temple Station)

Assuming I can save and deposit £..... per ..... please send me—without obligation on my part—full particulars of your endowment plan showing what income or cash sum will be available for me.

Exact date of birth .....

Occupation .....

Name ..... (Mr., Mrs., or Miss)

Address .....

Wld. Radio, 16/3/28.

# Dominion and Foreign Broadcasting Intelligence

## CANADA

(By a Correspondent.)

### Mark Hambourg Broadcast

Radio listeners in Montreal had a great treat last night when Mark Hambourg, the celebrated pianist and composer was heard from station CKAC. This transmission was re-broadcast from station CFCA, Toronto, and was picked up in many districts in eastern Canada. Mark Hambourg is on a concert tour of the Canadian provinces, which closes in Vancouver.

### A Broadcasting Club

Montreal can boast, as far as it is possible to ascertain, of having the only "broadcasting club" in existence. The members hold monthly luncheon meetings, have a speaker who discusses a well-known radio topic of the day, and questions are asked, the whole resulting in a closer co-operation between local radio stations. The membership is composed of station directors, announcers, technicians, newspaper radio editors, and all and sundry who are in direct contact with radio matters. It is the endeavour of the club to raise broadcast programmes to a higher level, and educate the public to a greater appreciation of good music.

### Australia Rebroadcast

After picking up programmes broadcast from London and rebroadcasting them, station CFCA, Toronto, has been successful in rebroadcasting programmes sent out from Sydney, Australia. This achievement is similar to that of a Buffalo station a few days ago, and it is believed to have been the first successful Canadian rebroadcast of Australian programmes.

## AUSTRIA

(From our Vienna Correspondent.)

### S.W. Broadcasting at Trade Fair

With a call-signal EAWM, a small station is working from March 11 to 18 in the Rotunda building of the Vienna Spring Trade Fair. It is using wavelengths 44, 68 and 128, with an energy of 20 watts, and is working regularly from 9 a.m. till 4 p.m. It sends out gramophone concerts, and announcements, at intervals, of the progress of business at the Fair. It is in the Rotunda building in the Prater that the radio exhibits are housed, together with all the other electrical and engineering sections of the Fair, including motor cars and machinery in motion. The signal EAWM stands for "Europe, Austria Wiener Messe."

### Programme Items of Note

On Friday, March 23, there will be an interesting lecture from the Ravag Studio by Professor Fritz Lange, upon "Franz Schubert and the dance music of his time," and the Tautenhayn Quartette will provide the accompanying concert. The first of the Sunday morning gymnastic lectures by Herr Viktor Krainz (an ex-captain of the Austrian Army, who is now a medical student) has been postponed from

March 18 to March 25, at 9 a.m. His system is to have before him in the studio a pupil who carries out each exercise as ordered. In this way he can "see" exactly what his other thousands of listeners are doing. Each of them is recommended to stand before a mirror. His lessons will not be merely "exercises," but he will give sound advice upon how to bathe, douche, massage oneself, and keep joints constantly supple. *The Orloff operetta* is to be given in the studio on the evening of Sunday, March 25.

## The Sheikh

Paris wireless has its sheikh. He is an Algerian *littérateur*; the Sheikh Abdallah, who is the joint author with Ben Danou, another Algerian, already well known in Paris studios, of a play, *El Guezane*, which, a success on the legitimate stage, is to be adopted for broadcasting.

## HUNGARY

(From our Vienna Correspondent.)

### Brighter Railways

There has been formed in Budapest a company called the Hungarian State Railways Radio Company, which is about to provide, first of all, radio concerts in the waiting rooms of the principal stations, and during the summer to introduce radio equipment upon all the principal express trains serving Budapest. Later it is hoped to equip even slow passenger trains with radio. The waiting room idea is particularly good, for trains coming from abroad into Hungary, and then being made up afresh to proceed further, are often delayed, and a tedious wait at the Budapest terminus or elsewhere can be much alleviated by a rousing radio concert.

## NORWAY

(From our Bergen Correspondent.)

### A New Feature of Weather Forecasts

The western part of this country has recently suffered severely from snow avalanches. Many lives have been lost and much property damaged. As will be easily understood, these avalanches are caused by sudden warm temperature in the lower regions and upwards. Thus, whenever such a break may be expected, a special "Avalanche Forecast" is sent with the others, giving the necessary statements as to time and extent upwards of the mild temperature. For instance: "Tomorrow—danger for sudden warm temperature in the inner districts up to 1,000 metres over the sea." In this way, people living in avalanche regions may take the necessary precautions—that is, move away. It provides a variation of weather forecasts.

## SWEDEN

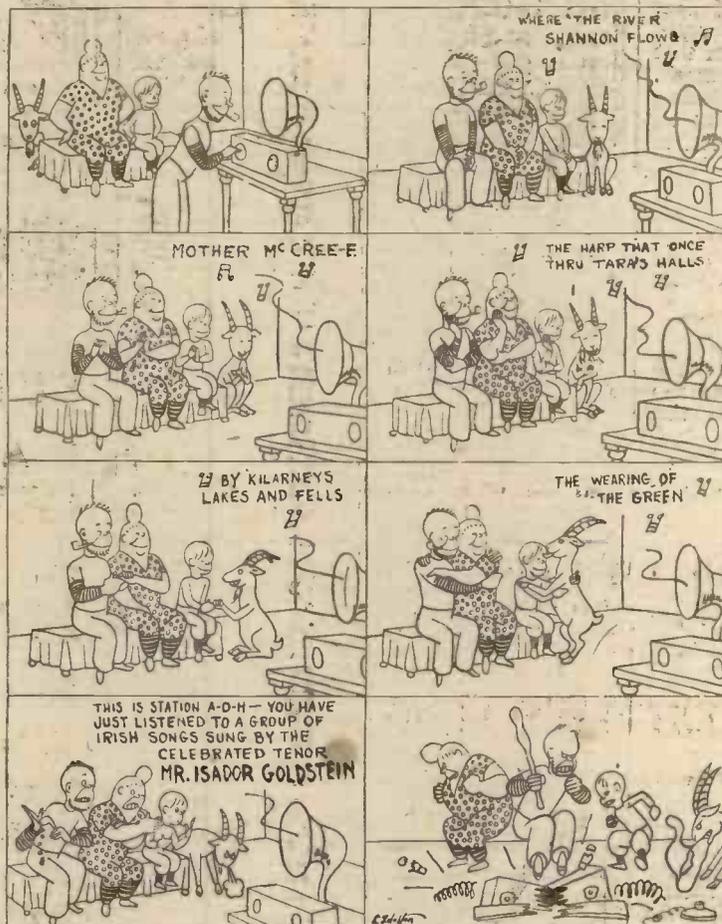
(From our Stockholm Correspondent.)

### New Waves for Swedish Stations

For the purpose of freeing it from interference with the new Zeesen station, the wavelength of Motala has been raised to 1,380 m. Boden's wavelength is also changed, in consequence of interference with Stambul. It is now transmitting on 1,190 m.

### Increased Listeners

Nearly 350,000 licences were issued in Sweden on March 1. This is an increase, since the beginning of 1928, of about 20,000.



Paddy's Irish Rose Up.

(Life, New York)

## FRANCE

(From our Paris Correspondent.)

### Sports Relays from England

Many of the keenest listeners to the sports broadcasts of the B.B.C. are French, and to cater for them more than one wireless paper reproduces the plan of the England v. Scotland Rugby match, which will be played on Saturday, March 17.

### Electing the Announcer

Being in need of another "speaker" (announcer) Radio-Toulouse have just launched a competition for men for the post. Listeners will make their own choice. By the way, the wireless link between this station and the Capitole Theatre at Toulouse, from where the operas are relayed, uses variously a wavelength of 130 metres, 165 metres and 205 metres.

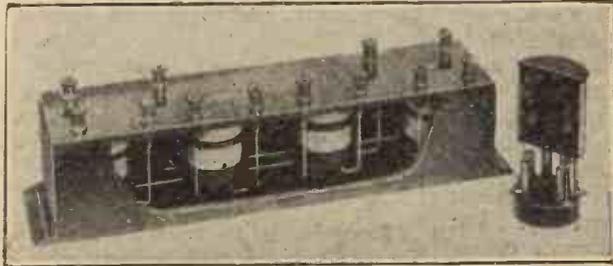
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BRITISH MADE RADIO

## SUPERSONIC UNITS 10/3000 METRES

Will receive ANY STATION at will, not by accident, including AMERICAN and AUSTRALIAN, at good loud speaker strength. NOTE.—2 TUNING CONTROLS ONLY.

WIRELESS WORLD, Nov. 24th: "The makers' claim of range and selectivity are in no way exaggerated."



SECTIONAL VIEW OF UNIT AND OSCILLATOR.

The "Liberty" will give you continuous tuning from 10 to 3000 metres, and in this respect is unique in the world's wireless components.

### PRICE.

Unit Complete with long wave Oscillator 750/3000, medium Oscillator 250/800, short wave Oscillator 10/200, and Oscillator holder,

£5 - 10 - 6

including full-size wiring and theoretical diagrams and list of other parts required.

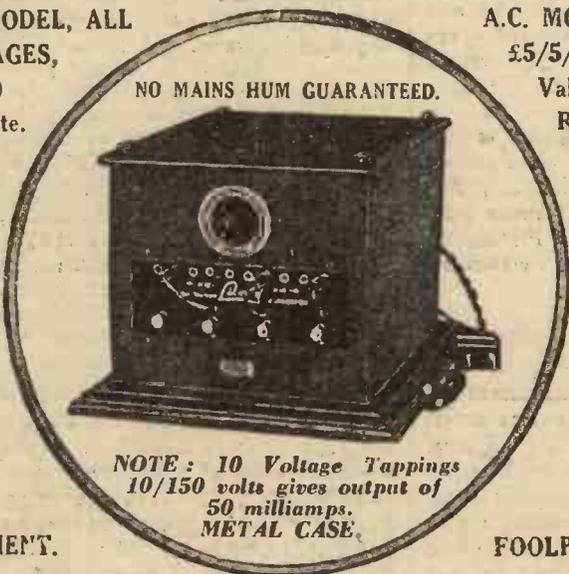
### UNPRECEDENTED SUPER-HET TEST.

Every unit tested in an actual Super Het Receiver over the whole range 10/3000 metres, and if desired any particular station calibrated.

### "LIBERTY" H.T. BATTERY ELIMINATORS

D.C. MODEL, ALL VOLTAGES, £2/5/0 Complete.

A.C. MODELS, £5/5/0, plus Valve and Royalty.



NO MAINS HUM GUARANTEED.

SAFE.

SILENT

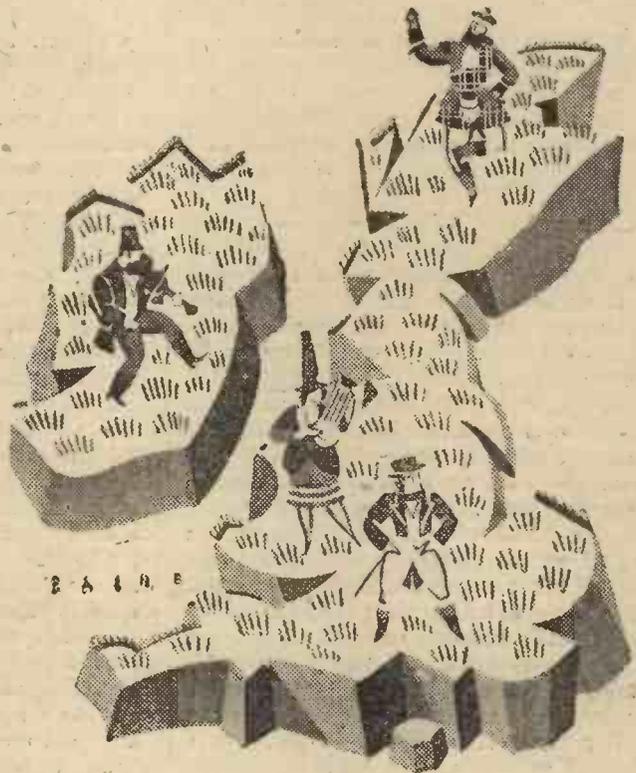
NOTE: 10 Voltage Tappings 10/150 volts gives output of 50 milliamps. METAL CASE.

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IN THE UTMOST COMFORT BY THE MAGNIFICENT OCEAN LINER

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AUGUST 3  
AUGUST 18

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## ROYAL MAIL STEAM PACKET COMPANY

America House, Cockspur St., S.W.1. Atlantic House, Moorgate, E.C.2  
Southampton, Liverpool, Manchester, Birmingham, Glasgow, Cardiff  
or Local Representative.

# Viâ Ether

NOTWITHSTANDING the fact that in my last notes I sent out a friendly note of warning regarding the possible very late transmissions carried out by the Polish stations on March 4 and 5, these appear to have come as a staggering surprise to a great number of readers. Many were the reports received by *World-Radio* from listeners who had been mystified by a broadcast in some Slavonic language, followed by transmissions of American dance melodies with choruses sung in English. At times, too, the problem was complicated by a news bulletin in French, and I am not surprised if some "fans" who stayed up late may have retired to their bed with the firm conviction that a modern Tower of Babel (complete with transmitter) had been erected in some European—or perhaps even more distant—land since they had last donned headphones. But bear in mind that Poland was in the throes of a General Election, the results of which greatly interested all cities, towns, and hamlets in that country, and for this reason, so long as results were obtainable from the polls, the stations remained on the air, beguiling the time with the transmission of a collection of gramophone records, covering a wide selection of musical items, from grave to gay. For the benefit of distant listeners, a summary of news was given out in the French language at intervals, as is customary with the Polish studios. I listened to these transmissions, which, in view of the fact that the ether in the early hours of the morning was clear of near-by stations, came over at enormous strength. Posen and Wilno, two transmitters which on ordinary days I can seldom hear, might have been, on that occasion, in the next street. And that's that!

As it is reported that the Rosenhügel station may soon be "off the air," pending the installation of the new super-power transmitter, we should do well to take advantage of its activities to-night (Friday, March 16) when at 6.30 p.m. it switches over to the State Opera House for a performance of Mozart's three-act comic opera *Il Seraglio*. It was originally produced in the Austrian capital on July 16, 1782, the book being founded on Bretzner's *Belmont and Constanza*. Mozart, who had fallen in love with Constanze Weber, with whose family he was living in Vienna, married her about a month after the opera he had dedicated to her had achieved a popular success. Stuttgart, on the same evening, at 8 p.m., resumes its Chase of Happiness around the world; this week we search for it in Bangkok. At 7.50 p.m. it will also be worth our while to turn to Naples, which promises a broadcast of *Ruy Blas*, a four-act opera by Filippo Marchetti. It was first heard at La Scala, Milan, on April 3, 1869. The plot is almost identical with that of Victor Hugo's tragedy of that title, and deals with the love of Don Sallustio for the Queen of Spain, by whom his advances are rejected. In revenge, he introduces his valet Ruy Blas to the Court as a young noble. You may easily guess what follows: the Queen favours the youth, nominates him as her Prime Minister, and grants him the title of Duke of Garofa. She is then told that she has fallen in love with a valet! Ruy Blas, spurned by the Spanish queen, kills himself—Curtain.

To-morrow (Saturday, March 17) brings us from Berlin (*via* Königswusterhausen), at 7 p.m., a performance from the Metropol-Theater, in the German capital, of Lehár's three-act operetta *The Count of Luxemburg*, the revival of which has met with considerable success. In the cast will be found three Berlin favourites, Ralf Arthur Roberts (a curiously English name) as Prince Basil Basilowitsch, and Margit Suchy and Alice Hechy, respectively as Angèle Didier and Juliette Vermont. By the way, Königswusterhausen also relays, at 4 p.m., the Hamburg afternoon broadcast, consisting of a Russian orchestral programme conducted by José Eibenschütz. Oslo, at 6 p.m., takes from the National Theatre in that city the prologue to the Ibsen Gala Festival. *Endlich Allein* (At Last Alone!) is another Franz Lehár three-act operetta which has been chosen by Warsaw for its evening entertainment at 7.30 p.m. on Saturday (March 17). The score contains the usual number of catchy melodies found in most of this versatile composer's stage works, and in many ways is on a par with his *Merry Widow*, *Gipsy Love*, *Frasquita*; or his latest works, *Paganini* and *The Czarewitch*. The École Supérieure, Paris, and most of the provincial PTT relays, including Eiffel Tower, offer us, at 9 p.m. *La Damnation de Faust* (Belioz), with the soloists and chorus of the Concerts Colonne, assisted by the full band of the Garde Republicaine of Paris. Lille, however, will transmit its own programme at 8.45 p.m., following which an attempt will be made to relay the symphony concert Brussels gives in conjunction with the Liège International Radio Exhibition.

Of late, PTT Nord has been launching out and has treated its listeners to many dips in the ether, including a broadcast of Sandler's orchestra from Eastbourne, picked up from 2LO or 5XX. Madrid, for its 10 p.m. entertainment, will give *Les Descaminados*, a short musical comedy by Chueca, and *The Yellow Guard*, a one-act comic opera by Jimenez. At Basle, Felix Weingartner will personally conduct the Gustav Mahler's Third Symphony, which constitutes the main feature of the concert, given at the Municipal Kursaal in that city on Sunday, March 18, at 7 p.m. Berne will relay this transmission. At 7.50 p.m. Hilversum puts over the ether a broadcast of *Die Fledermaus* (The Bat), the well-known operetta by Richard Strauss, and Leipzig, at 6.30 p.m., gives us a studio performance of Ibsen's *Peer Gynt*, with music by Grieg, which is also down for broadcast by Munich at 7.15 p.m. on March 20. Vienna, realising its listeners' predilection for plays of English origin, continues its series with a German translation of *Berkeley Square*, by John Balderston. If you can get Brussels at 5 p.m., you may pick up a running commentary on the arrival of automobiles and motor cycles at the Palais des Beaux Arts at Liège. They will have taken part in the Radio Rally Races, Liège-Paris return. Finally, Munich on that date, at 5.10 p.m., will see its studio visited by Bela Bartok, the Hungarian composer, who promises a piano-forte recital of his own works. After which, but not for the purposes of comparison, the

Bavarian transmitters will take us over to the Circus Radioni, whence we are to hear the roar of lions and other dangerous felines.

Lecocq's delightful comic opera *La Fille de Madame Angot*, a story of the Directoire period, will be performed this week in both Western and Eastern Europe, for Radio Paris has selected it for transmission at 8.30 p.m. on Monday, March 19, leaving Warsaw to revive this favourite at 7.30 p.m. on Saturday, March 24. Hilversum, on Monday next, at 7.10 p.m., supplies us with a more serious programme, namely, Bach's *Passion according to St. Matthew*, as given at the Zuider Kerk, or Southern Church, at Rotterdam. Brussels, at 8.30 p.m., relays from Antwerp a concert given by the Royale Harmonie, with Vera Janacopoulos, IJona Furigo, and other star singers as soloists.

Brussels, during this week will rely on Liège for the bulk of its afternoon concerts, but a special entertainment is also to be taken from that city at 8.15 p.m. on Tuesday, March 20. The great attraction on that evening will consist of excerpts from Verdi's *Il Trovatore*, with the tenor, Massart, supported by La Légia Choral Society, which you will already have heard through 5XX on a recent evening. Oslo, at 7 p.m. on that date, supplies Stockholm and the Swedish relays with an all-Ibsen programme. To any of the Polish transmitters we may also turn, from 6.20 p.m. onwards, for Bizet's *Carmen*, as performed at the Posen Opera House. In its possession of the Liederhalle, Stuttgart enjoys a valuable asset, and regularly relays from this concert hall recitals by some of the very best singers, solo instrumentalists and orchestras. On a recent occasion you cannot have failed to have heard Erica Morini, one of the finest violinists now touring Europe; on Tuesday, March 20, you will be given an opportunity of enjoying a programme of chamber music by the French Capet Quartet. I understand that both Frankfurt-on-Main and Langenberg will share this entertainment.

Cracow dedicates its evening broadcast, on Wednesday, March 21, to Carl Maria von Weber; the orchestral portion of the programme will be contributed by the band of the 20th Cracow Infantry Regiment, Françoise Plat, of the Lemberg Opera House, being the soloist. The legend of Blue Beard has furnished the libretti of many operas, some serious and symbolical, some tragic, others of a lighter nature. Offenbach could never be taken seriously, and his *Barbe Bleue*, produced at Paris in the middle 'eighties, was written as a parody on mediæval romanticism. Under the title *Ritter Blaubart*, Stuttgart will ring up the curtain on a performance of this work on Thursday, March 22, at 7.15 p.m. At Stockholm, at 6.45 p.m., we find a programme which will be appreciated by British listeners; it is to be a popular concert of English music and recitals by the Trinity Madrigal Club. Brussels again, on that evening, provides us, at 9 p.m., with a Mozart concert to be relayed from the Théâtre Royal de la Monnaie, with singers and orchestra from this famous opera-house.

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# Which Station Was That?

## ANSWERS TO CORRESPONDENTS

**Malinkin (Alkrington):** WGY (Schenectady), Palmolive programme. **Gem (Norbury):** No, this was Motala, relaying Stockholm (altered programme). **Rollston Radnov: WEA** (New York). **One Valve (Coventry):** Barcelona (EAJ1) English lesson. **BCM/ZVKE (Weymouth):** Milan (Vigentino), relay of opera: Mignon (Thomas). **Tootiel (Longridge):** Kalundborg, relaying Copenhagen; chimes are taken from the Town Hall at midnight (11 p.m. G.M.T.). **St. Jacut (Hoddesdon):** WBZ (Springfield) received direct. **Screened Grid (Bourne):** If not 2XAD (Schenectady), regret, cannot trace. **H. W. B. (Smymna):** WGY (Schenectady) received direct. **1000 H. P. (Wolverhampton):** Your estimate of WL is really too vague; so many stations were giving dance music at that time; regret, cannot trace. **Oscry (Darford):** PTT Rennes, relaying concert from PTT Paris. **W. P. H. (Colchester):** No, WGY (Schenectady) received direct. **Craigie (Scotland):** WL surely wrong; your details would tally with Münster, relaying concert of classical and dance music from Cologne. **Spoooner (Norfolk):** (1) Graz, relaying Vienna, (2) WL very vague, but possibly Leningrad. **Columbus (Newton Abbot):** Warsaw, relaying Symphony concert from the Philharmonic Hall in that city. **The Globe (Kidderminster):** (1) Possibly WORD (Batavia) relaying one of the New York stations, (2) WOC (Davenport), (3) yes, WEA (New York). **Wonderful (Dublin):** So far as we know, no European station relayed U.S.A. programmes on that night; WGY (Schenectady) received direct. **H. O. S. (Nottingham):** No, more likely to be San Sebastian, relaying opera: *The Pearl Fishers* (Bizet) from Madrid (EAJ7). **R. M. S. W. D. (Rudheath):** 2XG, is the Duplex telephony wireless station of the Radio Corporation of America, Rocky Point, Long Island, New York. **Excited (Finsbury Park):** If you are sure of WL, yes, WGY (Schenectady) received direct; see answer to **Wonderful (Dublin)**. **Sparks-Madge (Bedford):** Kattowitz (Poland). String quartet: dances of the 18th and 19th centuries, followed by news bulletin. **Insomnia (Bletchworth):** What urged you to believe this was a Norwegian relay? U.S.A. stations were well received on that evening. **S. W. C. 3. (Redfield):** (1) Possibly WTAM (Cleveland), (2) WRC (Washington) takes the WGY (Schenectady) programme; it is the nearest station to your estimated WL., WIOD (Miami Beach, Fla.), confirmed by other reports, (4) possibly WHAM (Rochester). **Kim (New Headington):** (1) Are you sure that this was not 5WA (Cardiff) testing? (2) an amateur transmission, but cannot trace as you give no call sign. **Searcher (Hillsbro):** (1) Kattowitz (Poland), (2) Warsaw (Call: "Radio Warszawa"). **Sulian (Bath):** (1) PTT Toulouse, relaying Ecole Supérieure, Paris, (2) yes, your details tally with the Munich programme, apparently received through Kaiserslautern on 204.1 m. (1,470 kc). 500 watts. **Lisna (Middlesbrough):** (1) Apparently an amateur relay; confirmed by other reports, (2) WLWL (New York) 500 watts. **F. D. H. (Stockport):** (1) Apparently an amateur relay, but later you heard a Polish station (Kattowitz on 422 m.) broadcasting election results with gramophone records in the intervals, (2) details are too vague, regret, cannot trace (3 and 4) WEA (New York) and WGY (Schenectady) about 3,100 miles. **Jebel Tarik (Beckenham):** Apparently Lille or Rennes on altered WL. **Mystified (Eastbourne):** (1) 5SW, B.B.C. experimental short-wave transmitter at Chelmsford, (2) regret, cannot trace. **Radio Roma (Cheshire):** (1) No German station near that WL., and so far as we can see no official broadcaster in that region of the band likely to relay Frankfurt-on-Main; this may have been Copenhagen, (2) we have had other reports of a French transmission on about this WL; although we have no confirmation of the fact, we believe that Rennes or Lille is broadcasting on a higher WL. **Yokey (Swindon):** Milan (Vigentino) on 526.3 m. **Super Tone 3 (Witney):** Barcelona (EAJ1) relaying chimes from Madrid (EAJ7). **Inquisitive (Lichfield):** (1) Dublin; the call you heard was: "Se só Ballo Atha Cliaih ag Gladhach." (2) Yes, Kalundborg, relaying Copenhagen, (3) Cassel, relaying concert of gramophone records from Frankfurt-on-Main. **Anodo (Cardiff):** WGY (Schenectady) received direct. **Artichoke (London):** All Polish stations were broadcasting election results at that time, with gramophone records in the intervals. **R. Y. (Leicester):** 2XZ advertised as amateur at Southfields, S.W. 18. **Tuned Anodo Three (Surrey):** WGY (Schenectady) received direct. **P. C. (Staffs.):** All Polish stations were giving election results at that time with gramophone records in the intervals; your estimate of WL is too vague to say which of these transmitters you heard. **H. Fox (Walsall):** An amateur transmission, but cannot trace as you give no call sign. **E. X. 5 (Forest Hill):** WPG (Atlantic City) received direct. **Optimist (Portsmouth):** Yes, WTAM (Cleveland) and WCCO (Minneapolis) both relay WGY (Schenectady), but we cannot say which of these stations you heard as your estimate of WL covers both. **Quizzy (Westcliff):** English lesson from Barcelona (EAJ1). **Trebila (Hornsey):** (2) Bremen or Hanover relaying Hamburg; on March 3, Gilbert's operetta *The Woman in Ermine*. **Straight Three:** This was Leipzig (an hour of variety and dance music); this might have included an outside broadcast but it was not advertised in programmes. **DX Three Valver (Works):** (a) KDKA (East Pittsburgh), (b) cannot trace Morse stations, (c) WGY (Schenectady), (d) possibly WCCO (Minneapolis). **Gromwell 3 (Mill Brow):** Apparently Motala, which is now working on 1,380 m. **Trebila (Hornsey):** (1) Frankfurt-on-Main, relaying Stuttgart, and later, Cassel, Joe (Kent): Hamburg, the early morning broadcast of news and weather (gramophone records in the intervals). **Variactor Two (Gordon):** (1) WPG (Atlantic City) received direct, (2) WEA (New York). **A. S. R. (Fife):** Warsaw, broadcasting election results (gramophone records in the intervals). **S. (Harrow):** Leningrad. **Ginger (Hornchurch):** This was an amateur transmission but cannot trace call sign. **3 Valve Reinartz (Rossington):** WIOD (Wonderful Isle of Dreams) Miami Beach, Fla. on 247.8 m. We know of no station with call sign WPEE. **Audifur (Cambridge):** At that time, your details could only tally with WGY (Schenectady). **Aerial (Lowestoft):** (1) Motala, now working on 1,380 m. (2) Norddeich (Germany) weather report. **BM/ZTJ4 (Christchurch):** Hamburg; shipping report given out in German and English. **R. H. Rigg (Barrow-in-Furness):** Eiffel Tower, testing on short waves. **Night Hawk (Dover):** You give no estimate of WL., but if received on 379.5 m. yes, WGY (Schenectady) direct. **Dubious (Margate):** Motala is now working on 1,380 m. **Zero (Belfast):** Madrid (EAJ7) instrumental and vocal concert. **R. C. M. Lloyd (Wrexham):** (1) Hulzen (Holland), lulltime music, followed by Children's Hour. Coupon must

be sent with each enquiry. **FAW1 (Cornwall):** Possibly Copenhagen. **H. B. S. (Hambrook):** Apparently WAZ, (Bourndbrook). **H. P. (Peckham):** Leningrad. **J. E. J. (Morden):** Posen, and Kattowitz, election results with gramophone records in the intervals. See paragraph in "Via Ether," *World-Radio* issue March 2, No. 136. **Schoolboy 3 (Barrow-in-Furness):** Yes, WGY (Schenectady) received direct. **Aitchoff (Wakefield):** This would appear to have been a test by Eiffel Tower, previous to the advertised 5.45 p.m. transmission; possibly experimenting on a lower WL., about 1,450 m. **R. Burleigh (E. 12):** An amateur transmission. **Melody (Redditch):** (1, 4, 5, and 6) Either amateur relays, or harmonics, (2) Cologne, *Pelleas and Melisande* (Debussy), (3) Naples (request programme). **Carfax (Surrey):** If your estimate of WL. is approximately correct, Moscow Comintern (RDW), but this station does not come between Motala (which is now working on 1,380 m.) and Leningrad. **Steward (Islington):** (1 and 2) yes, details and time tally with 3LO (Melbourne) and 2FC (Sydney). **JJJ-AAA-MMM (Somerset):** GNI, Nitou (Isle of Wight). **J. M. M. (Benview):** Cologne (chimes from the studio). **Mesico (Moffat):** (1) Cracow, broadcasting election results (gramophone records in the intervals), (2) with an 8LF condenser, the line would be fairly straight. **Miracle (Watlington):** Hamburg, the early morning broadcast of news and weather, and talk for the housewife; gramophone records in the intervals. **C. E. J. (Purley):** The only stations giving an outside broadcast at that time were Frankfurt-on-Main (operetta), and Leipzig (*Faust*); cannot trace on your estimate of WL. **Oneflat (Burton-on-Trent):** Dublin, relaying Cork. **Kettle (Fulham):** (1) Dublin, relaying Cork, (2) Madrid (EAJ7) operetta: *Marina* (Arrieta), (3) Posen and Kattowitz, broadcasting election results (gramophone records in the intervals). **Ann Matilda: Kalundborg, relaying 5GB; this station frequently relays London and Daventry, but it is not always advertised in programmes. Berte (Darlington):** All Polish stations were broadcasting election results at that time, with gramophone records in the intervals; you heard Posen, Kattowitz and Warsaw. **Nomad (Peterborough):** (1) Details are too vague, you do not say whether in the English or a foreign language; if the former, possibly an amateur, (2) possibly Kattowitz which was broadcasting election results at that time (gramophone records in the intervals). **West (Gryll):** This was Motala (now working on 1,380 m.) relaying Stockholm. **Ultra (Darlington):** 2XG, Rocky Point, Long Island, New York, testing on various WL. from 16-40 m. **Morse Martyr (Southampton):** (1) Yes, WSM (Nashville) 5 kw., (2) no, WLW (Cincinnati) working on 428.3 m.; WSAI (Cincinnati) is on 361.2 m., (3) yes, WJZ (Bourndbrook). **Mitzo: Posen, broadcasting election results (gramophone records in the intervals). E. K. T. (Buxton):** WEA (New York). **Avonia (Blaenavon):** This was Toulouse, relaying from the Theatre de la Caplote in that city. **W. A. E. R. C. M. M. (St. Austell):** (1) WEA (New York), (2) WCCO (Minneapolis) relaying WGY (Schenectady), (3) too vague, regret, cannot trace, (4) WGY (Schenectady), (5) regret, cannot trace, (6) KDKA (East Pittsburgh), (7 and 8) details much too vague, cannot trace, (9) WPG (Atlantic City), (10) WJZ (Bourndbrook), (11) WBZ (Springfield), (12) WIOD (Wonderful Isle of Dreams), Miami Beach, Fla., (13) WSM (Nashville, Tenn.) also heard by other listeners, (14) possibly WCAE (East Pittsburgh). **Rabbit (Near Colchester):** Bergen. **U. the P. (Bromley):** If you mean in kc., regret cannot trace, but if metres, details would tally with Hilsversum. **BM/CGMM (Hindhead):** Hilsversum; lunch-time music. **Amorphous Q: (1) PTT Rennes relaying orchestral concert from the Theatre Mogador at Paris, (2) possibly PTT Lyons (40.20 m.). Felix: Yes, WGY (Schenectady) received direct. Ajay: Posen, broadcasting election results (gramophone records in the intervals). Ultradon (Birmingham): (1) PTT Rennes relaying dance music from the Coliseum at Paris, (2) surely Copenhagen, (3) Kattowitz, broadcast of election results with gramophone records in the intervals. Mabel (Barnsley): Leningrad. **Igotton (Worcester):** (1) Possibly WBZ (Springfield), (2) this is apparently a new station, but we have no more information than that you gave us; reports have also been received, regarding this transmission, from other readers. **Scrutator (Somerset):** Motala, now working on 1,380 m. **W. J. Gillott (Birmingham):** Yes, WGY (Schenectady) received direct. **Short Waver (Chertsey):** We regret, but it is impossible to trace, as your details are much too vague. **Sedgewick (N. 16):** Dinky (M'bro): Kattowitz, broadcasting election results, with gramophone records in the intervals. **Lindum (Guildford):** Yes, WPG (Atlantic City). **Getemah (Seven Kings):** (1) Possibly KDKA (East Pittsburgh), (2) yes, details would tally with Madrid (EAJ7), (3) yes, WEA (New York), (4) possibly Barcelona (EAJ13) at that time, but cannot confirm as no programmes are available. **Cosmel (Newark):** Kalundborg, relaying 5GB; this station frequently relays London and Daventry, but it is not always advertised in programmes. Chimes are taken from the Town Hall, Copenhagen, at midnight (11.0 p.m. G.M.T.). **RTN/O.U.2.: J. W. F. (Gromer):** PTT Lyons (40.20 m.) relaying PTT Paris. **Symphony Concert from the Theatre Mogador. Tarzan (N. 22):** PTT Lyons (40.20 m.) relaying symphony concert from the Theatre Mogador at Paris. **S. D. 4. (South Nutfield):** Cannot understand WL. for this was a Polish station, broadcasting election results (gramophone records in the intervals). **R. Pepper (Hull):** Dublin, relaying Cork (news from Dublin). **Moheo (Thornton-le-Fyde):** Frankfurt-on-Main (orchestra and organ). **Prestwick (Ayrshire):** (1) Your estimate of WL. is wrong; regret, cannot trace, (2) WBAL (Baltimore) possibly heard through Bergen, which frequently relays U.S.A. stations. **Rekwak (Swansea):** (1) Hulzen (quarter of an hour of catechism), (2) Kattowitz, broadcasting election results with gramophone records in the intervals. **Two Valve (Redfield):** Yes, WGY (Schenectady) received direct. **Knobs (Switzerland):** We know of no Budapest station on that WL.; foreign transmitters frequently relay, thus puzzling listeners in regard to WL. **Chink (Newton Ferrers):** Although not advertised in programmes, your details would tally with a late dance transmission from Copenhagen. **Goldstream (Colnbrook):** All Polish stations were broadcasting election results at that time with gramophone records in the intervals; you apparently received this through Posen. **Wrong (Shrewsbury):** Leningrad. **4 Valver (Waterbeach):** Apparently aeroplane transmitter testing. **Swanley Three (S.W. 1):** WL. wrong; this was Kalundborg, relaying Copenhagen (a relay of foreign station). **Marine Parade (Folkestone):** (1) WGY (Schenectady), (2) Kattowitz, broadcasting election results**

(gramophone records in the intervals), (3) Hulzen; Tall, "Pilgrimage Through the Holy Land," (4) details are too vague, regret, cannot trace. **D. J. B. (The Terrace):** Commercial company's transmitter at North Woolwich testing. **Oscillating (Moseley):** Possibly Stuttgart (organ concert). **Avonia (Blaenavon):** Yes, WGY (Schenectady) received direct. **Gatesby Three (Ilford):** No, this was Dublin relaying Cork; see programme for latter station in *World-Radio*. **Jig Saw (Southampton):** Preston (Northumberland): Warsaw broadcasting election results with gramophone records in the intervals. See paragraph in "Via Ether" with reference to this late broadcast in *World-Radio*, issue March 2, No. 136. **Knocker (Falmouth):** (1) Yes, Hulzen, (2) Kalundborg, relaying dance music from the Restaurant Nimb at Copenhagen until 11.30 p.m. G.M.T. Coupon must be sent with each enquiry. **Trusthorpe Madge: (1, 2, 3, and 4)** All Polish stations were broadcasting election results at that time, with gramophone records in the intervals, (5) possibly WCCO (Minneapolis). **J. W. P. (Leeds):** Your details are very vague, but possibly Hamburg (dance items are often announced in English). **Far East (Northumberland):** (1) Warsaw, relaying symphony concert from the Philharmonic Hall, (2) details too vague, regret, cannot trace, (3) yes, this was San Sebastian. **D. W. S. (Gillingham, Kent):** We know of no French station other than PTT Paris, on or about your estimate of WL. Are you sure that the language was French? **Lon. Air (Birmingham):** Stuttgart's relay from the Liederhalle in that city of a recital given by Erica Morini (violinist); this was also taken by Frankfurt-on-Main, Cassel, and Freiburg. **Sharrow (Sheffield):** No, this was Dublin, relaying Cork (news from Dublin). **Le Pecq (Richmond):** Engineers' test from the Newcastle station. **G. W. (Bognor):** All Polish stations were broadcasting election results at that time, with gramophone records in the intervals (interval signal: metronome), but we cannot say which of these stations you heard as you give no estimate of WL. **Sparks (Sunderland):** Kalundborg, working later than advertised in programme: chimes from the Town Hall, Copenhagen, at midnight (11 p.m. G.M.T.). **Pip (Grantham):** Rome (a lady announcer) recitations in the interval of a relay from theatre. **Curiosity (Stainforth):** Amateur transmissions, but cannot trace, as you give no call signs. **Queen's Park (Glasgow):** Kattowitz broadcasting election results with gramophone records in the intervals (interval signal: metronome). **R. O. W. (Dalmeny):** (1) Kalundborg, relaying Copenhagen; a relay of foreign stations including 5GB; (2) Warsaw, broadcasting election results (gramophone records in the intervals). **B. W. (Rochdale):** You do not state WL. but the transmission was made by Stuttgart; a relay from the Liederhalle in that city of a recital by Erica Morini (violinist); also taken by Frankfurt-on-Main, Cassel and Freiburg. **Beta (St. Annes-on-the-Sea):** WL. wrong; you do not say what you heard, but the "hugle call" would come from Warsaw. **Wireless Willie (Bolton):** WGY (Schenectady) received direct. **Reveler (Northampton):** Kattowitz, broadcasting election results with gramophone records in the intervals. **Night Hawk: (1)** rather vague, but possibly WGY (Schenectady); (2) WOR (Newark) would be the nearest powerful station; we cannot confirm as details of programmes are not published; (3) possibly WCCO (Minneapolis); this station is frequently received in Great Britain. **Ardara (Co. Donegal):** (1) Warsaw, broadcasting election results (gramophone records in the intervals); (2) Kavno (Lithuania). **Trewint (S.W. 18):** WGY (Schenectady) received direct. **Cymra (Upton Warren):** (1) Madrid (EAJ7); (2) Cologne closed down at midnight. **Spud Murphy: A transmission by Stuttgart taken from the Liederhalle in that city; a recital by Erica Morini (violinist); also relayed by Frankfurt-on-Main, Cassel, and Freiburg. Twin (Forest Gate):** Kalundborg, relaying Copenhagen, dance music from the Restaurant Nimb, until 11.30 p.m. G.M.T.; chimes from the Town Hall at midnight (11 p.m. G.M.T.). **Tombo Bovo (Middlesbrough):** Apparently a B.B.C. station, but cannot tell you which as you give no idea of WL. **Essel (Horsham):** We cannot possibly trace this transmission, as you do not say what you heard. **Anvil (Darlington):** Kattowitz (broadcast of election results with gramophone records in the interval). **St. Edwards: A Polish station giving election results with gramophone records in the intervals; items heard tally with Kattowitz. Rabbit (nr. Colchester):** Possibly Bruenn, but item was not advertised in programme. **C. P. 377: Madrid (EAJ7) concert, followed by dance music. Night Owl (Bermundsey):** Much too vague; so many stations work on or about that WL. Sunday's transmission might tally with Kattowitz, which was giving election results at that time. **Sirrah (Lewisham):** Kaiserslautern on 204.1 metres, relaying Munich. **Mikado (Glasgow):** Kattowitz; gramophone records in the intervals of broadcast of election results; all Polish stations were working at that time. Your other transmission was from Posen. **O. H. V. (Wackings):** No, details would tally with Danzig, relaying Königberg. **Dixie 3 (Regent's Park):** (1) Kalundborg, relaying Copenhagen; chimes from the Town Hall at midnight (11 p.m. G.M.T.); (2) Yes, Cologne. **Maylor (Mitcham):** Item not given in programmes; Dresden relayed light and dance music from Leipzig at that time. **Big Ben (S.W. 10):** (1) This was the Munich programme; apparently received through Kaiserslautern (204.1 m.); (2) PTT Lille; (3) No, Leningrad. **P. M. O. K. (Wandsworth):** Norddeich (Germany) weather report. **Rose (Blackheath):** WL. apparently wrong; a Polish station, possibly Kattowitz, broadcasting election results with gramophone records in the interval. **Snevo: Regret, but cannot trace any programme to tally with your details on or about that WL. Mulcos: Yes, all Polish stations were giving election results at that time; you received this either through Kattowitz or Wilno. Radio (Staines):** Motala now working on 1,380 m., relaying Stockholm (news and weather report). **Pen (Bexhill):** Apparently an amateur transmission of gramophone records. **W. G. M. (Bristol):** Oslo (concert by the station orchestra). **Three Valver (Lancashire):** Kalundborg, relaying Copenhagen; a relay of 5GB; this station frequently relays London and Daventry, but it is not always advertised in programmes. **Super 7 (Pendleton):** Kattowitz, broadcasting election results; news is given in French and Polish. **J. G. (Derry):** Moscow Comintern (RDW). **Night Owl (Walthamstow):** No, WGY (Schenectady) received direct; many readers heard this transmission on that night. **Worried (Surbiton):** Motala on its new WL. of 1,380 m. **Snip (Westcliff-on-Sea):** (1) We can trace no play given at any station at 10 a.m. on a Sunday. **Pittsky: Apparently short wave transmission from Radio LL, Paris. Stump (Lincs):** Regret, cannot trace, as no estimate of WL. is given. **G. W. W. (Paddington):** No, Posen, Kattowitz and Cracow broadcasting election results with gramophone records in the intervals. **Kenvic (Manor Park):** No German station advertised a relay of foreign stations on that date, but this is sometimes carried out by Berlin, Stuttgart and Munich.

(Continued on page 406.)

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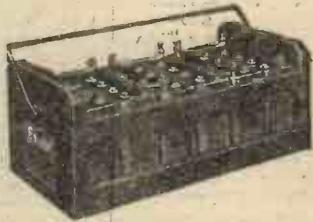
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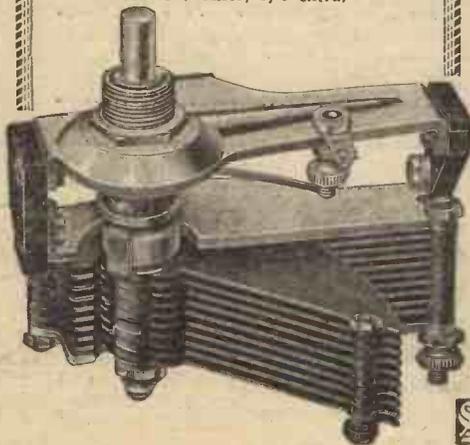
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Prices (with Aluminium Vanes) from 7/6  
Prices (with Brass Vanes) from 10/-  
With Vernier, 5/8 extra.



**Continental Programme Events**

*(The special Ibsen transmissions are given separately on page 397.)*

**Sunday, March 18.**

- 5.10 p.m. Munich.—A Bela Bartok recital.  
7 " Hamburg.—"Der Vogelhändler" (Zeller).  
7 " Königsberg.—"The Postmistress" (Jessel).  
7.10 " Langenberg.—"The Master Miner" (Zeller).  
7.30 " Posen.—Military concert.  
7.45 " Stockholm.—Norwegian music.  
7.45 " Milan.—"The Puritans" (Bellini).  
7.50 " Hilversum.—"The Bat" (Johann Strauss).  
7.50 " Naples.—"The Merry Widow" (Lehár).  
10.30 " Madrid.—"Michael Strogoff."

**Monday, March 19.**

- 6.30 p.m. Berlin.—"The Doctor in spite of himself" (Gounod).  
6.30 " Prague.—"M'selle Nitouche" (Hervé).  
7.5 " Munich.—Military concert.  
7.10 " Hilversum.—The Matthew Passion (Bach).  
7.10 " Königsberg.—German folk music.  
7.15 " Leipzig.—Songs of the Nations: France.  
7.50 " Naples.—"Addio Giovinezza" (Pietri).  
8.30 " Brussels.—Concert.  
8.30 " Radio Paris.—"La Fille de Madame Angot" (Lecocq).

**Tuesday, March 20.**

- 6.30 p.m. Posen, Wilno.—"Carmen" (Bizet).  
7.20 " Langenberg.—Concert.  
8.30 " Lille.—Organ and 'Cello recital.  
9.15 " Brussels.—Concert.  
10.10 " Madrid.—"Faust" (Gounod).

**Wednesday, March 21.**

- 5.25 p.m. Prague.—"The Brandenburgs in Bohemia" (Smetana).  
6.25 " Hamburg.—"Allesandro Stradella" (Flotow).  
7.5 " Munich.—Concert.  
7.30 " Berlin.—Russian dances.  
7.30 " Kattowitz.—Old Italian music.  
8.30 " Berlin.—Speech by the Minister of Foreign Affairs, Herr Stresemann.

**Thursday, March 22.**

- 7 p.m. Langenberg.—"Cosi fan tutte" (Mozart).  
7.10 " Berlin.—"Gasparone" (Millöcker).  
7.15 " Stuttgart.—"Blue Beard" (Offenbach).  
7.45 " Rome.—"The Count of Luxembourg" (Lehár).  
7.52 " Milan.—"The Puritans" (Bellini).  
7.55 " Hilversum.—Symphony concert.  
9 " Brussels.—Mozart festival concert.  
10.2 " Madrid.—Orchestral selections.

**Friday, March 23.**

- 7 p.m. Hamburg.—Beethoven programme.  
7.50 " Naples.—"Lucy of Lammermoor" (Donizetti).  
7.50 " Prague.—"Wallenstein's Camp" (Schiller).  
8 " Königsberg.—Modern Russian music.  
9.10 " Berlin.—"Wild West" programme.  
10.10 " Madrid.—Concert.

**Saturday, March 24.**

- 6.25 p.m. Bratislava.—"The Lantern" (Novák).  
7 " Königsberg.—"Madame Butterfly" (Puccini).  
7.30 " Kattowitz, Posen, Warsaw.—"La Fille de Mme. Angot" (Lecocq).

*(Continued from page 404.)*

regret, cannot trace. Possibly carried out by Stockholm, in which case you heard a German transmission via Malmö. **Libraire (Morley); Toffy (Small Heath):** Posen, broadcasting election results with gramophone records in the intervals. **Pinchin:** (1) Kattowitz, giving election results (gramophone records in the intervals); (2) U.S.A. station, but your details are too vague to trace. **Very Curious (Harringay):** (1) Yes, 2XAF (Scheneclady); (2) regret, cannot trace; (2) this is PTT Lyons on 40.20 m. **Wanderer:** Kalundborg, relaying church service from the Garrison Church at Copenhagen. **Uncertain (Lewisham):** Too vague, you give no estimate of WL, regret, cannot trace. **Pen Bryn:** Wilno and Cracow broadcasting election results (gramophone records in the intervals). **K. M. P. (Leamington Spa):** Hilversum (accordion quartet) with xylophone solo. **Coil Mover:** Your query is rather vague; if WL correct, fog beacons or light ships: if on a higher WL Biffel Tower (time signals). **Komo (Manchester):** Ajax (Sheffield): All Polish stations were broadcasting election results at that time, with gramophone records in the intervals. **C. P. 377:** Kalundborg, relaying afternoon concert from Copenhagen. **Gobelins (Mafé):** Quite possibly WPG (Atlantic City), U.S.A. **Juice (Brighton):** (1) Bordeaux, Radio-Sud-Ouest; (2) regret, cannot trace. **B. M. /BEH4 (Blackheath):** Riga relayed an opera at 6.30 p.m. **G.M.T. Eva Diavolo (Auber):** we believe that you heard a transmission from Kattowitz at that time. **Lex (Skipton):** Possibly Stockholm, which advertised a relay of foreign stations at that time. **Zaragoza (España):** T. W. M. (Corwen); **Billy (Bristol); Oscillating Oswald (Edinburgh); Carmarthen:** Kattowitz broadcasting election results (gramophone records in the intervals); see paragraph in "Via Ether" with reference to this late broadcast in *World Radio*, issue March 2, No. 136. **1 Valve Super-Het:** Surely your estimate of WL is wrong; the chimes were from the Radio Paris studio Westminster Clock, as was the orchestral programme. **Ether Searcher 2 (Somersetshire):** (1) No, this was PTT Lille; (2) Bergen relayed foreign stations; quite possibly Oslo took this broadcast. **Dance music from 5GB** was included and no doubt the last item was from a German station, hence the National Anthem. **Jimmo (Kent):** Regret, cannot trace from condenser readings alone. **Semloh:** Boden (1,190 m.) relaying dance music from Stockholm. **Hibernia (Loughrea):** (1) WGY (Scheneclady); (2) WJZ (Bundswbrook); (3) Yes, WCOO (Minneapolis). **Disclose (Wandsworth):** (1) Yes, WGY (Scheneclady) direct; (2) PTT Lille. **J. W. P. (Leeds):** Your estimate of WL is apparently wrong; the transmission was by Stuttgart from the Liederhalle (soloist: Erica Morini, violinist); this was also taken by Frankfurt-on-Main, Cassel, and Freiburg; probably you heard this through Frankfurt-on-Main. **West Hove:** Kaiserslautern (204.1 m.) relaying Munich. **Alpha (Llanely):** Hamburg advertised dance music at that time; we are asking the station to give us the name of the baritone. **Stage (Gloucester):** We cannot confirm, but possibly Stockholm which advertised a relay of foreign stations at that time. **Crucible (S.W.3):** (1) Kattowitz, election results (gramophone records in the intervals); (2) possibly WTAM (Cleveland), U.S.A., which is often received in Great Britain. **Naylor (Peacehaven):** Münster, relaying concert from "Hotel Zur Post" (Elberfeld). **St. Jacut (Kent):** Barcelona (E.A.J.). **Doc (Belfast):** Oslo. **Moonshine (Meiröse):** Cannot trace without some estimation of WL. **Waggle (Cowley):** Berlin (Königsbrunnenhaus). **German National Anthem:** "Deutschland ueber alles" music by Haydn. **H.F. 42:** (a) PTT Lyons on 40.20 m.; (b) We do not know the call, but apparently a short wave transmitter of the Cie Generale; (c) Private transmitter, Berlin; (d) We have not traced the Spanish short wave station. **Twin Reflex (Hammersmith):** WGY (Scheneclady) received direct. **C. L. Y. (Bucks.):** Although you give many details we cannot make any search as you give no idea of WL. **Smuggler (Shalford):** (1) PTT Rennes; (2) only English lesson given at that time was by the Ecole Supérieure, Paris; possibly received through PTT Grenoble; (3) Malmö, or Eskilstuna, relaying Malmö. **Muff:** No, this does not tally with the Juan-les-Pins programme; more probably Bordeaux, Radio-Sud-Ouest, of which detailed programmes are not published. **D. Brand (Rosebury Terrace):** A Polish station giving election results (gramophone records in the intervals); you do not state WL, so cannot trace actual transmitter. **Radio (Lympne):** Cannot confirm, but possibly relayed by Moscow. **New Comer (Eastbourne):** We cannot trace these items in programmes, but the WL would point to Huizen, which at that time was transmitting on 1,950 m. (Children's Hour). **Reinartz (Sunderland):** Stockholm was relaying foreign stations at that time, but we do not know whether this transmitter rebroadcast a programme from WGY (Scheneclady). **Metronome (Manchester):** Yes, 2XG, Rocky Point, Long Island, New York. **Rosstrevor:** Regret, we cannot trace this transmission. **G. T. C. (Heald Green):** WGY (Scheneclady) received direct. **Wireless King:** Rather vague; possibly English talk from Bergen. **Vernier:** Election results from Posen (gramophone records in the intervals). **F. W. (Hastingden):** Your estimate of WL is much too vague; regret, cannot trace.

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

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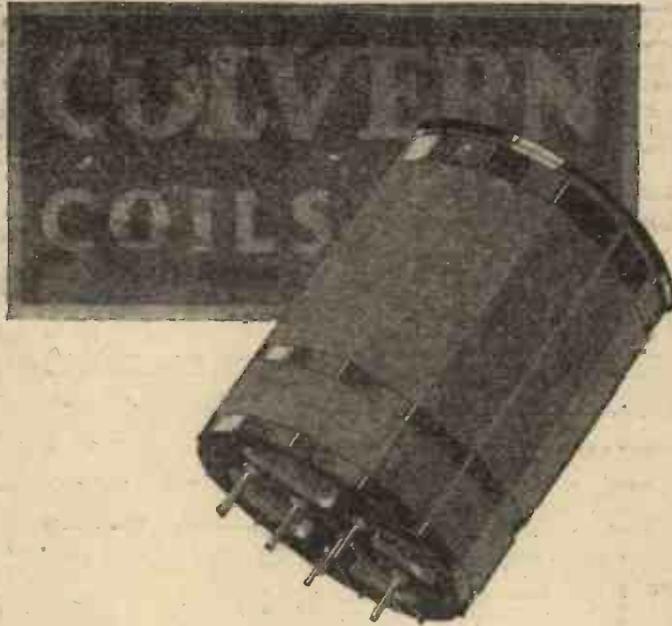
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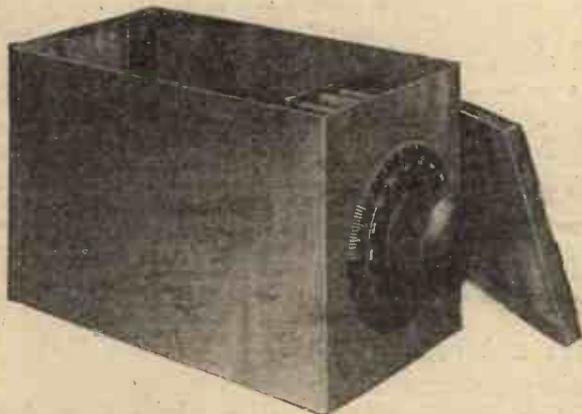
The great set of your mind's eye is the Raleigh P.M. The Free Blueprint

simplifies building to a degree that everyone may duplicate the original set wire for wire without the least difficulty.

With the set in your possession you will be no less amazed than we ourselves at the remarkable power which its five valves have at their command. It is hardly creditable that two high-frequency stages are able to reach out from a comparatively badly screened corner of London to any part of Europe as one feels inclined to direct them. [Adv.]



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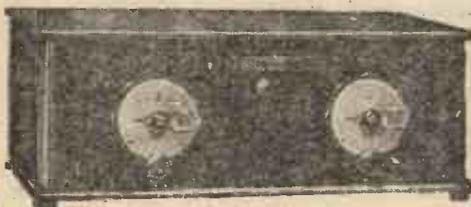
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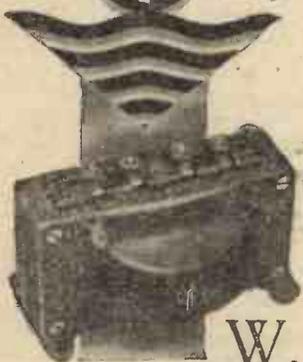


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Although this receiver costs to build a few shillings more than you may have allowed for your new set, do not hesitate at that. From the view-point of performance—and, after all, that is what counts—it is easily worth the outlay for two three-valve receivers. [Advt.]



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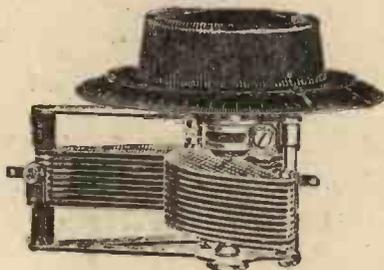
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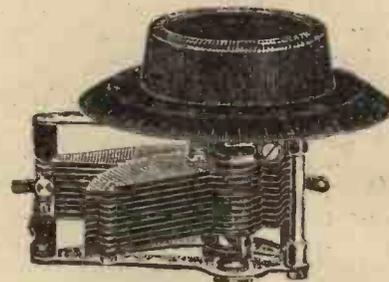
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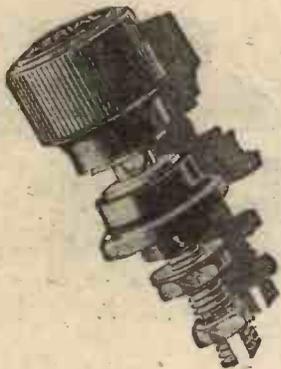
Radio human nature is almost satisfied at having pulled in a distant station—the absence of volume does not take away one scrap of the pride which is justly felt upon these occasions. But everyone must admit that the family do not share the enthusiasm. They are unmoved by our legitimate excitement. "Let's have London" is their only comment, as much as to say "leave the radio alone. For goodness' sake sit down and let us have some music." To abbreviate a long story, the trouble with most of

us is just simply that we are attempting the impossible.

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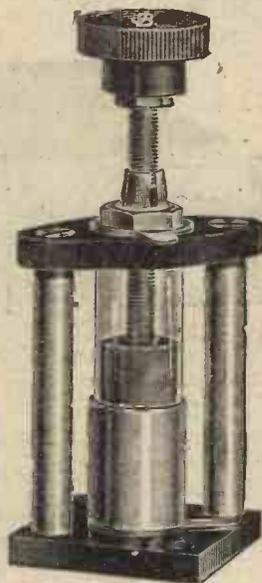
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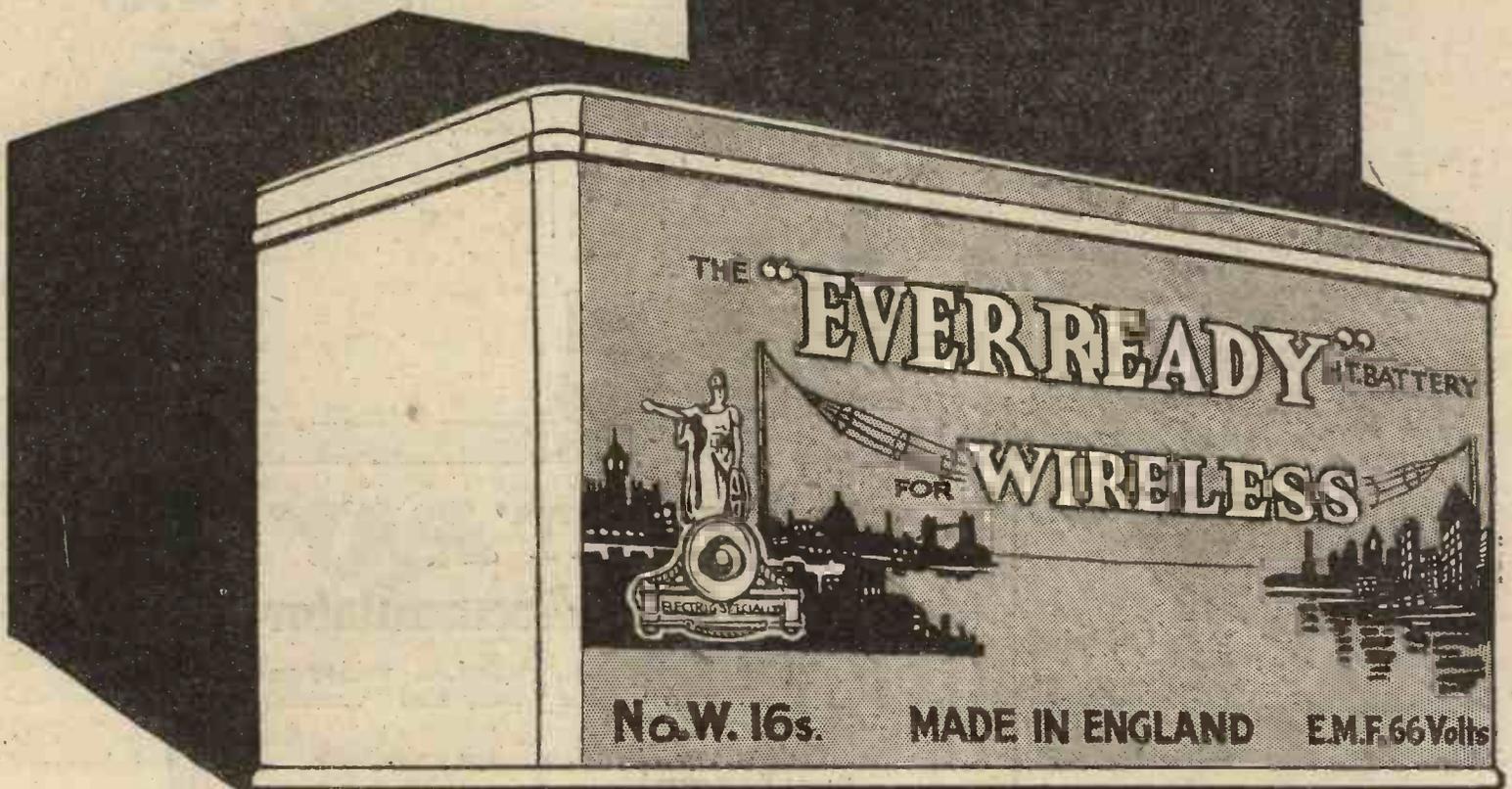
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(5XX) (1604.3 metres : 187 kc.)

DAVENTRY PROGRAMME

(March 18-24) (25 kw.)

SUNDAY

- 10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
3.30 p.m.—An Afternoon Concert. The Victor Olof Sextet, Dora Labbette (Soprano), Keith Falkner (Baritone).
5.20 p.m.—Readings from the Old Testament. "The Profit of Wisdom," Ecclesiastes viii, verses 5 to 12.
5.30-6.0 p.m.—Children's Service, relayed from St. John's, Westminster, conducted by the Rev. Canon C. S. Woodward.
7.55 p.m.—St. Martin-in-the-Fields, The Bells.
8.0 p.m.—Service, with the last of a series of three Addresses by the Rev. Eric Southam.
8.45 p.m.—The Week's Good Cause. Appeal on behalf of the Adair Wounded Fund, by Mr. Basil F. Leakey.
8.50 p.m.—Weather Forecast, General News Bulletin, Local Announcements, Shipping Forecast.
9.5 p.m.—A Moszkowski Programme. Teresa Ambrose (Soprano). The Wireless Symphony Orchestra, conducted by Percy Pitt.
10.30 p.m.—Epiques.

MONDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
11.0 a.m.—Gramophone Records.
12.0 noon—Rosa Pinkerton (Soprano), Jessie Cormack (Pianoforte).
12.30 p.m.—The B.B.C. Dance Orchestra, personally conducted by Jack Payne.
1.0-2.0 p.m.—An Organ Recital by Harold Darke. Relayed from St. Michael's, Cornhill.
2.30 p.m.—Miss Rhoda Pocer, "Boys and Girls of Other Days—X, Jack the Fenman's Son."
3.0 p.m.—Musical Interlude.
3.5 p.m.—Great Stories from History and Mythology—"How Sir Launcelot Rescued the King."
3.20 p.m.—Musical Interlude.
3.30 p.m.—A Song Recital, by Norah Dahl (Soprano).
4.0 p.m.—Frank Ashworth's Park Lane Hotel Band.
5.0 p.m.—Miss Helen Tress, "Some Fish Recipes."
5.15 p.m.—The Children's Hour.
6.0 p.m.—The B.B.C. Dance Orchestra, personally conducted by Jack Payne.
6.20 p.m.—Quarterly Bulletin of the Wireless League and the Wireless Association, by Prof. A. M. Low.
6.30 p.m.—Time Signal (Greenwich) Weather Forecast, First General News Bulletin.
6.45 p.m.—The B.B.C. Dance Orchestra (Continued).
7.0 p.m.—Mr. James Agate, Dramatic Criticism.
7.15 p.m.—The Foundations of Music. Chopin's Nocturnes, played by Edward Isaacs (Pianoforte).
7.25 p.m.—Mr. F. Norman, German Talk, including a reading from Hebel.
7.45 p.m.—Vaudeville. Julian Rose (the Hebrew Comedian), Yvette Darnac and Bernard Clifton (Light Songs), Kathleen O'Regan (Irish Humour), Sandy Rowan (Scots Comedian), Billy Hill (Saffeur and Vocalist), The Three New Yorkers (in Harmony) and the B.B.C. Dance Orchestra, personally conducted by Jack Payne.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Miss Elizabeth Robins, "Ibsen."
9.30 p.m.—Local Announcements, Shipping Forecast.

- 9.35 p.m.—A Concert by the Civil Service Choir, conducted by Stanford Robinson, Mavis Bennett (Soprano), Arthur Crammer (Baritone), Orchestra under the leadership of S. Kneale Kelley. Chorus assisted by members of the Railway Clearing House Male Voice Choir. Relayed from the Kingsway Hall, London, including Community Singing in which the audience will be accompanied by the Chorus and Orchestra.
10.30-11.0 p.m.—A Pianoforte Recital by Victor Hely-Hutchinson.
11.0 p.m.—12.0 midnight—Dance Music.

TUESDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
11.0 a.m.—Gramophone Records.
12.0 noon—The Gladys Noon Trio. Olive Davies (Contralto).
1.0-2.0 p.m.—Mozzetta and his Orchestra, from the Savoy Hotel.
2.30 p.m.—Sir H. Walford Davies, "Elementary Music—X, Filling in the Fourths."
3.15 p.m.—Musical Interlude.
3.20 p.m.—M. E. M. Stéphan, "Elementary French."
3.45 p.m.—A Short Recital by David Wise (Violin), Berkley Mason (Pianoforte).
4.0 p.m.—William Hodgson's Marble Arch Pavilion Orchestra.
4.15 p.m.—Mr. T. R. Scott, "The Building of the Hills."
4.30 p.m.—William Hodgson's Marble Arch Pavilion Orchestra (Continued).
5.0 p.m.—Miss E. Arnot Robertson, "Ideas for Holiday Week-ends."
5.15 p.m.—The Children's Hour.
6.0 p.m.—A Recital of Gramophone Records arranged by Mr. Christopher Stone.
6.30 p.m.—Time Signal (Greenwich) Weather Forecast, First General News Bulletin.
6.45 p.m.—A Recital of Gramophone Records.
7.0 p.m.—The Rt. Hon. the Earl of Drogheda, "Broadcast Listening," under the auspices of the Wireless League.
7.15 p.m.—The Foundations of Music. Chopin's Nocturnes, played by Edward Isaacs (Pianoforte).
7.25 p.m.—Professor A. Y. Campbell, "Greek Plays for Modern Listeners—IV, Euripides and his 'Hippolytus,'" from Liverpool.
7.45 p.m.—Variety. Melsa (Violin), Esther Coleman (Contralto), Robb Wilton (Entertainer), Una O'Connor (Irish and Cockney Character Studies), Tommy Handley, Phyllis Panting and Derrick de Marney.
8.0-8.30 p.m.—Mrs. Mary Adams, "Problems of Heredity—IV, The Inheritance in Man."
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.—"The Master Builder," a Play in Three Acts by Henrik Ibsen. Translated by Edmund Gosse and William Archer. Abridged and arranged for Broadcasting.
11.0 p.m.—12.0 midnight—Dance Music.

WEDNESDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
11.0 a.m.—Gramophone Records.
12.0 noon—A Concert by Kathleen Beldon (Soprano), W. R. Allen (Baritone), John Atkinson (Violin).
1.0-2.0 p.m.—The Week's Concert of New Gramophone Records.
2.30 p.m.—Mr. Eric Parker: "Out of Doors from Week to Week—X, Early Nests."
3.0 p.m.—Evensong. Relayed from Westminster Abbey.

- 12.30 p.m.—The B.B.C. Dance Orchestra, personally conducted by Jack Payne.
1.0-2.0 p.m.—Frascati's Orchestra, directed by Georges Haeck.
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—X, Victorian Poetry."
3.30 p.m.—Musical Interlude.
3.45 p.m.—Captain L. F. Ellis, "Our Interest in Good Government—IV, Our Part in the Making of Laws."
4.0 p.m.—A Light Classical Concert, Patrick Byrne (Baritone), Hetty Bolton's Trio; Marie Wilson (Violin); Edith Lake (Violoncello); Hetty Bolton (Pianoforte).
5.15 p.m.—The Children's Hour.
6.0 p.m.—The B.B.C. Dance Orchestra, personally conducted by Jack Payne.
6.20 p.m.—The Week's Work in the Garden; by the Royal Horticultural Society.
6.30 p.m.—Time Signal (Greenwich) Weather Forecast, First General News Bulletin.
6.45 p.m.—The B.B.C. Dance Orchestra, personally conducted by Jack Payne.
7.0 p.m.—Sir William Larkie, "Credit Insurance."
7.15 p.m.—The Foundations of Music. Chopin's Nocturnes. Played by Edward Isaacs (Pianoforte).
7.25 p.m.—Prof. A. V. Hill, "Speed, Strength and Endurance in Sport—IV, The 'Oxygen Debt' and the Limit of Fatigue."
7.45 p.m.—The Wireless Singers, conducted by Stanford Robinson.
8.0 p.m.—"The Piper," An Opera in One Act, founded on Robert Browning's "Pied Piper of Hamelin" by Herbert Feriers. The Wireless Chorus (Chorus-Master, Stanford Robinson), The Wireless Symphony Orchestra, conducted by the composer.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Speeches by H.R.H. The Prince of Wales and The Prime Minister, the Rt. Hon. Stanley Baldwin. Following the Second Annual Banquet of the Company of Master Mariners, relayed from the Mansion House. The Reply of H.R.H. the Prince of Wales, K.G., to the toast of "The Merchant Navy and Fishing Fleets." The Speech of the Prime Minister, the Rt. Hon. Stanley Baldwin, M.P., proposing the toast of "The Company of Master Mariners."
10.0 p.m.—Local Announcements, Shipping Forecast.
10.5 p.m.—A Sullivan Concert: Caroline Hatchard (Soprano), Charles Leggett (Cornet). The Wireless Chorus (Chorus-Master, Stanford Robinson), The Wireless Orchestra, conducted by John Ansell.
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.—Gramophone Records.
12.0 noon—A Concert by Kathleen Beldon (Soprano), W. R. Allen (Baritone), John Atkinson (Violin).
1.0-2.0 p.m.—The Week's Concert of New Gramophone Records.
2.30 p.m.—Mr. Eric Parker: "Out of Doors from Week to Week—X, Early Nests."
3.0 p.m.—Evensong. Relayed from Westminster Abbey.

MONDAY

- 3.0 p.m.—Dance Music. The B.B.C. Dance Orchestra, personally conducted by Jack Payne; Art Fowler and his Ukelele.
4.0 p.m.—Lazells Picture House Organ. (From Birmingham.) Frank Newman (Organ); Chrissie Stoddard (Soprano).
5.0 p.m.—A Ballad Concert. Dorothy Morris (Soprano), Frederick Grise-wood (Baritone), Mercia Stofesbury (Violin).
5.45 p.m.—The Children's Hour. (From Birmingham.)

- 3.30 p.m.—Lenten Address. The Rev. W. H. Elliott: "The Seamy Side of Life"—V.
3.45 p.m.—Miss Violet Brand: "Something New from Something Old: The Family Hats—Straws."
4.0 p.m.—The Astoria Orchestra. Directed by Fred Kitchen from the Astoria Cinema.
5.0 p.m.—Organ Recital by Pattman, from the Astoria Cinema.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Ministry of Agriculture fortnightly Bulletin.
6.15 p.m.—Market Prices for Farmers.
6.20 p.m.—Musical Interlude.
6.30 p.m.—Time Signal (Greenwich) Weather Forecast, First General News Bulletin.
6.45 p.m.—The B.B.C. Dance Orchestra. Personally conducted by Jack Payne.
7.0 p.m.—Mrs. M. A. Hamilton: "New Novels."
7.15 p.m.—The Foundations of Music: Chopin's Nocturnes. Played by Edward Isaacs (Pianoforte).
7.25 p.m.—Mr. R. S. Lambert: "Pioneers of Social Progress—IV, Lord Shaftesbury and the Saving of the Children."
7.45 p.m.—Vaudeville: Ivan Firth and Phyllis Scott (Syncopated Numbers), The Three New Yorkers (In Harmony), The Balagantschina, under the direction of Vladimir Zaaloff, Leslie Weston (Entertainer), Albert Sandler (Violin), and the B.B.C. Dance Orchestra, personally conducted by Jack Payne.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Travellers' Tales: Miss Stella Benson, "Out-of-the-way Places in China."
9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—Charlot's Hour—IX: A Light Entertainment specially designed and arranged by the well-known theatrical director, Andre Charlot.
10.30 p.m.—12.0 midnight—Dance Music.

FRIDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
11.0 a.m.—Gramophone Records.
12.0 noon—A Sonata Recital: Audrie Ford (Violin), Haward Clarke (Pianoforte).
12.30 p.m.—An Organ Recital: From St. Mary-le-Bow Church, by Charles F. Waters. Relayed from St. Mary-le-Bow Church.
1.0-2.0 p.m.—Lunch-Time Music. By the Hotel Metropole Orchestra (Leader, A. Mantovani), from the Hotel Metropole.
3.0 p.m.—Mr. Ernest Young and Dr. J. A. Williamson: "Empire History and Geography—New Zealand: (a) Outlines of New Zealand History; (b) The Britain of the South."
3.25 p.m.—Musical Interlude.
3.45 p.m.—Mr. Allen Walker: "London's Great Buildings—X, St. Paul's Cathedral."
3.45 p.m.—Musical Interlude.
3.50 p.m.—Plays to Schools: Shakespeare's "Julius Caesar."
4.45 p.m.—Musical Interlude.
5.0 p.m.—Mrs. Marion Cran: A Garden Talk.
5.15 p.m.—The Children's Hour.
6.0 p.m.—Frank Westfield's Orchestra. From the Prince of Wales Playhouse, Lewisham.
6.30 p.m.—Time Signal (Greenwich) Weather Forecast, First General News Bulletin.
6.45 p.m.—Frank Westfield's Orchestra (continued).

- 7.0 p.m.—Mr. G. A. Atkinson: "Seen on the Screen."
7.15 p.m.—The Foundations of Music: Chopin's Nocturnes. Played by Edward Isaacs (Pianoforte).
7.25 p.m.—Prof. C. H. Desch: "Metals in the Use of Man—IV, The Age of Steel." (From Sheffield).
7.45 p.m.—Fay Compton in Selections from "Kiddilogues" and "Kiddies' Hour," by Eileen de Mancha. At the Piano, the Composer: H. C. G. Stevens.
8.0 p.m.—A National Symphony Concert: Relayed from the Queen's Hall, The Hallé Orchestra, conducted by Sir Hamilton Harty. Leopold Godowsky (Pianoforte).
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—National Symphony Concert (continued).
10.15 p.m.—Local Announcements, Shipping Forecast.
10.20 p.m.—Anthony Armstrong ("A. A.") of Punch: "Music Parties and Olive Stones."
10.35 p.m.—Variety: Charles Treharne (Baritone), Frank Staff (Comedian).
11.0 p.m.—12.0 midnight—Dance Music.

SATURDAY

- 10.15 a.m.—A Short Religious Service.
10.30 a.m.—Time Signal (Greenwich) Weather Forecast.
1.0-2.0 p.m.—The Carlton Hotel Octet. Directed by Renee Tapponnier, from the Carlton Hotel.
2.55 p.m.—The Arsenal v. Blackburn Rovers. (From Nottingham.) Commentator, Mr. George F. Allison.
4.45 p.m. (approx.)—The Damsel.
5.15 p.m.—The Children's Hour.
6.0 p.m.—A Ballad Concert. Sybil Maden (Contralto), Andrew Clayton (Tenor).
6.15 p.m.—H. M. Abrahams. Eye-Witness account of the Oxford v. Cambridge Sports.
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. Chopin's Nocturnes, played by Edward Isaacs (Pianoforte).
7.25 p.m.—Major L. R. Tosswill: The Rugby Season—A Retrospect.
7.45 p.m.—A Scottish Variety Programme, by Aberdeen Artists. (From Aberdeen.) Hall Russell's Male Voice Choir, Minnie Mearns (Contralto), Alick Hobbs (Entertainer).
8.12 p.m.—The Bonaccord Vocal Quartet.
8.21 p.m.—"Change Over." A Short Domestic Drama by A. F. Hyslop, presented by the Aberdeen Vaudeville Players.
8.30 p.m.—R. E. Anderson (Baritone). The Aberdeen Station Octet will play Scottish Dance Interludes between the items.
8.40 p.m.—The Skirl of the Pipes. Mr. Seton Gordon will give a talk on "Piping," with illustrations played by Pipe-Major John McDevail, of Inverness.
9.0 p.m.—Weather Forecast, Second General News Bulletin.
9.15 p.m.—Mr. G. Watson Parker, "Let's get a Car—VI, Break-downs, III."
9.30 p.m.—Local Announcements, Shipping Forecast.
9.35 p.m.—A Military Band Concert. The Wireless Military Band, conducted by B. Walton O'Donnell, Watcyn Watcyns (Baritone).
10.30 p.m.—12.0 midnight—Dance Music.

DAVENTRY (EXPERIMENTAL) PROGRAMME

(5GB): (491.8 metres : 610 kc.) (25 kw.) (March 18-24)

SUNDAY

- 3.30 p.m.—Oratorio. (From Birmingham.) The Birmingham Studio Chorus and Augmented Orchestra (Leader, Frank Cantell). Conducted by Joseph Lewis; Fifine de la Cote (Soprano), Margery Phillips (Contralto), Richard Hawkins (Tenor), Dunstan Hart (Baritone). 1. "The Light of Life"—a Sacred Oratorio by Edward Elgar. For Four Solo Voices, Chorus, and Orchestra.
4.20 p.m.—II. Choral Variation from Cantata 140 (Bach, arr. Bantock). For Orchestra only.

- 4.35 p.m.—III. "Requiem" (Mozart). For Four Solo Voices, Chorus, and Orchestra.
5.20 p.m.—Readings from the Old Testament. (See 5XX.)
5.30-6.0 p.m.—Children's Service. (See 5XX.)
8.0 p.m.—Studio Service, conducted by the Rev. Canon Oscar Hardman.
8.45 p.m.—The Week's Good Cause. (See 5XX.)
8.50 p.m.—Weather Forecast, General News Bulletin.
9.0 p.m.—A Military Band Concert. The Wireless Military Band, conducted by B. Walton O'Donnell; Norah Dahl (Soprano).

MONDAY

- 3.0 p.m.—Dance Music. The B.B.C. Dance Orchestra, personally conducted by Jack Payne; Art Fowler and his Ukelele.
4.0 p.m.—Lazells Picture House Organ. (From Birmingham.) Frank Newman (Organ); Chrissie Stoddard (Soprano).
5.0 p.m.—A Ballad Concert. Dorothy Morris (Soprano), Frederick Grise-wood (Baritone), Mercia Stofesbury (Violin).
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 Frank Cantell; Margaret Ablethorpe (Pianoforte).
7.30 p.m.—"The Master Builder"—a Play in Three Acts by Henrik Ibsen. Translated by Edmund Gosse and William Archer. Abridged and arranged for broadcasting.
9.0 p.m.—Variety. (From Birmingham.) Constance Wentworth and Frederic Lake in Four Songs and Duets; The Birmingham Studio Orchestra (Frank Cantell and Harry Freeman in Violin Duets); T. C. Sterndale Bennett (Entertainer at the Piano).
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 Rivak Theatre Orchestra.
4.0 p.m.—A Military Band Concert (From Birmingham.) The Birmingham Military Band, conducted by W. A. Clarke; Mabel Baker (Soprano); Lena Wood (Violin).

# DAVENTRY (EXPERIMENTAL) PROGRAMME—Continued.

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.—*Dance Music*. The B.B.C. Dance Orchestra, personally conducted by Jack Payne; Cordelia Cooper (Songs at the Piano), Ronald Gourney (Whistling).  
 8.0 p.m.—*The Piper*—an Opera in One Act, founded on Robert Browning's "Pied Piper of Hamelin," by Herbert Ferrers; the Wireless Symphony Orchestra, conducted by the Composer; the Wireless Chorus (Chorus-Master, Stanford Robinson).  
 9.0 p.m.—*A Ballad Concert*. The Westminster Singers; Alice Vaughan (Contralto).  
 9.10 p.m.—*Lozell's Picture House Organ*. (From Birmingham.)  
 10.0 p.m.—Weather Forecast, Second General News Bulletin.  
 10.15—11.15 p.m.—*Vaudeville*. (From Birmingham.) Jack Payne (the Newsboy Whistler), Toni Farrell (Syncopations); Rickards and Stevens (the Scandalmongers), The Musical Avalos (in Xylophone Selections), Phil Brown's Dominoes Dance Band.

## WEDNESDAY

2.0 p.m.—*Chamber Music*. (From Birmingham.) Daisy Shorrocks (Violin) and Nigel Dallaway (pianoforte). Arthur Ruddock (Pianoforte).  
 4.0 p.m.—*The B.B.C. Dance Orchestra*. Personally conducted by Jack Payne. Cordelia Cooper (Songs at the Piano). Art Fowler and his Ukulele.  
 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 Frank Cantell. Leonie Zifado (Soprano).  
 8.0 p.m.—*A Military Band Concert* (from Birmingham).—The City of Birmingham Police Band, con-

ducted by Richard Wassell. Roy Henderson (Baritone).  
 9.0 p.m.—*Variety*: Carol Lyne (Light Songs at the Piano). Tommy Handley. Wolsey Charles (at the Piano). Sandy Rowan (Scots Comedian).  
 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.—*A Dinner Hour Service* (from Birmingham). Relay from St. Martin's Parish Church. Speaker, Dr. Peake.  
 3.0 p.m.—*A Symphony Concert*.  
 4.30 p.m.—*An Afternoon Concert* (from Birmingham). Relay from Lozells Picture House. The Orchestra, conducted by Paul Rimmer. George Guy (Bass). Frank Newman (Organ).  
 5.45 p.m.—*The Children's Hour*.  
 6.30 p.m.—Time Signal, Greenwich; Weather Forecast, First General News Bulletin.  
 6.45 p.m.—*Dance Music*: The B.B.C. Dance Orchestra, personally conducted by Jack Payne.  
 7.30 p.m.—*Hallé Orchestra Pension Fund Concert*. Relay from the Free Trade Hall, Manchester. The Hallé Orchestra, conducted by Sir Hamilton Hartly.  
 8.30 p.m. (approx.).—(In the Manchester Studio) Dorothy Bennett (Soprano).  
 8.45 p.m. (approx.).—*Concert* (continued).  
 9.45 p.m. (approx.).—*Poems read by Miss Stella Patrick Campbell* (from London).  
 10.0 p.m.—Weather Forecast, Second General News Bulletin.  
 10.15 p.m.—*Professor George Gordon*: Some Post-War Reflections on Literature.  
 10.45—11.15 p.m.—*A Song Recital by Arthur Cranmer*.

## FRIDAY

3.0 p.m.—*An Organ Recital*. By Leonard H. Warner. Relay from St. Botolph's, Bishopsgate. Dorothy Robson (Soprano).  
 4.0 p.m.—*Dance Music*: The B.B.C. Dance Orchestra. Personally con-

ducted by Jack Payne. Ronald Gourney (Whistling). Art Fowler and his Ukulele.  
 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*. Pierini Rosselli (Soprano), Aubrey Millward (Baritone). The Carlton Mason Sextet.  
 8.0 p.m.—*From the Musical Comedies* (from Birmingham). Olive Groves (Soprano). Harold Kimberley (Baritone). The Birmingham Studio Orchestra, conducted by Joseph Lewis.  
 9.0 p.m.—*Robb Walton* (Entertainer).  
 9.15 p.m.—*Dancing Through the Ages*. (from Birmingham).—A programme of Dance Music commencing from the olden times and leading up to the present-day Jazz. With incidental remarks by William Lloyd and music by the Birmingham Studio Orchestra and Lloyd's Rhythmic Dance Band.  
 10.0 p.m.—Weather Forecast, Second General News Bulletin.  
 10.15—11.15 p.m.—*Dance Music*.

## SATURDAY

3.30 p.m.—*Chamber Music* (from Birmingham). Dale Smith (Baritone). Eric Fogg (Pianoforte). Sidonie Goossens (Harp). The Virtuoso String Quartet.  
 4.30 p.m.—*Variety* (from Birmingham).—The Audley Mouth Organ Trio. Beatrice Eveline (Violin-cello). Fred E. Weatherley. Ethel Dakin (Soprano). Glyn Eastman (Baritone) and the St. Augustine's Male Voice Quartet.  
 5.45 p.m.—*The Children's Hour*.  
 6.30 p.m.—Time Signal, Greenwich; Weather Forecast, First General News Bulletin.  
 6.50 p.m.—*Light Music*. W. L. Trytel and his Octet. Lily Fairney (Mezzo-Soprano). Dan Jones (Tenor).  
 8.0 p.m.—*A Pianoforte Recital by Lorraine Tombo*.  
 8.30 p.m.—*A Symphony Concert* (from Birmingham).  
 10.0 p.m.—Weather Forecast, Second General News Bulletin.  
 10.15 p.m.—Sports Bulletin.  
 10.20—11.15 p.m.—*The Night Fighters*. A Radio Play. By Cecil Lewis.

# SPECIAL ST. PATRICK'S DAY PROGRAMMES.

Saturday, March 17.

## BELFAST.

7.45 p.m.—*"St. Patrick"*. A Narrative Play of the Life of Ireland's Saint, by F. K. Fahy. Main Characters: Saint Patrick; Victor, God's Angel; Regus, one of Patrick's Company; Laoghair, High King of Ireland; Lochru, the Chief-Druid; Dacrach, an Aged Soothsayer; Aercha, an Old Woman. Minor Characters: Miliuc, a Slave-owner; Derg, Rua, Aire (in bondage with Patrick to Miliuc); Dichu, a Local Chief at Saul; Laerg, a Swine-herd to Dichu; MacFind, one of Dichu's Warriors; Breg, Dichu's Messenger to Patrick; Benignus, Patrick's Pupil; A Messenger from Miliuc; The Queen of Ireland, at Laoghair's Court at Tara; Con, Dermot, Duffa, the Court Poet, Eric, Son of Deg (at Laoghair's Court at Tara). I. The Bondsmen of Miliuc gather on the hillside. II. Patrick lands at Saul in County Down. III. On Slernish Mountain. IV. At the Court of Laoghair at Tara. V. Easter Morn at Tara. VI. Patrick at Armagh. VII. The Death of Patrick.  
 9.35 p.m.—*A St. Patrick's Day Programme*. Pearl McConkey (Soprano), Mrs. Rooney of Belfast, Mat Mulcaghey, the Oul Besom Man from County Tyrone; Jimmy O'Dea, Irish Entertainer, R. L. O'Mealy, Uilleann Pipes, The Ulster Amateur Flute Band, The Station Orchestra.  
 10.35 p.m. (approx.).—*Carillon*. Relay from St. Patrick's R.C. Cathedral, Armagh. Carillonneur, Mr. T. W. Holden.

## DUBLIN.

6.0 p.m.—*Band of the Garda Siochana*. (Under the direction of Supt. D. J. Delaney); 1. March, "Garda Siochana (Delaney). 2. Overture—"Melodies of Hibernia" (Anon.). 3. "2nd Selection of Irish Airs" (Delaney). 4. Fantasia, "Irish Emeralds" (Gready). 5. Grand March—"The Gael" (Delaney). Finale—"The Soldiers' Song."  
 7.0 p.m.—*From 2RN Studio*. "Songs—Mícheal O Síochgráda: "Raiteachas na Láirgreach" (Traditional). "An Raibh tu agang Corr" (Traditional). "Buachaillín deas ag síghle" (Traditional).  
 7.10 p.m.—*Anhrain*. "Una ni Lochlainn." "Tain se mo Codladh" (Clandillon). "Caislean Uí Neill." "An Olmáin luachra."  
 7.25 p.m.—*Fiddle*. "An Buacaillín Bán." "An Londubh." "Realt na Numhan." "Triall Sean Uí Neill."  
 7.40 p.m.—*Anhrain* (Songs)—Tadhg F. Mac Fíir-Bhisigh. "Bheir m'oro" (Kennedy Fraser). "Ros catha na Mamhan" (M. ni Anna-gathain). "Bacach na Leige" (Clandillon).  
 7.50 p.m.—*"The Day We Celebrate"*—Cormac Breathnach.  
 8.0 p.m.—*Anhrain*.—*Maire Ní hAnghann*.  
 8.15 p.m.—*Royal Dublin Society's Concert*. Relay from R.D.S. Hall, Ballsbridge. Orchestra. Conductor, John F. Larcher, Mus.D. Songs—John Nolan. Irish Piper—Leo Rowsome. Traditional Songs (with Harp accompaniment)—Mairéad O'Donoghue. Traditional Songs—Sean Nesson.  
 9.15 p.m.—*Vocal and Instrumental Gaelic Programme* (relay from Town Hall, Galway).  
 10.15 p.m.—*From 2RN Studio*. Piper—Seamus MacAonghusa. Reels—"An briathrach." "An Splannac." "Jigs—"An buachaillín braithe." "O Maolmáir." "Air—"An Cúil Fionn." "Hornpipes—"The Ploughboy." "Spellane's Delight." Reels—"Johnny's Welcome Home." "Kitty's Gone a Milking." "Air—"Seoslainte cainain." "Amhrain (Songs)—Eamonn MacGearailt: "Mairín de Bharra." "Areill is me go hUaigneach." "An raibh tu ag an g carraig." "Ingear a Palating."  
 10.45 p.m.—*Fiddle*—Pádraig Clancy: "Cois leasa me go h-uaigneach." "Rogha taosig Uí Neill." "Páicin anraicre." "Clare's Dragoons March."  
 11.0 p.m.—*A Ceilidh Relay* (from Parnell Square, Dublin).  
 12.0 midnight.—Close Down.



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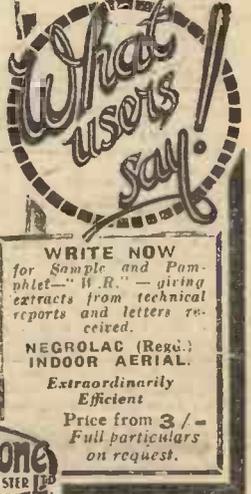
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PROGRAMMES FOR SUNDAY (March 18)

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

BARCELONA

Radio-Barcelona (EAJ) WL 344.8 m. (870 kc.); 1.5 kw. 11.0 a.m.—Chimes and Weather. 1.30 p.m.—Variety Concert. 5.0 p.m.—Symphony Concert from the "Gran Teatro del Liceo." 8.0 p.m.—Recitations. 8.20 p.m.—Quintet Selections: 1. Akita (Tramini). 2. Rondalla aragonesa (Granados). 3. Berceuse (Bolton). 4. Minuetto (Bolton). 8.40 p.m.—Sports Notes. 9.0 p.m. (approx.)—Close Down.

BERLIN

Königs-Wusterhausen. WL 1,250 m. (245 kc.); 35 kw. 8.0 a.m.—Programme from Voxhaus. 11.0 a.m.—Programme from Breslau. 1.0 p.m.—Talk on "Photography." 1.30-5.0 p.m.—Programme from Voxhaus. 5.0 p.m.—Talk. 5.25 p.m.—Talk, "The Year 1848." 6.10 p.m.—Talk, "Nietzsche and Youth." 7.10 p.m.—Programme from Breslau. 9.0 p.m.—Programme from Voxhaus.

BERLIN

Voxhaus. WL 484.6 m. (619 kc); 4 kw. 8.0 a.m.—Morning Recital. 10.30 a.m.—Choral Concert. 1.30 p.m.—Agricultural Talks. 2.30 p.m.—The Adventures of Captain Falk. 3.0 p.m.—Talk, "The World Voyage of the Emden." 3.30 p.m.—Concert. 1. Hoch Heidecksburg March (Herzer). 2. The Good Old Times—Waltz (Strauss). 3. "Titus"—Overture (Mozart). 4. Marmelades Lüftchen (Jensen). 5. Selection from "William Tell" (Rossini). 6. (a) Du hast mich nie geliebt (Meissel). (b) Hochzeitzug in Liliput (Translator). 7. Potpourri from "Der Feldprediger" (Müllbacher). 8. Romance for Violin (Svendsen). 9. Liebeslied—Violin Solo (Kreisler). 10. Waltz Fantasia in B minor (Glinka). 5.40 p.m.—Stories. 6.0 p.m.—Journalism Talk. 6.25 p.m.—Recitations. 7.0 p.m.—Talk, "State Control and the League of Nations." 7.30 p.m.—Ibsen Centenary Commemoration Programme. 1. Preludes from "The Feast of Solhoug" (Pfitzner). 2. Selections from "Peer Gynt" (Ibsen and Grieg). 3. Summer Night on the Fjord (Schjelderup). 4. Norwegian Rhapsody (Svendsen). 9.15 p.m.—Time, News and Sports Notes. 9.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

BERNE

Radio-Berne. WL 411 m. (730 kc.); 1.5 kw. 10.0 a.m.—Catholic Address. 12 (noon)—Time and Weather. 1.25 p.m.—Concert. 1.30 p.m.—Accordion Recital. 2.30 p.m.—The Kursaal Orchestra. 6.30 p.m.—Time and Weather. 6.35 p.m.—Sports Talk. 7.0 p.m.—Song Recital and Orchestral Interludes. News and Weather in the Interval. 9.30 p.m. (approx.)—Close Down.

BRESLAU

Schlesische Funkstunde. WL 322.6 m. (930 kc.); 4 kw. Programme relayed by Gleiwitz on 250 m. (1,200 kc). Transmits at intervals from 8.15 a.m. 11.0 a.m.—From the Grossen Konzerthausaal. 6.5 p.m.—"Synagogue Music"—Talk, with illustrations. 7.10 p.m.—"Hallo! Hier Welle Erdball"—Variety, followed by Instrumental Concert. 9.30 p.m.—Dance Music. 11.0 p.m. (approx.)—Close Down.

BRÜNN

Komarov. WL 441 m. (680 kc.); 3 kw. 5.0 p.m.—German Transmission. 6.0 p.m.—Concert. 7.0 p.m.—Programme from Prague. 9.20 p.m.—Military Concert.

BRUSSELS

Radio-Belgique. WL 508.5 m. (590 kc); 1.5 kw. 5.0 p.m.—Motor Rally relayed from the Palais des Beaux Arts at Liège. 7.45 p.m.—Radio-Chronique.

8.15 p.m.—Concert from Liège on the occasion of the Second International Wireless Exhibition. 1. "Poet and Peasant"—Overture (Suppé). 2. Songs. 3. Sylvia (Delibes). 4. Violin Solos. 5. Coiffe Pastorale (Godart). 6. Pianoforte Solos. 7. (a) Pavane pour une infante défunte (Ravel). (b) "Faust"—Valse (Gounod). 8. Songs. 9. (a) Someday, perhaps (Hawley). (b) "Withered Roses (Sunkay), (c) Prelude (Poissinger-Sunkay). 10. Violin Solos. 11. Scenes pittoresques (Massenet). 12. Pianoforte Solos. 13. Moonlight Ballet (Gaillard). 10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

BUDAPEST

Magyar Radio Ujsag. WL 555.6 m. (540 kc); 3 kw. Transmits at intervals from 8.0 a.m. 11.0 a.m.—Time and Weather. 11.5 a.m.—Wagnerian Concert. 1. "Rienzi"—Overture. 2. Eliza Beth's Aria from "Tannhäuser." 3. Intermezzo from "Lohengrin." 4. Wotan's Farewell from "The Valkyrie." 5. "The Mastersingers"—Overture (Wagner). 2.30 p.m.—Agricultural Talk. 3.0 p.m.—Children's Stories. 4.0 p.m.—German Talk. 4.45 p.m.—"Margareta"—Play. 7.0 p.m.—Time and News. 7.30 p.m.—Kern Aurel Memorial Programme. Choral and Vocal Music, followed by "Tzigane" Music

COLOGNE

Westdeutscher Rundfunk. WL 283 m. (1,060 kc); 4 kw. 8.0 a.m.—Catholic Morning Recital. Choral Music from the Works of Schumann, Boerner, etc. Address, and Solos from the Works of Bruckner, Mendelssohn, etc. 10.0 a.m.—Talk on "Goethe." 10.20 a.m.—Beethoven Pianoforte Sonata. 11.0 a.m.—Organ Recital. 12.0 noon.—See Langenberg. 1.30 p.m.—Literature Talk. 2.0 p.m.—See Langenberg. 2.40 p.m.—Agricultural Talk. 3.30 p.m.—Concert. 1. "The Merry Peasant"—Waltz (Fall). 2. Impromptu in A flat major (Schubert). 3. Tenor Solos: (a) Recitative and Air from "Der Freischütz" (Weber). (b) Aria from "Hans Heiling" (Marschner). 4. "Isabella"—Overture (Suppé). 5. Melodies from "Madame Butterfly" (Puccini). 6. Tenor Solos: (a) Aria from "La Bohème" (Puccini). (b) Aria from "Manon Lescaut" (Puccini). 7. Intermezzo from "Monna Lisa" (Schillings). 8. Egyptian Ballet (Luigini). 9. Tenor Solo from "Othello" (Verdi). 10. Scandinavian Intermezzo (Södermann). 5.0 p.m.—Sacred Music. 6.5 p.m.—See Langenberg. 6.35 p.m.—Sports Notes. 6.40 p.m.—Dancing Instruction. 7.10 p.m.—"Der Obersteiger"—Operetta (Zeller). Followed by Sports Notes, Concert and Dance Music. 11.0 p.m. (approx.)—Close Down.

COPENHAGEN

Copenhagen Radio. WL 337 m. (890 kc); 1 kw. Programme relayed by Kalundborg on 1,153.8 m. (260 kc). 9.0 a.m.—Divine Service. 10.0 a.m.—German Lesson. 2.0 p.m.—Afternoon Concert. 4.0 p.m.—Divine Service. 5.30 p.m.—Children's Corner. 6.10 p.m.—News and Time. 6.30 p.m.—Talk, "Determinisms in Childhood." 7.0 p.m.—Concert of Japanese Music. 1. Japanese Suite (Yamada). 2. Japanese Poems. 3. Japanese Melodies arranged for the Pianoforte (Capellen). 4. Japanese National Hymn (Hayashi). 5. Selections (Isawa Shuji). (a) Shiotsi-Zug, (b) Koi Yo, (c) Tematinta. 6. Japanese Suite, Op. 33 (Holst). 8.0 p.m.—News. 8.15 p.m.—"Intrigues"—Musical Play (Hostrup). 8.45 p.m.—Concert of Light Music. 1. Marche parisienne (Ganne). 2. "Morning, Noon and Night in Vienna"—Overture (Suppé). 3. Valse chalcoupée (Dubourgh). 4. Mäliuder (Paderewski). 5. The Standard Bearer—March (Fahrbach). 9.45 p.m.—Dance Music from Nimb's Restaurant. 11.0 p.m.—Chimes. 11.30 p.m. (approx.)—Close Down.

CORK

Cork Broadcasting Station (6CK). WL 400 m. (750 kc); 1.5 kw. 8.30 p.m.—Concert by the No. 2 Army Band, conducted by Lieut. A. Duff, Mus. B. Chrissie Manning (Soprano) and Laurance McCann (Violinist). 11.0 p.m.—The National Anthem and Close Down.

CRACOW

Polskie Radio. WL 566 m. (530 kc); 1.5 kw. 9.15 a.m.—Programme from Posen Cathedral. 11.10 a.m.—Programme from Warsaw. 1.0 p.m.—Agricultural Talk. 2.15 p.m.—Programme from Warsaw. 6.10 p.m.—Talk, "The Forests in Winter." 6.35 p.m.—Talk, "Polish Society in the Eighteenth Century." 7.0 p.m.—Famfar from Notre Dame, and Sports Notes. 7.30 p.m.—Programme from Warsaw. 9.30 p.m.—Concert from a Restaurant. 10.30 p.m. (approx.)—Close Down.

DUBLIN

Dublin Broadcasting Station (2RN). WL 319.1 m. (940 kc); 1.5 kw. 8.30 p.m.—Programme from Cork. 11.0 p.m.—National Anthem and Close Down.

FRANKFURT-am-MAIN

Südwestdeutscher Rundfunk. WL 428.6 m. (700 kc); 4 kw. Programme relayed by Cassel on 252.1 m. (1,190 kc). 7.30 a.m.—Morning Recital. 11.0 a.m.—Programme from Breslau. 2.0 p.m.—Relay of International Football Match "Eintracht"—Frankfurt v. "Kickers"—Stuttgart. 4.0 p.m.—Concert. 1. Inventions Nos. 1, 3 and 5 (Bach). 2. Seventh Concerto in A minor for Violin and Pianoforte (Rohde). 3. Pianoforte Sonata in C major (Mozart). 4. Ballet Scene for Violin and Pianoforte (Beriot). 5. Songs without words (Mendelssohn). 5.0 p.m.—Talk, "Modern Dietetics." 5.30 p.m.—Henrik Ibsen: Talk and Reading on the centenary of his birth. 7.0 p.m.—Transmission arranged by the Frankfurter Zeitung. 7.30 p.m.—An Evening of Contrasts—"Art and the rest." 8.30 p.m.—Programme from Stuttgart. 9.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

GENEVA

Radio Geneva. WL 760 m. (395 kc); 0.5 kw. 9.0 a.m.—Divine Service from the Victoria Hall. 7.15 p.m.—Sports Talk. 7.25 p.m.—Divine Service from the Temple de Carouge. 8.0 p.m.—Organ Recital.

HAMBURG

Norag (ha, in Morse). WL 396 m. (757 kc); 4 kw. Programme relayed by Bremen on 252.1 m. (1,190 kc); Hanover, 297 m. (1,000 kc); and Kiel, 259 m. (1,172 kc). Transmits at intervals from 7.25 a.m. 8.15 a.m.—Morning Recital. 10.0 a.m.—Talk, "Through the Hamburg Museums." 10.30 p.m.—Concert from the Ostermann Restaurant. 12.50 p.m.—Talk. 1.15 p.m.—Concert from Hanover. 2.30 p.m.—Children's Corner. 3.0 p.m.—Talk, "Travels in Brazil." 3.30 p.m.—Rugby Match—Germany v. France, from Hanover. 5.0 p.m.—Concert. 5.0 p.m.—Talk, "Reminiscences of a World Correspondent." 6.30 p.m.—Talk on "Cricket," from Kiel. 6.45 p.m.—Sports Notes and Weather. 7.0 p.m.—"The Bird Fancier." Operetta (Zeller), followed by News and Concert from the Café Wallhof. 10.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

HILVERSUM

Algerieene Vereeniging Radio-Omroep. WL 1,069 m. (280.5 kc); 5 kw. 9.10 a.m.—Programme arranged by the Workers' Radio Society. 12.10 p.m.—Trio Concert. 2.10 p.m.—Concert and Talk by Blind Artists. 3.10 p.m.—Concert. 1. Tenor Solos. 2. Contralto Solos (Schubert and Schumann). 3. Violin and Pianoforte duets, (a) Aria (Reget) and (b) Legend and Valse caprice (Wieniawski). 4. Tenor Solos.

5. Caprice viennois for Violin (Kreisler). 6. Hymn to the Sun (Rimsky-Korsakoff). 7. Gipsy Dance, Op. 14, No. 1 (Nachez). 8. Contralto Solos. 4.40 p.m.—"The Adventures of Little Fritz" Tales at the Piano. 5.10 p.m.—"The Fourth Sonata" (Beethoven) and Talk. 5.40 p.m.—Time. 6.10 p.m.—Divine Service. 7.40 p.m.—Time, Weather and News. 7.50 p.m.—"Die Fledermaus," Opera (Johann Strauss). 10.40 p.m. (approx.)—Close Down.

HUIZEN

WL 1,950 m. (154 kc); 4 kw. 8.10 a.m.—Divine Service and Talk. 9.50 a.m.—Divine Service from the Reform Church at Sneek. 12.10 p.m.—Time, and Trio Concert. 1.10 p.m.—Children's Corner from Bloemendaal. 2.10 p.m.—Concert from the "Salle de Concert," Amsterdam. 3.40 p.m.—Programme for Hospitals. Talk and Vocal Concert. 5.30 p.m.—Divine Service from the "Eglise Muiderkerk at Amsterdam." 7.10 p.m.—Talk. 7.40 p.m.—Instrumental Concert. 10.10 p.m.—News. 10.25 p.m.—Epilogue.

KÖNIGSBERG

Ostmarken Rundfunk. WL 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. 10.15 a.m.—Orchestral Concert from the Works of Handel, Haydn, Glazounov and Grieg, etc. (Königsberg only). 10.15 a.m.—Chamber Music (Danzig only). 3.15 p.m.—Request Concert. 5.15 p.m.—Talk, "Weight Reduction—Leichner's Reducing Baths." 5.45 p.m.—Esperanto Lesson. 6.15 p.m.—Reading. 7.0 p.m.—"The Postmistress"—Operetta (Jessel). 9.30 p.m.—News and Sports Notes. 9.40 p.m. (approx.)—Dance Music from Danzig.

KOVNO

Radio-Kaunas. WL 2,000 m. (150 kc); 15 kw. 2.30 p.m.—Children's Corner. 3.30 p.m.—Health Talk. 4.0 p.m.—Talk: "Commerce and Life." 5.0 p.m.—Wilno Hour. 5.30 p.m.—Rifle Club Programme. 6.0 p.m.—Time and Weather. 6.30 p.m.—Sacred Music. 7.0 p.m.—Concert. 1. Kreutzer Sonata for Pianoforte and Violin (Beethoven). 2. Six Pianoforte Preludes (Giurlionis). 3. Violin Solos: (a) Wiegenlied, (b) Rondo (Schubert), (c) Tambourin chinois (Kreisler). 4. Talk. 5. Theme and Variations for Pianoforte (Giurlionis). 6. (a) Selection from "Sadko" (Rimsky-Korsakoff). (b) Gavotte and Minuet (Toraullin). (c) Londonderry Air, (d) Zapateado (Sarasate). 7. "Bernuzeli nesvolnik"—Variations (Gruodis). 9.0 p.m.—Time and Close Down.

LANGENBERG

Westdeutscher Rundfunk. WL 470 m. (638 kc); 25 kw. Programme also for Aix-la-Chapelle, 401 m. (748 kc), Cologne, 283 m. (1,060 kc), and Münster, 241.9 m. (1,140 kc). 8.0 a.m.—12.0 noon.—Programme from Cologne. 12.0 noon.—Concert from Muenster. 1. "I Pagliacci"—Prologue (Leoncavallo). 2. Selection from "Der Freischütz" (Weber). 3. An der Weser (Pressel). 4. Torch Dance in C minor (Meyerbeer). 5. Programme of Marches. 1.30 p.m.—Programme from Cologne. 2.0 p.m.—Chess Talk from Dortmund. 2.40-6.5 p.m.—Programme from Cologne. 6.5 p.m.—Talk on "Dürer" from Düsseldorf. 6.35-11.0 p.m.—Programme from Cologne.

LAUSANNE

Société Romande de Radiophonie (HR2). WL 680 m. (441 kc); 0.6 kw. 9.0 a.m.—Address from the Victoria Hall. 3.0 p.m.—Programme from Berne. 7.15 p.m.—Programme from Geneva.

LEIPZIG

Mitteldeutscher Rundfunk. WL 366.3 m. (819 kc); 4 kw. Programme relayed by Dresden on 275.2 m. (1,095 kc).

6.30 p.m.—Concert: 1. Airs from "Die Geschiedene Frau" (Leo Fall). 2. Selections from (a) "Dolly" (Hirsch), (b) "Uschi" (Gilbert). 3. Air from "The Merry Widow" (Lehar). 4. "Behüt dich Gott," from "Countess Mariza" (Kalman). 5. Melodies from "A Waltz Dream" (O. Strauss). 6. Selections from (a) "Anneliese von Dessau" (Winterberg), (b) "Annenmarie" (Gilbert). 7. Melodies from "Das Schwarzwaldmädel" (Jessel). 8. Selections from (a) "Adieu, Mimi" (Benatzky), (b) "Der Orlow" (Granichstäden). 9. Melodies from "La Bayadere" (Kalman). 7.0 p.m.—Sports Notes. 9.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

LILLE

(PTI). WL 286.8 m. (1,046 kc); 0.5 kw. 3.0 p.m.—Concert of Readings and Music. 6.30 p.m.—Dance Music from the Lilliana Dance Hall. 8.30 p.m.—Orchestral Concert. 10.30 p.m.—News and Dance Music.

MADRID

Union Radio (EAJ7). WL 375 m. (800 kc); 1.5 kw. 2.0 p.m.—Orchestral and Vocal Concert. 7.0 p.m.—Children's Corner. 7.30 p.m.—Orchestral Concert. Programme relayed by San Sebastian (EAJ8), 335 m. (895 kc). 10.2 p.m.—"Michael Stragoff"—Drama (Miguel and Baerlan), after a Novel by Jules Verne, with Musical Illustration by del Campo and Rosillo. 12.30 a.m. (Monday, approx.)—Close Down.

MILAN

Unione Radiofonica Italiana (1MI). WL 526.3 m. (570 kc); 7 kw. 9.30 a.m.—Concert of Sacred Music. 11.30 a.m.—Quartet Concert. 12.0 noon.—Government Report. 3.0 p.m.—Concert. 1. Soprano Solos: (a) Chanson de Piques (Parelli), (b) Aria di concerto (Beethoven), (c) Strampinata al tramonio (Bettinelli). 2. Tenor Solos: (a) Aria from "Lohengrin" (Wagner), (b) Aria from "Manon" (Puccini). 3. Three Airs for Violin (Pizzetti). 4.30 p.m.—Children's Corner. 7.45 p.m.—Time. 7.50 p.m. (approx.)—"I Puritani"; Sports Notes in the interval. 9.55 p.m.—News and Close Down.

MUNICH

Deutsche Stunde in Bayern. WL 535.7 m. (560 kc); 4 kw. Programme relayed by Nürnberg on 303 m. (990 kc); and Augsburg, 566 m. (530 kc). Transmits at intervals from 10 a.m. 3.30 p.m.—Orchestral Concert. 4.35 p.m.—Talk: "Dürer's Mother," from Nürnberg. 5.10 p.m.—Bela Bartok Pianoforte Recital. 6.25 p.m.—Talk on "Mexico." 6.45 p.m.—Sports Notes. 7.0 p.m.—Radioni Circus. 9.5 p.m.—News. 9.20 p.m.—Orchestral Concert. 10.30 p.m. (approx.)—Close Down.

NAPLES

Unione Radiofonica Italiana (1NA). WL 330.3 m. (900 kc); 1.5 kw. 9.0 a.m.—Concert of Sacred Music. 3.45 p.m.—Children's Corner. 4.0 p.m.—Concert of Variety Music. 6.30 p.m.—Government Report. 7.40 p.m.—Lesson in Wireless Technology. 7.50 p.m.—"The Merry Widow"; Operetta (Lehar). Time in the interval. 9.55 p.m.—Calendar and Programme Announcements. 10.0 p.m. (approx.)—Close Down.

OSLO

Kringkastingselskapet. WL 461.9 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. (700 kc); and Rjukan, 448 m. (670 kc). 9.50 a.m.—Chimes and Divine Service. 5.0 p.m.—Ibsen Concert relayed from the National Theatre. 7.0 p.m.—Time. 7.2 p.m.—Talk, "Bismarck." 7.30 p.m.—Concert. 1. "La-Dame Blanche"—Overture (Béldieu). 2. Suite for Flute and Orchestra.

Programmes for Sunday.—(Cont.)

(Godard). 3. Legend for Violin and Orchestra (Wieniawski). 4. Kol Nidrei—For Cello and Orchestra (Bruch). 5. Pearl of the Ocean (Oterer).  
8.30 p.m.—*Song Recital*.  
9.15 p.m.—*Topical Talk*.  
9.30 p.m.—*Dance Music* from the Hotel Bristol.  
11.0 p.m. (approx.)—*Close Down*.

**PARIS**  
Ecole Supérieure (FPTT). WL. 458 m. (655 kc.); 0.5 kw.  
Transmits at intervals from 8 a.m.  
1.30 p.m.—*Concert*. 1. "Fidelio"—Overture (Beethoven). 2. Au Matin (Godard). 3. "The Huguenots"—Overture (Meyerbeer). 4. Lied de May (Pesse). 5. Czardas (Michiels).  
2.30 p.m.—*Symphony Concert*.  
5.15 p.m.—*Pasdeloup Concert*.  
8.15 p.m.—*Market Prices of Wheat*.  
8.30 p.m.—*Talk*, "The Infinite."  
9.0 p.m.—"La Vie de Bohème"—Opera (Puccini), followed by Dance Music.  
12 midnight (approx.)—*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*.  
5.0 p.m.—*Concert Pasdeloup*.  
7.0 p.m.—*Weather*.  
7.30 p.m.—*Le Journal Parlé*: Talks on "Health," "Police Anecdotes," "Race Results," etc.  
7.56 p.m.—*Time Signal* on 32 m. (9,375 kc.).  
8.30 p.m.—*Educational Programme*: Talks on "The Family, the Wife and the Law," "A Moral Tale," etc.  
10.26 p.m.—*Time Signal*.

**PARIS**  
Petit Parisien. WL. 340.9 m. (880 kc.); 0.5 kw.  
9.0 p.m.—*Concert*. 1. "L'Africaine"—Overture (Meyerbeer). 2. "La Juive" (Halévy). 3. "The Huguenots" (Meyerbeer). 4. "Martha" (Flotow). 5. "Robert le Diable"—Ballet (Meyerbeer). 6. Torchlight Dance (Meyerbeer).

**PARIS**  
Radio Paris (CFR). WL. 1,750 m. (171 kc.); 3 kw.  
Transmits at intervals from 8.0 a.m.  
12.0 noon.—*Sacred Music* and Religious Address, followed by News.  
12.45 p.m.—*Concert*. 1. Toledo—Spanish March (Lherty). 2. Les Grands Yeux Noirs (Fisher). 3. Aubade à Magdeleine (Poussigüe). 4. Pianoforte Solos: (a) L'Horloge à grand'mère (Smet), (b) Tonadilla del ariero (Seras). 5. Serenade for Violin (Ambrosio). 6. Bilboquet in Selections from his Repertory. 7. C'est un rendez-vous d'amour (Leojac). 8. Lakmé (Delibes). 9. Légende Marcucci. 10. Un mot d'amour (Siculli).  
5.0 p.m.—*Divine Service* from Notre Dame.  
7.0 p.m.—*Agricultural Report*.  
8.15 p.m.—*News*.  
8.30 p.m.—*Dance Music* by Mario Cazes and his Orchestra. News in the interval.

**POSEN**  
Polskie Radio. WL. 344 m. (872 kc.); 1.5 kw.  
9.15 a.m.—*High Mass*—relayed from Posen Cathedral.  
7.30 p.m.—*Orchestral Concert*. 1. "Rakocsky"—Overture (Keler-Bela). 2. Goldregen Waltz (Waldteufel). 3. Phantom Brigade (Mydleton). 4. Polish Dance (Wronski).  
8.0 p.m.—*Literary and Musical Programme*.  
9.0 p.m.—*Time and Variety Items*.  
9.30 p.m.—*Weather* and News.  
9.50 p.m.—*Dance Music* relayed from the "Carlton" Restaurant.  
11.0 p.m. (approx.)—*Close Down*.

**PRAGUE**  
Stranasice. WL. 348.9 m. (860 kc.); 5 kw.  
Transmits at intervals from 7.55 a.m.  
7.0 p.m.—*Slovakian Concert*.  
9.0 p.m.—*Time, News and Orchestral Selections*.

**ROME**  
Unione Radiofonica Italiana (IRO). WL. 448.4 m. (659 kc.); 3 kw.  
4.0 p.m.—*Concert*.  
5.0 p.m.—*Dance Music*.

7.45 p.m.—*Concert*: 1. Prelude and Variations (Franck). 2. Masques et bergamasques (Fauré). 3. The Vision of Saint Ursula (Gasco). 4. Romance (Svendsen). 5. Till Eulenspiegel (Richard Strauss). 6. Fashion Talk. 7. Violin solos: (a) Largo (Veracini); (b) Ronda dei foletti (Bazzini). 8. Forest Murmurs from "Siegfried" (Wagner). 9. "William Tell" (Rossini).  
9.55 p.m.—*News and 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 11.30 p.m.—3.30 a.m. (Monday).  
Transmits at intervals from 3.30 p.m.  
11.0 p.m.—*National Symphony Concert*.  
12.0 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*.

**STOCKHOLM**  
Radiotjänst (SASA). WL. 453.8 m. (661 kc.); 1.5 kw.  
Programme relayed by Motala, on 1,380 m. (217 kc.); Göteborg, 416.7 m. (720 kc.); Malmö, 260.9 m. (1,150 kc.); and Sundsvall, 545.6 m. (550 kc.).  
10.0 a.m.—*Divine Service*.  
1.45 p.m.—*Chamber Music*.  
2.15 p.m.—*Children's Corner*.  
3.15 p.m.—*Choral and Band Music*.  
4.30 p.m.—*Talk*: "Henrik Ibsen—the Centenary of his Birth."  
5.0 p.m.—*Divine Service*.  
6.15 p.m.—"The Wild Duck"—Play (Ibsen).  
7.45 p.m.—*Concert of Norwegian Music*: 1. "Peer Gynt Suite" (Grieg). 2. Songs with Orchestra from "Peer Gynt." 3. Two Elegies (Grieg). 4. Romance for violin and orchestra (Svendsen). 5. Songs from "The Feast of Solhaug" (Stenhammer). 6. Fest-polonaise (Svendsen).  
9.30 p.m. (approx.)—*Close Down*.

**STUTTGART**  
Städtischer Rundfunk. WL. 380.7 m. (788 kc.); 4 kw.  
10.15 a.m.—*Morning Recital*, followed by *Promenade Concert*.  
2.0 p.m.—*Programme from Frankfurt*.  
4.0 p.m.—*Concert*. 1. "Rosamunde"—Overture (Schubert). 2. Waltz from "Faust" (Gounod). 3. Serenade (R. Strauss). 4. Figaro's Song from "The Marriage of Figaro" (Mozart). 5. (a) Feinsliebchen, (b) Da unten im Tale (Brahms). 6. An Opera Evening—Fantasia (Manfred). 7. Bacchulus' Song from "Der Wildschütz" (Lortzing). 8. (a) Spirito sancto, (b) Nieman hat's gesehn (Lowe). 9. Song from "The Golden Cross" (Brüll). 10. "The Golden Cross"—Overture. 11. Air from "Die Fledermaus" (Strauss).  
6.0 p.m.—*Time and Sports Notes*.  
6.15 p.m.—*Illustrated Talk* on "Children's Folk Songs."  
6.45 p.m.—*Reading* by Oscar A. H. Schmitz from his own works.  
7.30 p.m.—*Programme from Frankfurt*.  
8.30 p.m.—*Concert*. 1. "Semiramis"—Overture (Rossini). 2. Song from "Il Seraglio" (Mozart). 3. Scherzo from "A Midsummer Night's Dream" (Mendelssohn). 4. (a) Die Liebe auf dem Lande (Lenz), (b) Missverständnis (Hebel), (c) Der tugenhafte Hund (Heine), (d) Moses Mendelssohn (Hebel). 5. Albumblatt (Wagner). 6. Sonst (Pfitzer). 7. L'Arlésienne Suite No. 2 (Bizet). 8. Gilda's Song from "Rigoletto" (Verdi). 9. (a) Der Reisekoffer (dekind), (b) Fritz Kratzfuss (Th. Fontane), (c) Die Schopf und der Frau (von Hofmannswaldau). 10. Second Hungarian Rhapsody (Liszt).  
9.40 p.m.—*Sports Notes* and News.  
10.0 p.m. (approx.)—*Close Down*.

**TOULOUSE**  
Radiophonie du Midi. WL. 391 m. (767 kc.); 3 kw.  
12.45 p.m.—*Concert*: 1. "Si j'étais roi"—Overture (Adam). 2. Soupiras—Tango (Lucesti). 3. Primo bacéro—Tango (Rico). 4. Pavane de Jacques Callot (le Rey). 5. Trois jeunes filles nues (Moretti). 6. Mira la bianca luna (Rossini). 7. Les jolies Viennoises—Waltz (Ziehrer). 8. Piano, Piano—Waltz

(Coda). 9. Chant d'espagne (Cardalens). 10. Les Huguenots (Meyerbeer). 11. Chinatown—Foxtrot (Yvain). 12. Livonie—Foxtrot (Barch). 13. Sérénade attendue (Bosso). 14. Y'a des chats—One step (Daquan).  
2.10 p.m.—*Address*.  
8.0 p.m.—*News*.  
8.15 p.m.—*Talk*, "Aven Armand."  
8.30 p.m.—*Relay of an Opera* from the Capitol Theatre.  
12.0 midnight (approx.)—*Close Down*.

**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 on 294.1 m. (1,020 kc.) from 10.0 a.m.; and Klagenfurt 272.7 m. (1,100 kc.) from 10.0 a.m.  
Transmits at intervals from 8.0 a.m.  
10.0 a.m.—*Symphony Concert*.  
2.30 p.m.—*Dance Music*.  
4.15 p.m.—*Talk*, "Through Western Europe from Portugal to Norway."  
5.0 p.m.—*Reading of Roumanian Literature*, with Songs.  
6.0 p.m.—*Chamber Music*: 1. String Quartet in B flat major, Op. 67 (Brahms). 3. Songs (Brahms).  
7.0 p.m.—"Berkeley Square"—Mystery Play (Balderston).

**WARSAW**  
Polskie Radio. WL. 1,111.1 m. (270 kc.); 10 kw.  
Transmits at intervals from 9.15 a.m.  
2.15 p.m.—*Symphony Concert* from the "Philharmonie de Varsovie."  
4.20 p.m.—*Variety*.  
6.10 p.m.—*Literary Talk*.  
6.35 p.m.—*Talk*: "The Ruins of Carthage."  
7.0 p.m.—*Talk* from Posen.  
7.25 p.m.—*Concert*.  
9.0 p.m.—*Time, News and Weather*.  
9.30 p.m.—*Dance Music*.  
10.30 p.m. (approx.)—*Close Down*.

**WILNO**  
Radio Pologne. WL. 435 m. (689 kc.); 0.5 kw.  
6.0 p.m.—*Wireless Notes*.  
6.25 p.m.—*Time and Variety Items*.  
6.35 p.m.—*History Talk*, "Wilno Under the first Jagiellons."  
7.30 p.m.—*Concert* from Warsaw and Wilno.  
9.30 p.m.—*Dance Music*.  
10.30 p.m. (approx.)—*Close Down*.

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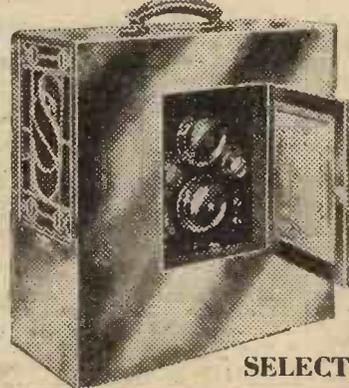


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# PROGRAMMES FOR MONDAY (March 19)

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

## BARCELONA

Radio-Barcelona. (EAJr). WL. 344.8 m. (870 kc.); 1.5 kw.  
Transmits at intervals from 11.0 a.m.  
6.0 p.m.—*Quintet Selections*.  
6.30 p.m.—*Baritone Solos*.  
7.0 p.m.—*Recitations*.  
7.20 p.m.—*Quintet Selections*.  
7.50 p.m.—*Soprano Solos*.  
8.20 p.m.—*Quintet Selections*.  
8.40 p.m.—*Sports Notes*.  
9.0 p.m.—*Chimes and Weather*.  
9.5 p.m. (approx.)—*Close Down*.

## BERGEN

Kringkastingselskap. WL. 369.9 m. (811 kc.); 1.5 kw.  
Transmits at intervals from 10.15 a.m.  
7.0 p.m.—*Wireless Orchestra*.  
7.30 p.m.—*Talk*.  
8.0 p.m.—*Wireless Orchestra*. 1. *Festpionaise* (Svendsen). 2. (a) *Valse*, (b) *Gavotte* (Sinding). 3. *Selections from "Olaf Trygvason"* (Grieg).  
8.30 p.m.—*German Reading*.  
9.0 p.m.—*Weather, News and Time*.  
9.15 p.m. (approx.)—*Close Down*.

## BERLIN

Königswusterhausen. WL. 1,250 m. (240 kc.); 35 kw.  
Transmits at intervals from 11.0 a.m.  
4.0 p.m.—*Programme from Voxhaus*.  
5.0 p.m.—*Technical Talk*.  
5.30 p.m.—*English Lesson*.  
5.55 p.m.—*Talk, "The Possibilities of the Flax Industry in Germany"*.  
6.30 p.m.—*Programme from Voxhaus*.

## BRISLAV

Voxhaus. WL. 484.6 m. (619 kc.); 4 kw.  
Transmits at intervals from 9.10 a.m.  
4.0 p.m.—*Hungarian Concert*: 1. *Kurucu-Lieder*. 2. *Flower Songs*. 3. *Song Cycles*. 4. *Song (Lavotta)*. 5. *Dance Song (Bihari)*. 6. *Song Cycles*.  
5.30 p.m.—*Talk, "International Trade"*.  
6.0 p.m.—*Talk on Following Relay*.  
6.30 p.m.—*"Le Medecin Malgre Lui"*—*Comedy (Moliere)*. *Relayed from the Opera House*.  
8.30 p.m. (approx.)—*Concert*: 1. *Orchestra*: (a) *Frisch voran—March (Blankenburg)*. (b) *Im Wald und auf der Heide—Potpourri (Köhler)*. 2. *Vocal Quartet*: (a) *Der frohe Wandersmann (Mendelssohn)*, (b) *Morgen Marschieren wir (Stern)*. 3. *Orchestra*, (a) *Wander-marsch (Derksen)*, (b) *Wal-desauber Waltz (Vollstedt)* (arr. Meissner). 4. *Vocal Quartet*: (a) *Morgenwanderung (Klauert)*, (b) *Nun a du mein lieb Heimatland (arr. Meissner)*, (c) *Ins Freie (Stuntz)*. 5. *"Heimkehr aus dem Fremde"*—*Overture (Mendelssohn)*. 6. *Vocal Quartet*: (a) *Der lust'ge Wandersmann (arr. Seidel)*, (b) *Wanderschaft (Zöllner)*, (c) *Wie hat das Gott so schön bedacht (arr. Beiber)*. 7. *Orchestra*: (a) *Scheidegruss (Lange)*, (b) *Wanderliedermarsch (Lindemann)*.

## BRUNNEN

Komarov. WL. 441 m. (680 kc.); 3 kw.  
Transmits at intervals from 11.15 a.m.  
5.0 p.m.—*Time and German Transmission*.  
5.25 p.m.—*Agricultural Report*.  
5.40 p.m.—*Talk*.  
6.0 p.m.—*Wireless Review*.  
6.40 p.m.—*English Lesson*.  
7.0 p.m.—*Concert of Popular Music*: 1. "Paganini"—Aria (Lehár). 2. Ah, ah, ah (Osman). 3. "La Belle Helene"—*Selection (Offenbach)*. 4. *Trio Selections*. 5. *Selection (Silen)*. 6. "The Gipsy Baron"—Aria (Strauss). 7. *Trio Selections*.  
8.15 p.m.—*"Collectors of Pictures"*—*Comedy (Novak)*.  
9.0 p.m.—*Programme from Prague*.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw.  
5.0 p.m.—*Trio Selections*.  
7.45 p.m.—*Radio-Chronique*.  
8.15 p.m.—*Schumann Pianoforte Recital*.  
8.23 p.m.—*Topical Talk*.  
8.30 p.m.—*Concert, from the Works of Mozart, by the Société des Nouveaux Concerts et Royale Harmonie, Antwerp*: 1. "The Magic Flute"—*Overture*. 2. *Aria from "Titus"*. 3. *Sérénade nocturne*. 4. *Aria, "Mentre ti lascio"*. 5. "Ave verum," for *Choir with Quartet Accompaniment*. 6. *Aria, "Bella mia Fiamma"*. 7. *Requiem*. *Followed by News*.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw.  
Transmits at intervals from 8.30 a.m.  
6.40 p.m.—*Orchestral Concert*.  
9.0 p.m.—*Time, News and Tzigane Music*.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw.  
Transmits at intervals from 9.30 a.m.  
12.5 p.m.—*Concert*: 1. *Gipsy Life—March (Oscheit)*. 2. *Die Werber Waltz (Lanner)*. 3. "Le Maçon"—*Overture (Auber)*. 4. *Melodies from "Manon Lescaut"* (Puccini). 5. *Serenade (Popper)*. 6. *Über allen Zauber Liebe—Ballet (Lassen)*. 7. *Erinnerung (Beyer)*. 8. *O Armadilla—One-step*. 9. *Talk for Women*.  
3.50 p.m.—*See Langenberg*.  
4.20 p.m.—*Topical Talk*.  
4.30 p.m.—*Talk, "Pictures of Old Cologne"*.  
5.0 p.m.—*Concert*: 1. *Mein Baden—Waltz (Komzak)*. 2. "Phedre"—*Overture (Massenet)*. 3. *Melodies from "Ariadne in Naxos"* (Strauss). 4. *Meeresbrandung (Leoncavallo)*. 5. *Der Geist des Wojwoden—Czardas (Grossmann)*. 6. *Potpourri (Morena)*. 7. *Tin Soldier (Kockert)*.  
6.20 p.m.—*Spanish Lesson*.  
6.45 p.m.—*Talk for Parents*.  
7.15 p.m.—*Programme from Düsseldorf (see Langenberg)*. *Followed by News, Sports Notes, Concert and Dance Music*.  
11.0 p.m. (approx.)—*Close Down*.

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (890 kc.); 1 kw. *Programme relayed by Kalundborg on 1,153.8 m. (260 kc.)*.  
Transmits at intervals from 6.30 a.m.  
5.0 p.m.—*Talk, "Oxford and Cambridge"*.  
5.30 p.m.—*English Lesson*.  
6.0 p.m.—*News, Exchange and Time*.  
6.30 p.m.—*Talk, "Henrik Ibsen and Betty Hennings"*.  
7.0 p.m.—*Ibsen Programme*. 1. *Overture (Hartmann)*. 2. *Scenes from "Ghosts"*—Act 1. 3. *Selections (Grieg)*: (a) *Spring*, (b) *Heartache*. 4. *Scenes from "The Wild Duck"*—Acts 3 and 4.  
8.15 p.m.—*News*.  
8.30 p.m.—*Norwegian Pianoforte Music*. 1. (a) *Six Norwegian Mountain Melodies*, (b) *Nocturne*, Op. 54, (c) *Humoresque in D major (Grieg)*. 2. *Romance in E major (Alnaes)*. 3. (a) *Character Pieces*, Op. 34, (b) *Caprice*, in E major, Op. 44, (c) *Rustle of Spring (Sinding)*.  
9.0 p.m.—*Orchestral Concert*. 1. "Oberon"—*Overture (Weber)*. 2. *Humoresque*, Op. 36, No. 1 (Max Reger). 3. *Suite (Ducasse)*. 4. *Selection from "Manon Lescaut"* (Puccini). 5. *Prelude*, Op. 3, No. 1 (Rachmaninoff). 6. *Military March (Schubert)*.  
10.0 p.m. (approx.)—*Close Down*.

## BRATISLAVA

Radio Bratislava. WL. 300 m. (1,000 kc.); 0.5 kw.  
5.55 p.m.—*Talk*.  
6.10 p.m.—*Comedy*.  
6.50 p.m.—*Programme relayed from Prague*.  
7.0 p.m.—*Ibsen Programme*. 1. *Overture (Hartmann)*. 2. *Scenes from "Ghosts"*—Act 1. 3. *Selections (Grieg)*: (a) *Spring*, (b) *Heartache*. 4. *Scenes from "The Wild Duck"*—Acts 3 and 4.  
8.15 p.m.—*News*.  
8.30 p.m.—*Norwegian Pianoforte Music*. 1. (a) *Six Norwegian Mountain Melodies*, (b) *Nocturne*, Op. 54, (c) *Humoresque in D major (Grieg)*. 2. *Romance in E major (Alnaes)*. 3. (a) *Character Pieces*, Op. 34, (b) *Caprice*, in E major, Op. 44, (c) *Rustle of Spring (Sinding)*.  
9.0 p.m.—*Orchestral Concert*. 1. "Oberon"—*Overture (Weber)*. 2. *Humoresque*, Op. 36, No. 1 (Max Reger). 3. *Suite (Ducasse)*. 4. *Selection from "Manon Lescaut"* (Puccini). 5. *Prelude*, Op. 3, No. 1 (Rachmaninoff). 6. *Military March (Schubert)*.  
10.0 p.m. (approx.)—*Close Down*.

## BRESLAU

Schlesische Funkstunde. WL. 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.  
6.0 p.m.—*Weather*.  
6.5 p.m.—*"New Music" Talk and Illustrations*.  
6.45 p.m.—*Topical Talk*.  
7.10 p.m.—*Song Recital*: 1. *Lieder eines fahrenden Gesellen (Mahler)*. 2. *Songs (Korngold)*: (a) *Sommer*, (b) *Liebesbriefchen*, (c) *Gefatzter Abschied*, (d) *Ständchen*. 3. *Songs (Marx)*: (a) *Windräder*, (b) *September-morgen*. 4. *Songs (R. Strauss)*: (a) *Morgen*, (b) *Traum durch die Dämmerung*, (c) *Ständchen*.  
7.10 p.m.—*Concert of Songs and Duets (Gleiwitz only)*.  
8.10 p.m.—*Reading of Poems*. *Followed by News and Agricultural Report*.

## BRENNEN

Komarov. WL. 441 m. (680 kc.); 3 kw.  
Transmits at intervals from 11.15 a.m.  
5.0 p.m.—*Time and German Transmission*.  
5.25 p.m.—*Agricultural Report*.  
5.40 p.m.—*Talk*.  
6.0 p.m.—*Wireless Review*.  
6.40 p.m.—*English Lesson*.  
7.0 p.m.—*Concert of Popular Music*: 1. "Paganini"—Aria (Lehár). 2. Ah, ah, ah (Osman). 3. "La Belle Helene"—*Selection (Offenbach)*. 4. *Trio Selections*. 5. *Selection (Silen)*. 6. "The Gipsy Baron"—Aria (Strauss). 7. *Trio Selections*.  
8.15 p.m.—*"Collectors of Pictures"*—*Comedy (Novak)*.  
9.0 p.m.—*Programme from Prague*.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw.  
5.0 p.m.—*Trio Selections*.  
7.45 p.m.—*Radio-Chronique*.  
8.15 p.m.—*Schumann Pianoforte Recital*.  
8.23 p.m.—*Topical Talk*.  
8.30 p.m.—*Concert, from the Works of Mozart, by the Société des Nouveaux Concerts et Royale Harmonie, Antwerp*: 1. "The Magic Flute"—*Overture*. 2. *Aria from "Titus"*. 3. *Sérénade nocturne*. 4. *Aria, "Mentre ti lascio"*. 5. "Ave verum," for *Choir with Quartet Accompaniment*. 6. *Aria, "Bella mia Fiamma"*. 7. *Requiem*. *Followed by News*.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw.  
Transmits at intervals from 8.30 a.m.  
6.40 p.m.—*Orchestral Concert*.  
9.0 p.m.—*Time, News and Tzigane Music*.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw.  
Transmits at intervals from 9.30 a.m.  
12.5 p.m.—*Concert*: 1. *Gipsy Life—March (Oscheit)*. 2. *Die Werber Waltz (Lanner)*. 3. "Le Maçon"—*Overture (Auber)*. 4. *Melodies from "Manon Lescaut"* (Puccini). 5. *Serenade (Popper)*. 6. *Über allen Zauber Liebe—Ballet (Lassen)*. 7. *Erinnerung (Beyer)*. 8. *O Armadilla—One-step*. 9. *Talk for Women*.  
3.50 p.m.—*See Langenberg*.  
4.20 p.m.—*Topical Talk*.  
4.30 p.m.—*Talk, "Pictures of Old Cologne"*.  
5.0 p.m.—*Concert*: 1. *Mein Baden—Waltz (Komzak)*. 2. "Phedre"—*Overture (Massenet)*. 3. *Melodies from "Ariadne in Naxos"* (Strauss). 4. *Meeresbrandung (Leoncavallo)*. 5. *Der Geist des Wojwoden—Czardas (Grossmann)*. 6. *Potpourri (Morena)*. 7. *Tin Soldier (Kockert)*.  
6.20 p.m.—*Spanish Lesson*.  
6.45 p.m.—*Talk for Parents*.  
7.15 p.m.—*Programme from Düsseldorf (see Langenberg)*. *Followed by News, Sports Notes, Concert and Dance Music*.  
11.0 p.m. (approx.)—*Close Down*.

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (890 kc.); 1 kw. *Programme relayed by Kalundborg on 1,153.8 m. (260 kc.)*.  
Transmits at intervals from 6.30 a.m.  
5.0 p.m.—*Talk, "Oxford and Cambridge"*.  
5.30 p.m.—*English Lesson*.  
6.0 p.m.—*News, Exchange and Time*.  
6.30 p.m.—*Talk, "Henrik Ibsen and Betty Hennings"*.  
7.0 p.m.—*Ibsen Programme*. 1. *Overture (Hartmann)*. 2. *Scenes from "Ghosts"*—Act 1. 3. *Selections (Grieg)*: (a) *Spring*, (b) *Heartache*. 4. *Scenes from "The Wild Duck"*—Acts 3 and 4.  
8.15 p.m.—*News*.  
8.30 p.m.—*Norwegian Pianoforte Music*. 1. (a) *Six Norwegian Mountain Melodies*, (b) *Nocturne*, Op. 54, (c) *Humoresque in D major (Grieg)*. 2. *Romance in E major (Alnaes)*. 3. (a) *Character Pieces*, Op. 34, (b) *Caprice*, in E major, Op. 44, (c) *Rustle of Spring (Sinding)*.  
9.0 p.m.—*Orchestral Concert*. 1. "Oberon"—*Overture (Weber)*. 2. *Humoresque*, Op. 36, No. 1 (Max Reger). 3. *Suite (Ducasse)*. 4. *Selection from "Manon Lescaut"* (Puccini). 5. *Prelude*, Op. 3, No. 1 (Rachmaninoff). 6. *Military March (Schubert)*.  
10.0 p.m. (approx.)—*Close Down*.

## BRATISLAVA

Radio Bratislava. WL. 300 m. (1,000 kc.); 0.5 kw.  
5.55 p.m.—*Talk*.  
6.10 p.m.—*Comedy*.  
6.50 p.m.—*Programme relayed from Prague*.  
7.0 p.m.—*Ibsen Programme*. 1. *Overture (Hartmann)*. 2. *Scenes from "Ghosts"*—Act 1. 3. *Selections (Grieg)*: (a) *Spring*, (b) *Heartache*. 4. *Scenes from "The Wild Duck"*—Acts 3 and 4.  
8.15 p.m.—*News*.  
8.30 p.m.—*Norwegian Pianoforte Music*. 1. (a) *Six Norwegian Mountain Melodies*, (b) *Nocturne*, Op. 54, (c) *Humoresque in D major (Grieg)*. 2. *Romance in E major (Alnaes)*. 3. (a) *Character Pieces*, Op. 34, (b) *Caprice*, in E major, Op. 44, (c) *Rustle of Spring (Sinding)*.  
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10.0 p.m. (approx.)—*Close Down*.

## BRESLAU

Schlesische Funkstunde. WL. 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.  
6.0 p.m.—*Weather*.  
6.5 p.m.—*"New Music" Talk and Illustrations*.  
6.45 p.m.—*Topical Talk*.  
7.10 p.m.—*Song Recital*: 1. *Lieder eines fahrenden Gesellen (Mahler)*. 2. *Songs (Korngold)*: (a) *Sommer*, (b) *Liebesbriefchen*, (c) *Gefatzter Abschied*, (d) *Ständchen*. 3. *Songs (Marx)*: (a) *Windräder*, (b) *September-morgen*. 4. *Songs (R. Strauss)*: (a) *Morgen*, (b) *Traum durch die Dämmerung*, (c) *Ständchen*.  
7.10 p.m.—*Concert of Songs and Duets (Gleiwitz only)*.  
8.10 p.m.—*Reading of Poems*. *Followed by News and Agricultural Report*.

## BRUNNEN

Komarov. WL. 441 m. (680 kc.); 3 kw.  
Transmits at intervals from 11.15 a.m.  
5.0 p.m.—*Time and German Transmission*.  
5.25 p.m.—*Agricultural Report*.  
5.40 p.m.—*Talk*.  
6.0 p.m.—*Wireless Review*.  
6.40 p.m.—*English Lesson*.  
7.0 p.m.—*Concert of Popular Music*: 1. "Paganini"—Aria (Lehár). 2. Ah, ah, ah (Osman). 3. "La Belle Helene"—*Selection (Offenbach)*. 4. *Trio Selections*. 5. *Selection (Silen)*. 6. "The Gipsy Baron"—Aria (Strauss). 7. *Trio Selections*.  
8.15 p.m.—*"Collectors of Pictures"*—*Comedy (Novak)*.  
9.0 p.m.—*Programme from Prague*.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw.  
5.0 p.m.—*Trio Selections*.  
7.45 p.m.—*Radio-Chronique*.  
8.15 p.m.—*Schumann Pianoforte Recital*.  
8.23 p.m.—*Topical Talk*.  
8.30 p.m.—*Concert, from the Works of Mozart, by the Société des Nouveaux Concerts et Royale Harmonie, Antwerp*: 1. "The Magic Flute"—*Overture*. 2. *Aria from "Titus"*. 3. *Sérénade nocturne*. 4. *Aria, "Mentre ti lascio"*. 5. "Ave verum," for *Choir with Quartet Accompaniment*. 6. *Aria, "Bella mia Fiamma"*. 7. *Requiem*. *Followed by News*.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw.  
Transmits at intervals from 8.30 a.m.  
6.40 p.m.—*Orchestral Concert*.  
9.0 p.m.—*Time, News and Tzigane Music*.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw.  
Transmits at intervals from 9.30 a.m.  
12.5 p.m.—*Concert*: 1. *Gipsy Life—March (Oscheit)*. 2. *Die Werber Waltz (Lanner)*. 3. "Le Maçon"—*Overture (Auber)*. 4. *Melodies from "Manon Lescaut"* (Puccini). 5. *Serenade (Popper)*. 6. *Über allen Zauber Liebe—Ballet (Lassen)*. 7. *Erinnerung (Beyer)*. 8. *O Armadilla—One-step*. 9. *Talk for Women*.  
3.50 p.m.—*See Langenberg*.  
4.20 p.m.—*Topical Talk*.  
4.30 p.m.—*Talk, "Pictures of Old Cologne"*.  
5.0 p.m.—*Concert*: 1. *Mein Baden—Waltz (Komzak)*. 2. "Phedre"—*Overture (Massenet)*. 3. *Melodies from "Ariadne in Naxos"* (Strauss). 4. *Meeresbrandung (Leoncavallo)*. 5. *Der Geist des Wojwoden—Czardas (Grossmann)*. 6. *Potpourri (Morena)*. 7. *Tin Soldier (Kockert)*.  
6.20 p.m.—*Spanish Lesson*.  
6.45 p.m.—*Talk for Parents*.  
7.15 p.m.—*Programme from Düsseldorf (see Langenberg)*. *Followed by News, Sports Notes, Concert and Dance Music*.  
11.0 p.m. (approx.)—*Close Down*.

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (890 kc.); 1 kw. *Programme relayed by Kalundborg on 1,153.8 m. (260 kc.)*.  
Transmits at intervals from 6.30 a.m.  
5.0 p.m.—*Talk, "Oxford and Cambridge"*.  
5.30 p.m.—*English Lesson*.  
6.0 p.m.—*News, Exchange and Time*.  
6.30 p.m.—*Talk, "Henrik Ibsen and Betty Hennings"*.  
7.0 p.m.—*Ibsen Programme*. 1. *Overture (Hartmann)*. 2. *Scenes from "Ghosts"*—Act 1. 3. *Selections (Grieg)*: (a) *Spring*, (b) *Heartache*. 4. *Scenes from "The Wild Duck"*—Acts 3 and 4.  
8.15 p.m.—*News*.  
8.30 p.m.—*Norwegian Pianoforte Music*. 1. (a) *Six Norwegian Mountain Melodies*, (b) *Nocturne*, Op. 54, (c) *Humoresque in D major (Grieg)*. 2. *Romance in E major (Alnaes)*. 3. (a) *Character Pieces*, Op. 34, (b) *Caprice*, in E major, Op. 44, (c) *Rustle of Spring (Sinding)*.  
9.0 p.m.—*Orchestral Concert*. 1. "Oberon"—*Overture (Weber)*. 2. *Humoresque*, Op. 36, No. 1 (Max Reger). 3. *Suite (Ducasse)*. 4. *Selection from "Manon Lescaut"* (Puccini). 5. *Prelude*, Op. 3, No. 1 (Rachmaninoff). 6. *Military March (Schubert)*.  
10.0 p.m. (approx.)—*Close Down*.

## BRATISLAVA

Radio Bratislava. WL. 300 m. (1,000 kc.); 0.5 kw.  
5.55 p.m.—*Talk*.  
6.10 p.m.—*Comedy*.  
6.50 p.m.—*Programme relayed from Prague*.  
7.0 p.m.—*Ibsen Programme*. 1. *Overture (Hartmann)*. 2. *Scenes from "Ghosts"*—Act 1. 3. *Selections (Grieg)*: (a) *Spring*, (b) *Heartache*. 4. *Scenes from "The Wild Duck"*—Acts 3 and 4.  
8.15 p.m.—*News*.  
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9.0 p.m.—*Orchestral Concert*. 1. "Oberon"—*Overture (Weber)*. 2. *Humoresque*, Op. 36, No. 1 (Max Reger). 3. *Suite (Ducasse)*. 4. *Selection from "Manon Lescaut"* (Puccini). 5. *Prelude*, Op. 3, No. 1 (Rachmaninoff). 6. *Military March (Schubert)*.  
10.0 p.m. (approx.)—*Close Down*.

## BRESLAU

Schlesische Funkstunde. WL. 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.  
6.0 p.m.—*Weather*.  
6.5 p.m.—*"New Music" Talk and Illustrations*.  
6.45 p.m.—*Topical Talk*.  
7.10 p.m.—*Song Recital*: 1. *Lieder eines fahrenden Gesellen (Mahler)*. 2. *Songs (Korngold)*: (a) *Sommer*, (b) *Liebesbriefchen*, (c) *Gefatzter Abschied*, (d) *Ständchen*. 3. *Songs (Marx)*: (a) *Windräder*, (b) *September-morgen*. 4. *Songs (R. Strauss)*: (a) *Morgen*, (b) *Traum durch die Dämmerung*, (c) *Ständchen*.  
7.10 p.m.—*Concert of Songs and Duets (Gleiwitz only)*.  
8.10 p.m.—*Reading of Poems*. *Followed by News and Agricultural Report*.

## BRUNNEN

Komarov. WL. 441 m. (680 kc.); 3 kw.  
Transmits at intervals from 11.15 a.m.  
5.0 p.m.—*Time and German Transmission*.  
5.25 p.m.—*Agricultural Report*.  
5.40 p.m.—*Talk*.  
6.0 p.m.—*Wireless Review*.  
6.40 p.m.—*English Lesson*.  
7.0 p.m.—*Concert of Popular Music*: 1. "Paganini"—Aria (Lehár). 2. Ah, ah, ah (Osman). 3. "La Belle Helene"—*Selection (Offenbach)*. 4. *Trio Selections*. 5. *Selection (Silen)*. 6. "The Gipsy Baron"—Aria (Strauss). 7. *Trio Selections*.  
8.15 p.m.—*"Collectors of Pictures"*—*Comedy (Novak)*.  
9.0 p.m.—*Programme from Prague*.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw.  
5.0 p.m.—*Trio Selections*.  
7.45 p.m.—*Radio-Chronique*.  
8.15 p.m.—*Schumann Pianoforte Recital*.  
8.23 p.m.—*Topical Talk*.  
8.30 p.m.—*Concert, from the Works of Mozart, by the Société des Nouveaux Concerts et Royale Harmonie, Antwerp*: 1. "The Magic Flute"—*Overture*. 2. *Aria from "Titus"*. 3. *Sérénade nocturne*. 4. *Aria, "Mentre ti lascio"*. 5. "Ave verum," for *Choir with Quartet Accompaniment*. 6. *Aria, "Bella mia Fiamma"*. 7. *Requiem*. *Followed by News*.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw.  
Transmits at intervals from 8.30 a.m.  
6.40 p.m.—*Orchestral Concert*.  
9.0 p.m.—*Time, News and Tzigane Music*.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw.  
Transmits at intervals from 9.30 a.m.  
12.5 p.m.—*Concert*: 1. *Gipsy Life—March (Oscheit)*. 2. *Die Werber Waltz (Lanner)*. 3. "Le Maçon"—*O*

Programmes for Monday.—(Cont.)

**MUNICH**

Deutsche Stunde in Bayern. WL 535.7 m. (560 kc.); 4 kw. Programme relayed by Nürnberg on 303 m. (990 kc.) and Augsburg, 566 m. (530 kc.).  
Transmits at intervals from 10.15 a.m.  
6.0 p.m.—English Lesson.  
6.30 p.m.—Talk: "SOS."  
7.5 p.m.—Concert from Nürnberg:  
1. Parade of the 18th Hussars—March. 2. "Im Reiche des Indra"—Overture (Lincke). 3. Introduction and Chorus from "Carmen" (Bizet). 4. Soldier Life Potpourri. 5. Variety. 6. Trot de Cavallerie (Rubinstein). 7. March and Drinking Song (arr. Schreck).  
9.5 p.m.—News.  
10.0 p.m.—Chess Talk.

**NAPLES**

Unione Radiofonica Italiana (INA). WL 333.3 m. (900 kc.); 1.5 kw. Transmits at intervals from 12 noon.  
7.20 p.m.—Wireless Notes.  
7.40 p.m.—News.  
7.48 p.m.—Harbour Notes.  
7.50 p.m.—"Addio Giovinezza"—Overture (Pietri).  
9.55 p.m.—Calendar and Programme Announcements.  
10.0 p.m. (approx.)—Close Down.

**OSLO**

Kringkastingselskapet. WL 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.  
6.15 p.m.—News.  
6.30 p.m.—German Lesson.  
7.0 p.m.—Time and Foreign Review.  
7.30 p.m.—Song Recital.  
8.0 p.m.—Recitations.  
8.30 p.m.—Hornomium Recital.  
9.0 p.m.—News, Weather and Topical Talk.  
9.30 p.m. (approx.)—Close Down.

**PARIS**

Ecole Supérieure (FPTT). WL 458 m. (655 kc.); 0.5 kw. Transmits at intervals from 8 a.m.  
6.0 p.m.—Radio Journal de France.

8.0 p.m.—Talks on "Photography," "Hygiene," "Gardening," "Aviation," "Electricity."  
9.0 p.m.—Concert from the Works of Mendelssohn and Reyer.

**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 Week in the Theatres," "Wireless Novelties," etc.  
7.10 p.m.—Weather.  
7.30 p.m.—Concert of Dance Music and popular Songs. At 7.56 p.m.: Time Signal (on 32 m.; 9,375 kc.).  
8.30 p.m.—Educational Programme: Talks on "Meglomania," "Matter and the Immaterial," etc.  
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.—Concert. 1. Sur le vieux Terre (Kalinikoff). 2. Invitation aux voyage (Duparc). 3. Chant juif (Moussorgsky). News in the interval.  
1.50 p.m.—Market Prices.  
3.30 p.m.—Exchange Quotations.  
3.45 p.m.—Concert. 1. La fleur Mystique (Silver). 2. Romance (Moreau). 3. Pianoforte Solos. 4. Ritournelle (Schmitt). 5. Petite Suite espagnole (Vidal). 6. Talk: "The Law in France and England."  
4.45 p.m.—Exchange Quotations.  
7.0 p.m.—Agricultural Report.  
7.45 p.m.—Book-keeping Lesson.  
8.0 p.m.—Exchange and Horticultural Talk.  
8.30 p.m.—"La Fille de Madame Angot"—Opera (Lecocq). News in the interval.

**POSEN**

Polskie Radio. WL 344 m. (872 kc.); 1.5 kw. Transmits at intervals from 12 (noon).  
6.35 p.m.—Talk: "Ibsen—his Life and Works."  
7.0 p.m.—Programme from Warsaw.  
9.0 p.m.—Time, and Variety Items.  
9.30 p.m.—Finance Notes, Weather and News.  
9.50 p.m. (approx.)—Close Down.

**PRAGUE**

Strasnice. WL 348.9 m. (960 kc.); 5 kw. Transmits at intervals from 9.30 a.m.  
5.15 p.m.—Agricultural Report.  
5.25 p.m.—Talk for Labourers.  
5.35 p.m.—French Lesson.  
6.30 p.m.—"Mam'selle Nitouche"—Operetta (Hervé).  
9.0 p.m.—Time, News and Orchestral Selections.

**ROME**

Unione Radiofonica Italiana (1 RO). WL 448.4 m. (669 kc.); 3 kw. Transmits at intervals from 11.30 a.m.  
7.0 p.m.—French Lesson.  
7.30 p.m.—Time, News, Exchange Quotations and Weather.  
7.45 p.m.—Concert of Light Music: 1. Overture to a Spanish Comedy (Keler-Bela). 2. "La Mascotte"—Selection (Audran). 3. Soprano Song (Ferraris). 4. "Grandi manovre"—Soprano Song (Abbati). 5. Tenor Songs with Mandoline Accompaniment (Falvo and Mario). 6. "Trop décolletée"—(Dupont). 7. Gipsy Scene (Mantente). 8. Waltz (Leoncavallo). 9. Bambina dibisquit (Rulli). 10. Acqua cheta (Pietri). 11. Jealousy—Tango (Gade). 12. Hallelujah (Youmans). 13. Topical Review. 14. Stornelli toscani (Zuccoli). 15. Nell'ascensore Soprano and Tenor Duet (Rulli). 16. Tenor Songs with Mandoline Accompaniment (Valente and Tagliaferri). 17. March (Siède). 18. Dance Music.  
10.10 p.m.—News.  
10.15 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 8.0—9.0 p.m. and by 2XAF on 31.4 m. (9,554 kc) from 11.0 p.m. Transmits at intervals from 11.45 a.m.  
11.0 p.m.—Exchange and News.  
11.20 p.m.—"U.S. Radio Farm School."  
11.30 p.m.—Concert from the Hotel Van Curler, Schenectady.  
12.30 a.m. (Tuesday)—Theodora Conway (Soprano).  
1.0 a.m.—Musical Programme.  
1.30 a.m.—Time and the "A. & P."  
Gipsies from New York.  
2.30 a.m.—"The General Motors Family Party" from New York.

3.30 a.m.—"Fisk" Programme from New York.  
4.0 a.m. (approx.)—Close Down.

**STOCKHOLM**

Radiojäst (SASA). WL 453.8 m. (661 kc.); 1.5 kw. Programme relayed by Motala on 1,380 m. (217 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.  
5.0 p.m.—Children's Corner.  
5.20 p.m.—Light Music.  
6.15 p.m.—Topical Talk.  
6.45 p.m.—Elementary English Lesson.  
7.10 p.m.—Chamber Music: Trio in C (Brahms).  
7.45 p.m.—Songs.  
8.15 p.m.—News and Weather.  
8.40 p.m.—Talk, "Art Criticism."  
9.0 p.m. (approx.)—Close Down.

**STUTTGART**

Süddeutscher Rundfunk. WL 380.7 m. (788 kc.); 4 kw. Transmits at intervals from 11.30 a.m.  
3.15 p.m.—Concert: 1. German Honour—March (Blankenburg). 2. Gebirgskinder (Ziehrer). 3. Das Mutterl (Schnock). 4. "Si j'étais Roi"—Overture (Adam). 5. Selection from "Carmen" (Bizet). 6. (a) Reigen; (b) Valse d'amour; (c) Humoreske (Reger). 7. Sektgeister (Urbach). 8. Friendship's Flag—March (Blon).  
5.0 p.m.—Time and Weather.  
5.15 p.m.—Talk, "A World University in Davos."  
5.45 p.m.—Wireless Notes.  
6.10 p.m.—Legal Talk.  
6.35 p.m.—Time and Weather.  
6.45 p.m.—Talk, "The Poet as the conscience of the times."  
7.15 p.m.—"Nicht Ia"—Swabian Comedy (Vischer), followed by Orchestral Concert from the Hindenburg Buildings.

**TOULOUSE**

Radiophonie du Midi. WL 391m. (737 kc.); 3 kw. Transmits at intervals from 10.15 a.m.  
12.45 p.m.—Orchestral Concert.  
8.30 p.m.—Agricultural Talk.  
8.45 p.m.—Concert: 1. Selections by Gourdin: (a) Salut des Aigles, (b) Farandole impériale, (c) Marche des Ecolopés, (d) Le Champ d'honneur, (e) Marche Impériale,

(f) La Grenadière, (g) Re traite française, (h) Réveil de la Garde, (i) Pas cadencé des Sans-Culottes. 2. Les Diables bleus (Courtade). 3. Hunting Horn Selections: (a) La Fernand Dardé (Blondiau), (b) La Fête au Château (Blondiau), (c) La Etienne Hubert. (d) La Villa Saint-Hubert (Blondiau), (e) Le Rallye Normand, (f) Souvenir de Fleuries.  
9.0 p.m.—Trésors d'amour—Valse chantée.

**VIENNA**

Radio-Wien. WL 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 a.m.  
5.0 p.m.—Talk, "Being Young and Remaining Young."  
5.30 p.m.—Talk, "The History of the Overture."  
6.0 p.m.—German Talk on "The International Esperanto Museum in Vienna."  
6.30 p.m.—"Trittico Franceseano" (Mucci and Refice).

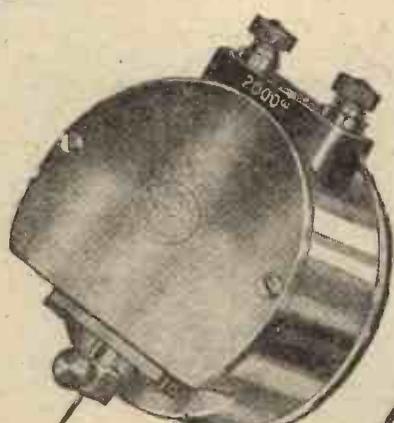
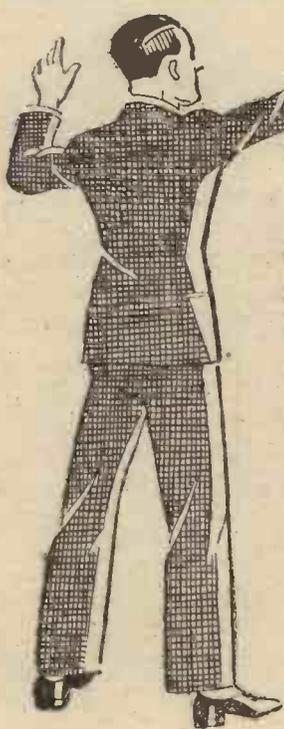
**WARSAW**

Polskie Radio. WL 1,111.1 m. (270 kc.); 10 kw. Transmits at intervals from 11.0 a.m.  
5.15 p.m.—Dance Music from the "Gastronomia."  
6.5 p.m.—Agricultural Report.  
6.15 p.m.—Variety.  
6.35 p.m.—French Lesson.  
7.30 p.m.—Concert. In the Interval: News in French.  
9.0 p.m.—Time, Weather and News.  
9.30 p.m. (approx.)—Close Down.

**ZAGREB**

Radioklub Zagreb. WL 310.5 m. (966 kc); 0.35 kw. Transmits at intervals from 12.15 p.m.  
7.0 p.m.—Talk on Aesthetics.  
7.15 p.m.—Talk on "The History of Music."  
7.30 p.m.—Announcements.  
7.35 p.m.—Chamber Music: 1. Sonata in G Major (Haydn). 2. Nocturne (Field). 3. Slavonic Dance for Violin and Pianoforte (Dvorak). 4. Le cygne (Saint-Saëns). 5. Harlequin (Drige). 6. Trio in D Minor (Mozart).  
8.50 p.m.—Talk on Psychology.  
9.10 p.m.—News.  
9.20 p.m.—Musical Programme.

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# PROGRAMMES FOR TUESDAY (March 20)

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

## BARCELONA

Radio-Barcelona (EAJ1). WL. 344.8 m. (870 kc.); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Fashion Talk. 6.30 p.m.—*Quintet Selections*. 8.40 p.m.—*English Lesson*. 9.5 p.m.—Exchange and News. 9.10 p.m.—Humorous Review in Verse. 9.20 p.m.—Dance Music. 10.0 p.m.—Exchange Closing Prices. 10.5 p.m.—Regional Programme. 1. La entrá de Murta (Giner). 2. Selections of Valencian Jotas. 3. Recitation of Valencian Poems. 4. Nit d'albaes—Symphonic Poem (Giner). 5. Selection of Songs with Guitar Accompaniment. 6. Andalusian Rhapsody (Lugena). 7. Auras de España (Caballero). 8. Recital of Asturian Songs. 9. La Dolores (Beaton). 10. Selection of Aragonese Jota for Tenor. 11. Jota from "La Dolores" (Beaton). 11.30 p.m. (approx.)—Close Down.

## BASLE

Basler Radio Genossenschaft. WL. 1,900 m. (300 kc.); 0.25 kw. 6.30 p.m.—Time and Weather. 6.35 p.m.—Talk and Recitations on "China." 7.15 p.m.—Concert from the "Huber-Saal des Stadtkasinos"—*Chamber Music*. 1. Quartet for Pianoforte in E flat major, Op. 47 (Schumann). 2. Quintet in A major, Op. 114 (Schubert). 9.0 p.m.—News and Weather.

## BERGEN

Krinkingstingselskap. WL. 369.9 m. (811 kc.); 1.5 kw. Transmits at intervals from 10.15 a.m. *Ibsen Centenary Memorial Programme*. 6.0 p.m.—Wireless Orchestra: 1. (a) March, (b) Erotic, (c) Norwegian Dance (Grieg). 2. Evening Landscape (Halvorsen). 3. Romance for Violin (Svendsen). 4. Norwegian Rhapsody, No. 3 (Svendsen). 7.0 p.m.—*Ibsen Programme from Oslo*. 9.0 p.m.—Weather, News and Time. 9.15 p.m.—*English Lesson*.

## BERNE

Radio-Berne. WL. 411 m. (730 kc.); 1.5 kw. Transmits at intervals from 12 noon. 6.30 p.m.—Time and Weather. 6.35 p.m.—Talk, "The Monastery and Works of Art." 7.15 p.m.—Programme from *Basle*. News and Weather in the interval. 9.15 p.m.—The Korsaal Orchestra. 9.30 p.m.—(approx.)—Close Down.

## BERLIN

Königswusterhausen. WL. 1,250 m. (240 kc.); 35 kw. Transmits at intervals from 11.0 a.m. 4.0 p.m.—Programme from *Leipzig*. 5.0 p.m.—Talk, "Henrik Ibsen and the German Theatre." 5.55 p.m.—Literary Talk. 6.45 p.m.—Programme from *Voxhaus*.

## BERLIN

Voxhaus. WL. 484.6 m. (619 kc.); 4 kw. Transmits at intervals from 9.10 a.m. 5.15 p.m.—Health Talk. 5.45 p.m.—Education Talk. 6.15 p.m.—Astronomy Talk. 6.45 p.m.—Talk on Ibsen's "Brand." 7.0 p.m. (approx.)—"Brand"—Drama (Ibsen). 9.15 p.m.—Time, News and Sports Notes. 9.30 p.m. (approx.)—Close Down.

## BILBAO

Union Radio (EAJ9). WL. 400 m. (750 kc.); 0.5 kw. 9.45 p.m.—Time, Calendar, Shipping Intelligence, Weather and Exchange Quotations. 10.0 p.m.—Programme relayed from *Madrid* (EAJ7). 11.30 p.m. (approx.)—Close Down.

## BRESLAU

Schlesische Funkstunde. WL. 322.6 m. (930 kc.); 4 kw. Programme relayed by *Gleititz* on 250 m. (1,200 kc). Transmits at intervals from 10.15 a.m. 5.55 p.m.—Weather. 6.0 p.m.—Literary Talk. 6.30 p.m.—Review of Art and Literature. 7.15 p.m.—"When We Dead Awaken"—Play (Ibsen), followed by News and Wireless Notes.

## BRUENN

Komarov. WL. 441 m. (680 kc.); 3 kw. Transmits at intervals from 11.15 a.m. 6.40 p.m.—*English Lesson*. 7.0 p.m.—*Pianoforte Recital*. 1. *Chinoiserie* (Scebarcev). 2. "Eugen Onegin"—Aria (Tchaikovsky). 7.15 p.m.—Programme from *Prague*. 8.15 p.m.—Selections by a Military Orchestra. 9.0 p.m.—Programme from *Prague*.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw. 5.0 p.m.—*Dance Music* from the Armenonville Tea Room. 6.0 p.m.—French Lesson. 7.45 p.m.—Radio-Chronique. 8.15 p.m.—Concert from *Liège*. 1. "The Italian in Algiers"—Overture (Rossini). 2. Rose-Marie (Friml). 3. Science Talk (in the interval). 4. Selection from "Il Trovatore" (Verdi). 9.0 p.m.—Topical Talk. 9.15 p.m. (approx.)—Concert (cont). 5. "Les Erynnies" (Massenet). 6. (a) Air from "The Seasons" (Haydn), (b) Serenade (Schubert). 7. Two Dances. 8. (a) Prize Song from "The Mastersingers" (Wagner), (b) Lamento (Fauré), (c) Danse Macabre (Saint-Saëns). 9. Suppé Fantasia (Morena). 10. Serenade (Tittl). 11. Valse (Waldteufel). 10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw. Transmits at intervals from 8.30 a.m. 5.15 p.m.—Talk, "Kossuth's Visit to England." 6.0 p.m.—Relay from the Opera House. 9.0 p.m.—Time, News and Tzigane Music.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw. Transmits at intervals from 9.30 a.m. 12.5 p.m.—See *Langenberg*. 3.0 p.m.—Talk, "Spring is Coming." 3.20 p.m.—Children's Songs. 3.45 p.m.—Education Talk. 4.30 p.m.—Talk, "Artist and Public through the Ages." 5.0 p.m.—See *Langenberg*. 6.10 p.m.—French Lesson. 6.30 p.m.—Talk on "Henrik Ibsen." 6.55 p.m.—Talk, "Men and Commerce." 7.20 p.m.—Programme from *Dortmund* (See *Langenberg*), followed by News, Sports Notes and *Silent Night*.

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (890 kc.); 1 kw. Programme relayed by *Kahundborg* on 1,153.8 m. (260 kc). Transmits at intervals from 6.30 a.m. 5.30 p.m.—Shorthand Lesson. 6.0 p.m.—News, Exchange and Time. 6.30 p.m.—Talk, "The Planting and Care of Garden Trees and Shrubs." 7.0 p.m.—"Peer Gynt"—Play by Ibsen, Music by Grieg—on the Centenary of Ibsen's Birth. 9.30 p.m.—News and Close Down.

## CORK

Cork Broadcasting Station (6CK). WL. 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. WL. 566 m. (530 kc.); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.5 p.m.—Agricultural Report. 6.20 p.m.—Programme from *Posen*. 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). WL. 319.1 m. (940 kc.); 1.5 kw. Transmits at intervals from 1.30 p.m. 6.15 p.m.—Children's Corner. 7.0 p.m.—Gramophone Records. 7.20 p.m.—News. 7.30 p.m.—Fainne Talk by Sorcha ni Dhubhghain. 7.45 p.m.—Spanish Lesson by W. Starkie, LL.D. 8.0 p.m.—The Augmented Station Orchestra. 8.20 p.m.—Eva Tomsohn (Contralto). 8.30 p.m.—The Augmented Station Orchestra. 8.40 p.m.—Laelia Finneberg (Soprano).

8.50 p.m.—"The Spoiling of Wilson"—Sketch, by E. Ashley and Company. 9.20 p.m.—Ibsen Centenary Talk, with Vocal and Instrumental Illustrations, by H. R. White. Vocalist: Lucia Finneberg. 10.0 p.m.—The Augmented Station Orchestra and Joseph O'Neill (Tenor). 10.30 p.m.—News, Weather and Close Down.

## FRANKFURT-am-MAIN

Südwestdeutscher Rundfunk. WL. 428.6 m. (700 kc.); 4 kw. Programme relayed by *Cassel* on 252.1 m. (1,190 kc). Transmits at intervals from 11.30 a.m. 3.30 p.m.—Programme from Works of Rimsky-Korsakoff. 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 from *Cassel*. 6.15 p.m.—Talk, "Bad Nauheim and Heart Treatment." 6.45 p.m.—Chess Lesson. 7.15 p.m.—Programme from *Stuttgart*. 8.15 p.m.—Waltz Programme, followed by Gramophone Selections.

## GENEVA

Radio Geneva. WL. 760 m. (395 kc.); 0.5 kw. 5.0 p.m.—Gramophone Selections and News. 7.15 p.m.—News. 7.20 p.m.—Programme from *Lausanne*. 8.20 p.m.—Legal Talk. 8.40 p.m.—News. 8.50 p.m.—Relay of foreign stations.

## HAMBURG

Norag (ha, in Morse). WL. 396 m. (757 kc.); 4 kw. Programme relayed by *Bremen* on 272.7 m. (1,100 kc); *Hanover*, 207 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 Hans Andersen's Stories. 4.0 p.m.—Talk, "Ibsen." 4.20 p.m.—Talk on "Taxation." 4.35 p.m.—Talk, "The Choice of a Career." 6.0 p.m.—Talk, "Max Reinhardt." 6.25 p.m.—Talk from *Kiel*. 6.55 p.m.—Weather. 7.0 p.m.—Talk on Economics. 7.15 p.m.—"Nordische Meerfahrt"—Play (Ibsen), followed by Topical Talk and News, and Concert from the Café Wallhof. 10.25 p.m.—(Hamburg, Bremen and Kiel)—Ice Report. 10.30 p.m.—(Hamburg, Bremen and Kiel)—Dance Music. 11.30 p.m. (approx.)—Close Down.

## HILVERSUM

Algemeene Vereeniging Radio Omroep. WL. 1069 m. (280.5 kc.); 5 kw. 11.40 a.m.—Police News. 12.10 p.m.—Trio Concert. 2.40 p.m.—Fashion Talk. 5.10 p.m.—Concert. 1. Overture in Italian Style (Schubert). 2. First Lyrical Suite (Karganoff). 3. Soprano Solos: (a) Vergine tutto amor (Durante), (b) Danza, danza fanciullo (Durante), (c) Se Florendo è fidele (Scarlatti). 4. (a) Première Nocturne (Pierné), (b) Les Cloches du soir (Saint-Saëns). 5. Selection from "La Navarraise" (Massenet). 6. Soprano Solos: (a) Soyons unis (Bâton), (b) Je ne me souviens plus (Bâton), (c) Le Revoir (Bâton). 7. The Sixth Hungarian Rhapsody (Liszt). 8. Campana y sera (Billi). 9. North Sea Scenes (Joh. Strauss). 10. Military March (Schubert). 6.55 p.m.—*English Lesson*. 7.25 p.m.—Police News. 7.45 p.m.—Talk, "Flemish Literary Art from 1900—1928." 8.40 p.m.—Concert organised by the Dutch Students' Union. Talk by Prof. Dr. Burger, Rector Magnifique at Amsterdam University on "The Netherlands and Belgium" followed by *Dance Music*. News in the interval. 11.40 p.m. (approx.)—Close Down.

## HILVERSUM

WL. 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 Concert from St. Dominicus Church. 9.10 p.m.—Concert. 10.10 p.m.—News.

## KATTOWITZ

Polskie-Radio. WL. 422 m. (710 kc.); 10 kw. Transmits at intervals from 3.20 p.m. 5.45 p.m.—News and Announcements. 6.20 p.m.—Programme from *Posen*. 9.0 p.m.—Time and News. 9.30 p.m.—Concert from the Café Atlantic.

## KOENIGSBERG

Ostmarken Rundfunk. WL. 330.3 m. (908 kc). Relayed by *Danzig* on 272.7 m. (1,100 kc). Transmits at intervals from 10.0 a.m. 6.30 p.m.—Talk on Ibsen's "Master Builder." 7.0 p.m.—Weather. 7.10 p.m.—"The Master Builder"—Play (Ibsen). Weather, Time and Sports Notes. 9.0 p.m.—Concert of Chamber Music from *Danzig*: 1. Sonata in C Minor (Sor). 2. Old French Gavotte. 3. Minuet in G Major (Beethoven). 4. "Rosamunde"—Ballet Music (Schubert). 5. Seville (Albeiz). 6. Thüringer Reigen (Alwe). 7. Prämberl mit Fughetta Scherzo, Op. 20 (Roemer). 10.0 p.m. (approx.)—News.

## KOVNO

Radio Kaunas. WL. 2,000 m. (150 kc); 15 kw. 4.30 p.m.—Talk, "The Movements of the Stars." 5.0 p.m.—Talk, "What Happened Ten Years Ago." 5.30 p.m.—Talk, "The Education of the People." 6.0 p.m.—Time, Weather and News. 6.30 p.m.—Gala Variety Concert.

## LANGENBERG

Westdeutscher Rundfunk. WL. 470 m. (638 kc.); 25 kw. Programme also for *Aix-la-Chapelle*, 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.—Orchestral Concert from *Dortmund*. 3.0—5.0 p.m.—Programme from *Cologne*. 5.0 p.m.—Chamber Music from *Düsseldorf*. 1. Pianoforte Quartet (Marschner). 2. Pianoforte Quartet (Götz). 6.10—7.20 p.m.—Programme from *Cologne*. 7.20 p.m.—Concert from *Dortmund*. 1. Talk. 2. Recitations. 3. Pianoforte Selections from the "Hamburg" Suite (Niemann). 4. Recitations. 5. Baritone Solos: (a) Ich will heraus aus dieser Stadt, (b) Der alte Mann (Gress). 6. Recitations. Followed by Programme from *Cologne* and *Silent Night*.

## LAUSANNE

Société Romande de Radiophonie (HR2). WL. 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. "Jean de Paris"—Overture (Boieldieu). 2. Rose du Midi—Waltz (Strauss). 3. Selection from "Preciosa" (Weber). 4. Boîte à musique (Antiga). 5. Two Italian Songs (Volpatti). 6. Dance of the Hours (Ponchielli). 8.0 p.m.—Violin Recital. 1. Légende (Wieniawski). 2. Berceuse (Albeniz). 3. Aria (Zipoli). 4. Tambourin (Rameau).

## LEIPZIG

Mitteldeutscher Rundfunk. WL. 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. 4.0 p.m.—Spring Concert. 1. Spring Sonata (Beethoven). 2. Songs: (a) In the Spring (Schubert), (b) Snowdrops (Schumann), (c) A Spring Journey (Schumann). 3. Pianoforte Solos: (a) Selection from "The Seasons" (Niemann); (a) Once Upon a Time, (b) Children's Garden Games, (c) Little Goldenlocks. 4. Songs: (a) Frühlingsreigen (Göhler), (b) A Spring Morning (Mahler). 5. Violin Solos: (a) Divertissement, after Albiéff's "Nightingale" (Vieuxtemps), (b) Zephyr (Hubay). 6. Pianoforte Solos: (a) Approaching Spring (Wittenbecher), (b) Ich möchte still (Haag), (c) Er ist's (Hugo Wolf). 7. Pianoforte Solo—"The Voices of Spring" (Joh. Strauss-Schütt). 5.5 p.m.—Talk, "Henrik Ibsen and Women." 6.15 p.m.—Talk, "The Development of Medicine."

6.45 p.m.—Talk, "Ibsen." 7.0 p.m.—Weather and Time. 7.15 p.m.—"The Wild Duck"—Play (Ibsen). 9.0 p.m.—News. 9.15 p.m.—Dance Music. 11.0 p.m. (approx.)—Close Down.

## LILLE

(PTT). WL. 286.8 m. (1,046 kc); 0.5 kw. Transmits at intervals from 12.30 p.m. 7.40 p.m.—Esperanto Talk. 8.30 p.m.—Organ and Cello Recital from the Works of Mozart, Handel, Haydn, Beethoven, etc. Followed by News.

## MADRID

Union Radio (EAJ7). WL. 375 m. (880 kc.); 1.5 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Orchestral Concert: 1. The Blue Domino—Selection (Arrietta). 2. The Twilight of the Gods—Selection (Wagner). 3. Recuerdo a Gaztambide—Selection (Chapi). In the interval, Verse Recital. 8.0 p.m.—Dance Music, relayed from the Alcazar. 9.30 p.m.—*English Lesson*. 10.0 p.m.—Programme relayed by *San Sebastian* (EAJ8), 335 m. (895 kc). Time and Exchange Quotations. 10.10 p.m.—Selection from "Faust" (Gounod). 12.20 a.m. (Wednesday)—News. 12.30 a.m. (approx.)—Close Down.

## MILAN

Unione Radifonica Italiana (IMI). WL. 525.3 m. (570 kc); 7 kw. Transmits at intervals from 11.15 a.m. 7.30 p.m.—German Lesson. 7.30 p.m.—Wireless Notes. 7.50 p.m.—Time and Art Talk. 8.0 p.m.—Variety Concert: 1. Orchestral Selections: (a) Hansel and Gretel (Humperdinck), (b) Cleopatra—Intermezzo, Barcarolle and Scherzo (Mancinelli). 2. Soprano Songs: (a) Manon Lescaut—Aria, (b) Matino di sole (Bettinelli). 3. (a) Othello—Selection (Verdi), (b) Isabeau—Selection (Mascagni). 4. Verse Recital. 5. Trio Selections: (a) Sonata (Mortari), (b) Trio in D Minor (Rachmaninoff). 6. Soprano Song from "Andrea Chénier" (Giordano). 7. Il Forestiero—Song (Zanella). 8. "Ruy Blas"—Overture (Mendelssohn).

## MUNICH

Deutsche Stunde in Bayern. WL. 535.7 m. (560 kc); 4 kw. Programme relayed by *Nürnberg* on 303 m. (990 kc) and *Augsburg*, 566 m. (530 kc). Transmits at intervals from 10.20 a.m. 6.30 p.m.—Talk, "Henrik Ibsen." 7.45 p.m.—"Peer Gynt"—Drama (Ibsen). Incidental Music by Grieg. 9.45 p.m.—News. 10.0 p.m.—Programme from *Vienna*.

## NAPLES

Unione Radiofonica Italiana (INA). WL. 333.3 m. (900 kc); 7.5 kw. Transmits at intervals from 12 noon. 7.20 p.m.—Wireless Notes. 7.40 p.m.—News. 7.48 p.m.—Harbour Notes. 7.50 p.m.—Opera Relay from the "San Carlo" Theatre. 9.55 p.m.—Calendar and Programme Announcements. 10.0 p.m. (approx.)—Close Down.

## OSLO

Kringkastingsselskapet. WL. 461.5 m. (650 kc); 1.5 kw. Programme relayed by *Hamar* on 566 m. (530 kc); *Porsgrund*, 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. 10.15 a.m.—Ibsen Centenary Commemoration Memorial Service, from Ibsen's Tomb. 12.30 p.m.—Memorial Programme from Oslo University. 4.0 p.m.—Programme from the University Hall. 6.15 p.m.—News. 6.30 p.m.—*English Lesson*. 7.0 p.m.—Time. 7.2 p.m.—Orchestral Concert and Recitations. 7.30 p.m.—"Brand" Drama (Ibsen). 8.15 p.m.—Talk, "Ibsen." 8.40 p.m.—Orchestral Selections. 8.50 p.m.—Talk, "Henry Ibsen and Norwegian Music." 9.0 p.m.—Song Recital from the works of Grieg-Ibsen. 9.30 p.m.—Weather and News. 9.45 p.m.—Topical Talk. 10.0 p.m. (approx.)—Close Down.

Programmes for Tuesday.—(Cont.)

PARIS
Ecole Supérieure (FPTT). WL. 458 m. (655 kc); 0.5 kw.
Transmits at intervals from 8.0 a.m.
8.0 p.m.—Radio Journal de France.
8.0 p.m.—English Lesson.
9.0 p.m.—Concert from the Works of Puccini.
10.0 p.m.—Talk on "Foreign Affairs."

PARIS
Eiffel Tower (FL). WL. 2650 m. (113 kc); 5 kw.
7.50 a.m.—Time Signal (on 32 m.; 9375 kc).
9.20 a.m.—Time Signal.
5.45 p.m.—Le Journal Parlé. Talks on "Books to Read," etc.
7.10 p.m.—Weather.
7.30 p.m.—Concert: 1. Pianoforte Solos: (a) Adoration (Filippucci), (b) Sonata in A Minor (Mozart), (c) Two Arabesques (Debussy). 2. Song, "En Rêve" (de Castera). 3. Tenor Solos, "Pastorale Roumaine" (Cantelouve). 4. Songs, (a) Nocturne (Cools), (b) Monodies (Migot). 5. Tenor Solos, Five Popular Auvergne Songs (Cantelouve). 6. Flute and Song Selections (de Crèvecoeur): (a) Souvenirs, (b) Veu-tu me rejouer, (c) O la Tristesse des Airs gais, (d) Ecoutez la Chanson, (e) Galop d'un Cheval. 7. Chanson des Bois (Cools). At 7.56 p.m.—Time Signal (on 32 m.; 9375 kc).

7.30 p.m.—Educational Programme: Talks on "Brazil," "Life in the United States," "The Discoveries of Christopher Columbus."
10.26 p.m.—Time Signal.
PARIS
Petit Parisien. WL. 340.9 m. (880 kc); 0.5 kw.
9.0 p.m.—Concert. 1. "Ramuntcho"—Overture (Pierne). 2. Piece for Flute (Gaubert). 3. Nocturne (Paray). 4. Izeil (Pierne). 5. En Bretagne (Rhené-Baton). 6. Serenade for Strings (Pierne). 7. "Naila"—Ballet (Gaubert). 8. Sonata for Cello and Orchestra (Paray). 9. Ballet de cour (Pierne). 10. En vacances (Rhené-Baton).

PARIS
Radio-Paris (CFR). WL. 1,750 m. (171 kc.); 3 kw.
Transmits at intervals from 7.30 a.m.

12.30 p.m.—Concert. 1. "Coriolan"—Overture (Beethoven). 2. Bacchus (Massenet). 3. Contes de la veillée (Godard). 4. Serenade from "Don Juan". 5. Elégie (Filippucci). 6. Air de chasse (Schumann). 7. Cello Solo. 8. "Lakmé" (Delibes). 9. Gavotte and Musette (D'Ambrosio). 10. Minuet de Boeuf (Haydn). 11. Prelude and Death of Isolde (Wagner). 12. Ballet from "Henry VIII" (Saint-Saëns). News in the interval.

1.50 p.m.—Market Prices.
3.30 p.m.—Exchange Quotations.
3.45 p.m.—Concert. 1. Cavatine (Saint-Saëns—Mouton). 2. Violin Solos: (a) Cantilène nuptiale (Dubois), (b) Fantasia (Huë). 3. Aveu dans le soir (Paray). 4. Pianoforte Solos: (a) Holda (Dumoulin), (b) Caprice in A (Mendelssohn). 5. Invocation (Ganne). 6. Cello Sonata (Huë). 7. Dans la montagne (Fourdrain-Delsaux).

4.45 p.m.—Exchange Quotations.
7.0 p.m.—Agricultural Notes.
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. Un Caprice (Musset). 2. Quartet for Flute (Mozart). 3. (a) Air de Lioubava from "Sadko" (Rimsky-Korsakoff), (b) Air from "Snegourochka" (Rimsky-Korsakoff), (c) Pauline's Romance from "Pique Dame" (Tchaikovsky). 4. Trio for Piano-forte, Clarinet and Cello (Beethoven). 5. Poems. 6. Chansons à manger. 7. Quartet (Borodine). News in the interval.

POSEN
Polskie Radio. WL. 344 m. (872 kc.); 1.5 kw.
Transmits at intervals from 12.15 p.m.
6.30 p.m.—"Carmen"—Opera (Bizet). Followed by Time, Finance Notes and News.
10.0 p.m.—Dance Music from the Carlton Restaurant.
11.0 p.m. (approx.)—Close Down.

PRAGUE
Strasnice. WL. 348.9 m. (860 kc); 5 kw.
Transmits at intervals from 9.30 a.m.
3.30 p.m.—Concert.

4.30 p.m.—Talk.
4.50 p.m.—German Transmission.
5.15 p.m.—Agricultural Report.
5.25 p.m.—Talk for Labourers.
5.35 p.m.—Czech-German Talk.
6.15 p.m.—Popular Concert.
7.0 p.m.—Weather and News.
7.15 p.m.—Popular Concert.
8.15 p.m.—Concert.
9.0 p.m.—Time, News and Orchestral Selections.

ROME
Unione Radiofonica Italiana (IRO). WL. 448.4 m. (669 kc); 3 kw.
Transmits at intervals from 11.30 a.m.
7.0 p.m.—English Lesson.
7.30 p.m.—Time, News, Exchange and Weather.
7.45 p.m.—Instrumental Concert. 1. Le donne curiose—Overture (Usiglioli). 2. Fourth Sonata in G minor, for Cello with cembalo accompaniment (Marcello). 3. Concerto in C major—Largo and Allegro moderato (Vivaldi). 4. Medical-Hygiene Talk. 5. Chante triste (Dumas). 6. Berceuse (Fauré). 7. Hungarian Czardas for Cello (Fischer). 8. The Barber of Seville—Symphony (Rossini), arranged for String Quartet. 9. "The Legend of the Seven Towers"—One-Act Opera (Gasco).
9.50 p.m.—News.
10.0 p.m. (approx.)—Close Down.

SCHENECTADY, N.Y.
General Electric Company (WGY). WL. 379.5 m. (790kc); 50 kw.
Programme relayed by 2XAD on 21.96 m. (13,661 kc) from 6.0—7.0 p.m. and by 2XAF on 31.4 m. (9,554 kc), from 11.0 p.m.
Transmits at intervals from 11.45 a.m.
11.0 p.m.—Exchange and News.
11.30 p.m.—Concert from the Hotel Ten Eyck, Albany, N.Y.
12.0 (midnight)—"Voters' Service," from New York.
12.30 a.m. (Tuesday)—The Madrigal Quartet.
1.0—4.30 a.m.—Programme from New York.
1.0 a.m.—"The Seiberling Singers."
1.30 a.m.—Sealy Air Weavers.
2.0 a.m.—Time.
2.2 a.m.—Eveready Hour.
3.0 a.m.—Bridge Lesson.
3.30 a.m.—Rolle's Palais d'Or Orchestra.
4.30 a.m.—Organ Recital from Rochester.

5.0 a.m.—Shea's Buffalo Symphony Orchestra from Buffalo.
6.0 a.m.—Close Down.

STOCKHOLM
Radiotjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw.
Programme relayed by Morala on 138.0 m. (217 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.
5.0 p.m.—Children's Corner.
5.30 p.m.—Light Music.
6.0 p.m.—Agricultural Talk.
6.15 p.m.—Physiology Talk.
6.30 p.m.—Light Music.
7.0 p.m.—Programme from Oslo.
8.15 p.m.—News and Weather.
8.40 p.m.—Geography Talk.
9.0 p.m. (approx.)—Close Down.

STUTTGART
Süddeutscher Rundfunk. WL. 380.7 m. (788 kc); 4 kw.
Transmits at intervals from 11.30 a.m.
3.30 p.m.—Concert from Works of Rimsky-Korsakoff: 1. Intermezzo from "Die Zarenbraut." 2. Air from "Sevilla." 3. Fantasia from "Schneeglöckchen." 4. Selection from "Sadko": (a) Hindu Song, (b) Wedding Song. 5. Berceuse from "Die Bojarin Vera Scheloga." 6. "The Song of the Dying Swan." 7. Suite in Three Movements from "The Fairy Tale of Zaren Saltan."
4.45 p.m.—Time and Weather.
5.15 p.m.—Talk, "Henrik Ibsen—on the Centenary of His Birth."
5.45 p.m.—Wireless Talk.
6.15 p.m.—Talk, "Georg Forster—the Life of a German South Sea Voyager."
6.45 p.m.—Time, Weather and Wireless Notes.
7.0 p.m.—Chamber Music by the Capet Quartet, from the Liederhalle: 1. Köchel No. 465 (Mozart). 2. Op. 41, No. 1 in A Minor (Schumann). 3. Op. 10, No. 1 in G Minor (Debussy), followed by News and Silent Night.

TOULOUSE
Radiophonie du Midi. WL. 391 m. (767 kc.); 3 kw.
Transmits at intervals from 10.15 a.m.
12.45 p.m.—Orchestral Concert.
8.15 p.m.—Relay from the Capitól Theatre.

VIENNA
Radio-Wien. WL. 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.
5.30 p.m.—Commerce Talk.
6.0 p.m.—French Lesson.
6.30 p.m.—English Lesson.
7.5 p.m.—Vocal and Orchestral Selections from Mozart's Operas.

WARSAW
Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw.
Transmits at intervals from 11.0 a.m.
6.5 p.m.—Agricultural Report.
6.20 p.m.—Programme from Posen.
In the interval: News in French.
9.0 p.m.—Time, News and Weather.
9.30 p.m.—Dance Music.
10.30 p.m. (approx.)—Close Down.

WILNO
Radio Pologne. WL. 435 m. (689 kc.); 0.5 kw.
Transmits at intervals from 3.25 p.m.
5.55 p.m.—Wireless Notes, Time and Variety Items.
6.20 p.m.—"Carmen"—Opera (Bizet), relayed from Posen.
9.0 p.m.—News.
9.30 p.m.—Dance Music.
10.30 p.m. (approx.)—Close Down.

ZAGREB
Radioklub Zagreb. WL. 310.5 m. (966 kc); 0.35 kw.
Transmits at intervals from 12.15 p.m.
6.0 p.m.—Talk, "Pictures of World History."
7.0 p.m.—Ibsen Concert.

ZURICH
Radio - Genossenschaft. WL. 588.2 m. (510 kc); 2 kw.
Transmits at intervals from 11.30 a.m.
6.30 p.m.—Time and Weather.
6.32 p.m.—Talk, "Samoa, the Paradise of the South Seas."
7.0 p.m.—"Henry Ibsen and Edward Grieg": Programme of Readings, Songs and Orchestral Selections.
8.10 p.m.—Soloist Concert.
9.0 p.m.—News and Weather.
9.10 p.m.—Gramophone Dance Music.

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# PROGRAMMES FOR WEDNESDAY (March 21)

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

## BARCELONA

Radio-Barcelona (EAJ), WL. 344.8 m. (870 kc.); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Quintet Selections. 8.30 p.m.—Castilian Grammar Lesson. 9.0 p.m.—Chimes and Weather. 9.10 p.m.—Selections by the "Cobla" Barcelona. 10.0 p.m.—Exchange Closing Prices. 10.5 p.m.—Scene from "Twelfth Night" (Shakespeare). 10.20 p.m.—Part of the Concert relayed from the "Granja Royal." 12.0 midnight.—Close Down.

## BERGEN

Kringkastingselskap. WL. 369.9 m. (811 kc.); 1.5 kw. Transmits at intervals from 10.15 a.m. 6.30 p.m.—Evensong. 7.15 p.m.—Peer Gynt Suite No. 1 (Grieg). 7.40 p.m.—French Lesson. 8.10 p.m.—Peer Gynt Suite No. 2 (Grieg). 8.30 p.m.—Talk. 9.0 p.m.—Weather, News and Time. 9.15 p.m. (approx.)—Close Down.

## BERLIN

Königswusterhausen. WL. 1,250 m. (240 kc.); 35 kw. Transmits at intervals from 11.0 a.m. 4.0 p.m.—Programme from Hamburg. 5.0 p.m.—Technical Talk. 5.30 p.m.—French Lesson. 5.55 p.m.—Talk. 6.20 p.m.—Talk, "The Music of Franz Schrecker." 7.30 p.m.—Programme from Voxhaus.

## BERLIN

Voxhaus. WL. 484.6 m. (619 kc.); 4 kw. Transmits at intervals from 9.10 a.m. 3.30 p.m.—Ibsen Talk and Reading followed by The Dancers from the Hotel Kaiserhof. 5.20 p.m.—Programme Notes. 5.50 p.m.—Talk, "Metallography." 6.20 p.m.—Talk, "Modern Man and Woman." 6.50 p.m.—Talk, "Medical Philosophy." 7.30 p.m.—Russian Dances. 1. Introduction and Polonaise from "Boris Godounov" (Moussorgsky). 2. "Snegurotchka"—Dance (Rimsky-Korsakoff). 3. Waltz and Ballet from "Raymonde" (Glazounov). 4. Tarantelle (Cui). 5. Persian Dance from "Prince Khovansky" (Moussorgsky). 6. Ballet Scenes (Glazounov). 8.30 p.m.—Address by Dr. Stresemann at the International Press Congress. 9.15 p.m.—Time, News and Sports Notes. 9.30 p.m.—Dance Music. 11.30 p.m. (approx.)—Close Down.

## BERNE

Radio-Berne. WL. 411 m. (730 kc.); 1.5 kw. Transmits at intervals from 12 noon. 6.30 p.m.—Time and Weather. 6.35 p.m.—Talk, "Swiss Penal Law." 7.0 p.m.—Programme from Zurich. 7.40 p.m.—Instrumental Concert, News and Weather in the Interval. 9.30 p.m. (approx.)—Close Down.

## BILBAO

Union Radio (EAJ9). WL. 400 m. (750 kc.); 0.5 kw. 7.30 p.m.—Time, Calendar, Shipping Intelligence, Weather and Exchange Quotations. 7.45 p.m.—Concert: 1. Sextet Selections: (a) Paco (Monreal), (b) "The Girl of the Golden West"—Selection (Puccini). 2. Baritone Songs: (a) "Rigoletto"—Aria (Verdi), (b) "Maruxa"—Romance from Act 2 (Vives). 3. Sextet Selections: (a) Elegy (Guridi), (b) El manubrio (Romero). 4. "Othello"—Tenor and Baritone Duet (Verdi). 5. Guitar and bandurria Selections. 6. Tenor Songs: (a) Doña Francisquita—Romance (Vives), (b) "Andrea Chenier" (Giordano). 7. Sextet Selections: (a) El sentir de la milonga—Tango (Ferriz), (b) Pavana (Albeniz), (c) Les bullangueros (Guerrero). 9.30 p.m. (approx.)—Close Down.

## BRATISLAVA

Radio Bratislava. WL. 300 m. (1,000 kc.); 0.5 kw. 3.30 p.m.—Concert. 1. Serenade, Op. 48 (Leopold). 2. Lyrical Intermezzo (Jirak). 3. Songs (Tchaikovsky and Moussorgsky).

4. Potpourri of National Songs (Sevcik). 5. Songs (Marsik and Bordone). 6. Aria (Kreisler). 4.35 p.m.—Agricultural Report. 5.25 p.m.—Programme relayed from Prague.

## BRESLAU

Schlesische Funkstunde. WL. 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. 5.0 p.m.—Talk on Philosophy. 5.30 p.m.—French Lesson. Relayed from Königswusterhausen. 5.55 p.m.—Weather, followed by Talk, "Learn Foreign Languages." 6.0 p.m.—Reading. 6.30 p.m.—Talk, "The Elixir of Love." 7.0 p.m.—"The Elixir of Love"—Opera (Donizetti). Relayed from the Municipal Theatre. News.

## BRUNN

Komarov. WL. 441 m. (680 kc.); 3 kw. Transmits at intervals from 11.15 a.m. 5.0 p.m.—Time, and German Transmission. 5.25 p.m.—Programme from Prague.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw. 5.0 p.m.—Trio Selections. 7.45 p.m.—Radio Chronique. 8.15 p.m.—Gramophone Records. 8.30 p.m.—Concert by the Royal Zoological Society, Antwerp. 1. Faust Overture (Wagner). 2. Concerto for Violin and Orchestra (Mendelssohn). 3. (a) "Tannhäuser"—Introduction to Scene 2, (b) Forest Murmurs from "Siegfried," (c) Rhine Journey, from "The Twilight of the Gods" (Wagner). 4. Violin Solos. 5. "Tannhäuser"—Overture (Wagner). 10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw. Transmits at intervals from 8.30 a.m. 6.0 p.m.—German Lesson. 6.45 p.m.—"Die goldene Frau" (Schöthan and Koppel). 9.0 p.m.—Time, News and Gramophone Records.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw. Transmits at intervals from 9.10 a.m. 12.5 p.m.—Orchestral Concert. 2.45 p.m.—Talk for Women. 3.20 p.m.—Review of Books. 4.10 p.m.—Chemistry Talk. 4.30 p.m.—Talk, "Help the Blind." 4.50 p.m.—Gramophone Records. 5.0 p.m.—See Langenberg. 6.35 p.m.—Talk, "German Culture." 7.0 p.m.—Dancing Lesson. 7.30 p.m.—African Programme. 1. Orchestral Variations on an African Air (Coleridge-Taylor). 2. Recitation. 3. (a) Two Gramophone Songs, (b) Recitation, (c) Choral Song of Battle for the Egyptian Army (Rouget de Lisle). 4. (a) Tunisian Dances, (b) Recitations. 5. (a) West African Song, (b) Recitation from "In the Sea Gods' Kingdom" (Probenius), (c) African Legends, (d) West African Song for Harp. 6. (a) Recitation, (b) Orchestral Variations on an African Air (Coleridge-Taylor). 8.50 p.m.—Concert. 1. Orchestra—Rosamunde—Overture (Schubert). 2. Choir—(a) Die Lore am Tore—Folk Song, (b) Heidenroslein (Werner). 3. Tenor Solos: (a) Gute Nacht, (b) Ein-Friedhof, (c) Im Herbst (Franz). 4. Ballet Music from "Undine" (Lortzing). 5. Vocal Quartet: (a) Elsa von Caub (Filke), (b) Die drei Röslein (Silcher), (c) Irish Folk Song. 6. Die Schönbrenner—Waltz (Lanner). 7. Male Choir: (a) Loreley, (b) Upper Swabian Dance Song (Silcher). 8. Bass Solos: (a) Gute Nacht, (b) Die Krähe (Schubert). 9. Mixed Choir: (a) Untreue (Glück), (b) Abschiedslied—Folk Song, (c) Der Mond ist aufgegangen (arr. Herdickehoff). Followed by News and Sports Notes and Concert from the Hotel zur Post, Elberfeld. 11.0 p.m. (approx.)—Close Down.

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (890 kc.); 1 kw. Programme relayed by Kahundborg on 1,153.8 m. (260 kc). Transmits at intervals from 6.30 a.m. 5.30 p.m.—Talk for Housewives and Wireless Notes.

6.0 p.m.—News, Exchange and Time. 6.30 p.m.—Political Talk. 7.0 p.m.—Relay of European Stations. 8.15 p.m. (approx.)—News. 11.0 p.m.—Chimes and Close Down.

## CORK

Cork Broadcasting Station (6CK). WL. 400 m. (750 kc.); 1.5 kw. 2.30 p.m.—Weather, Stock Market Report and Gramophone Selections. 6.15 p.m.—Programme from Dublin.

## CRACOW

Polskie Radio. WL. 566 m. (530 kc.); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.35 p.m.—Music Talk. 7.0 p.m.—Talk. 7.30 p.m.—Concert from the works of Weber. 1. "Abu Hassan"—Overture. 2. Polacca brillante. 3. Agathe's Aria from "Der Freischütz." 4. Air and Cavatina from "Der Freischütz." 5. Air from "Euryanthe." 6. Chorus from "Silvaine." 7. Invitation to the Waltz. 8. Rezia's Aria from "Oberon." 9. "Oberon"—Overture. 9.0 p.m.—Programme from Warsaw. 9.30 p.m. (approx.)—Close Down.

## DUBLIN

Dublin Broadcasting Station (2RN). WL. 319.1 m. (940 kc.); 1.5 kw. Transmits at intervals from 1.30 p.m. 6.15 p.m.—Children's Corner. 7.0 p.m.—Programme 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.—The Station Orchestra. 8.30 p.m.—Fay Sargent and Joan Burke in a Musical Sketch. 9.0 p.m.—Joseph Schofield ("Cello) and Mary Maguire (Soprano). 9.30 p.m.—"The Warden of Galway"—Sketch, by Frank Fay and Company. 10.0 p.m.—The Station Orchestra. 10.10 p.m.—Duet by P. J. Byrne (Baritone) and Mr. Warren. 10.25 p.m.—The Station Orchestra. 10.30 p.m.—News, Weather and Close Down.

## FRANKFURT-AM-MAIN

Südwestdeutscher Rundfunk. WL. 428.6 m. (700 kc.); 4 kw. Programme relayed by Cassel on 252.1 m. (1,190 kc). Transmits at intervals from 11.30 a.m. 3.30 p.m.—Concert from works of Bach. 4.45 p.m.—Review of books. 5.15 p.m.—Wireless Notes and other announcements. 5.30 p.m.—Talk, "The Religion of the Greek Thinkers up to and including Socrates." 6.0 p.m.—Talk, "My Journey to Paraguay." 6.30 p.m.—French Lesson. 7.0 p.m.—Talk, "The Botanical Gardens of Buitenzorg in Java." 7.15 p.m.—Concert from Cassel: 1. Serenade for Strings (R. Trunk). 2.: (a) Nachtgruss, for voices and strings; (b) Abendwolke, for voices and strings (Bodart). 3. Two pieces for strings (Hugo Kaun): (a) Mondnacht; (b) Liebeslied. 3. Three songs for soprano: (a) Fliederim Mondlicht (Trunk); (b) Mondschein (Trunk); (c) Im Spätboot (R. Strauss). 8.30 p.m.—Address by Dr. Stresemann, Minister of Foreign Affairs, from the New Town Hall, Berlin-Schöneberg.

## GENEVA

Radio Geneva. WL. 760 m. (395 kc.); 0.5 kw. 5.0 p.m.—News and Dance Music from the MacMahon. 7.15 p.m.—News and Talk. 7.40 p.m.—Programmes from Basle and Bern. 8.50 p.m.—News. 9.0 p.m.—Dance Music from the Fantasio. 10.0 p.m. (approx.)—Close Down.

## HAMBURG

Nörag (ha, in Morse). WL. 396 m. (757 kc.); 4 kw. Programme relayed by Bremen on 272.7 m. (1,100 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 Bremen)—Reading. 4.0 p.m.—Quartet Concert. 5.30 p.m.—Talk, "How can I retain a good figure?"

5.55 p.m.—Talk, "Low Germany." 6.20 p.m.—Weather. 6.25 p.m.—"Alessandro Stradella"—Opera (Flotow). Relayed from the Municipal Opera House. 8.45 p.m.—Talk, followed by News and Dance Music. 10.25 p.m.—Ice Report. 11.30 p.m. (approx.)—Close Down.

## HILVERSUM

Algemeene Vereeniging Radio Orroep. WL. 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.—Trio Concert. 1. "The Merry Wives of Windsor"—Overture (Nicolai). 2. "La Source"—Ballet Suite (Delibes). 3. Violin Solos: (a) Concerto in G minor (Vivaldi), (b) Meditation (Glazounov). 4. Selection from "The Pearl Fishers" (Bizet). 5. Violin Solos: (a) Feeling (Achron). (b) La Clochette (Paganini). 6. Dance of the Roses (Moszkovsky). 7. Manhattan Beach (Souza). 8. Polar Star—Waltz (Walteufel). 9. Von Bühne zu Bühne (Fétras). 10. Cadetten March (Souza). 6.55 p.m.—Talk. 7.25 p.m.—Police News. 7.45 p.m.—Concert. 8.40 p.m.—Talk on "India." 9.30 p.m.—Weather and News. 9.50 p.m.—Concert (contd.). 10.40 p.m. (approx.)—Close Down.

## HUIZEN

WL. 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.—Orchestral, Mandoline and Choral Concert and Talk.

## KATTOWITZ

Polskie-Radio. WL. 422 m. (710 kc.); 10 kw. Transmits at intervals from 3.20 p.m. 7.0 p.m.—Talk. 7.30 p.m.—Concert of Italian Music. 1. Viola and Pianoforte Solos: (a) Adagio (Corelli), (b) Romance (Campagnoli), (c) Adagio (Boccherini), (d) Sonata in E minor (Marecello). 2. Songs: (a) Nina, (b) Se tu m'ami (Pergolesi), (c) Amarilli (Caccini), (d) Danza, Danza (Durante), (e) Comeragio di sol (Caldara), (f) Pur dicesti (Lotti), (g) Caro mio ben (Giordani), (h) Quella fiamma que m'accende (Marcello), (i) Sen core l'agneletta (Sarti). 3. Viola and Pianoforte: (a) Plaisir d'amour, (b) Gavotte (Martini), (c) Andante and Minuet (Milandre), (d) Second Sonata in A major (Ariosti).

## KIEL

Norag. WL. 256 m. (1,172 kc); 0.7 kw. 3.15 p.m.—Concert of Operetta Music. 1. "Casanova"—Overture (Lincke). 2. Soprano Solos: (a) "Mir ist so bang" from "Der Zarewitsch" (Léhar), (b) "Man schilt uns Frauen" (Goetze), (c) Ihre Hoheit, die Tänzerin (Goethe). 3. Blütenzauber (Lindsay). 4. Soprano Songs (Doelle and-Granchstädt). 5. Kadettenstreiche (Jesse).

## KONIGSBERG

Ostmarken Rundfunk. WL. 330.3 m. (908 kc.); 1 kw. Relayed by Danzig on 272.7 m. (1,100 kc). Transmits at intervals from 8.00 a.m. 6.30 p.m.—Elementary English Lesson. 7.0 p.m.—Weather. 7.10 p.m.—Instrumental and Vocal Concert: 1. Concerto in the Italian Style (Bach)—for Pianoforte. 2. Soprano Solos. 3. (a) Impromptu in G major (Schubert), (b) Etude in A minor (Chopin)—Pianoforte Solos. 4. Soprano Songs. 8.30 p.m.—Programme relayed from Voxhaus followed by Weather, News and Sports Notes. 9.0 p.m. (approx.)—"Spring Concert": Orchestral, Choral and Solo Music.

## KOVNO

Radio Kaunas. WL. 2,000 m. (150 kc); 15 kw. Transmits at intervals from 3.55 p.m. 5.30 p.m.—Talk, "Nature in Brazil." 6.0 p.m.—Time, Weather and News. 6.30 p.m.—"Rigoletto"—Opera (Verdi). Relayed from the National Theatre.

## LANGENBERG

Westdeutscher Rundfunk. WL. 470 m. (638 kc); 25 kw. Programme also for Aix-la-Chapelle, 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—6.10 p.m.—Programme from Cologne. 6.10 p.m.—Commerce Talk, from Dortmund. 6.35 p.m.—Programme from Cologne, followed by Concert from the Hotel zur Post, Elberfeld. 11.0 p.m. (approx.)—Close Down.

## LAUSANNE

Société Romande de Radiophonie (HB2). WL. 680 m. (441 kc.); 0.6 kw. Transmits at intervals from 6.45 a.m. 7.0 p.m.—Weather. 7.1 p.m.—Talk, "Cream Cheeses." 7.30 p.m.—Programme from Basle (1,000 m.; 300 kc.). Orchestral Concert.

## LEIPZIG

Mitteldeutscher Rundfunk. WL. 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.—"Gianni Schicchi"—Opera (Puccini), from the German National Theatre, Weimar, followed by "Ol-oi"—Drama (Tchérepnin). 6.30 p.m.—Talk, "The Central German Problem." 7.0 p.m.—Weather and Time. 7.15 p.m.—Concert of Popular Orchestral Music. 0.15 p.m.—News. 0.30 p.m.—Cabaret Concert. 11.0 p.m. (approx.)—Close Down.

## LILLE

(PTT). WL. 286.8 m. (1,046 kc); 0.5 kw. Transmits at intervals from 12.30 p.m. 7.10 p.m.—Concert. 9.0 p.m.—Probable Relay. 10.30 p.m.—Dance Music from the Lilliana Dance Hall.

## MADRID

Union Radio (EAJ7). WL. 375 m. (800 kc); 1.5 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Orchestral Concert. 1. Pepe Condo—Selection (Vives). 2. Falstaff—Selection (Verdi). 3. Potpourri of Modern Musical Play Selections. In the Interval—Talk on "A Theatrical Production in the El Gorrat de la Cruz in the Eighteenth Century," and Scenes from an Old Tragedy (Garcia de la Huerta), and from a Play by Ramon de la Cruz. 9.30 p.m.—History Lesson. 9.45 p.m.—Meteorology Talk, "Atmospheric Disturbances in the Temperate Zone—Cyclones and Anti-cyclones." 10.0 p.m.—Popular Concert. 1. Marche solemne (Alonso). 2. Sangre de reyes (Luna and Balaguer). 3. "Lysistrata"—Aria (Lincke). 4. La Duquesa del Tabarín—Song (Bard). 5. Curro Achares—Duet (Ortiz). 6. En plena locura—Egyptian Romance (Benloch). 7. El señor Joaquin (Caballero). 8. Duet (Serrano). 9. Selection from "Picio, Adan and Co"—Musical Play (Mangialilli). 12.20 a.m. (Thursday)—News. 12.30 a.m. (approx.)—Close Down.

## MILAN

Unione Radiofonica Italiana (IMI). WL. 526.3 m. (570 kc); 7 kw. Transmits at intervals from 11.5 a.m. 7.0 p.m.—French Lesson. 7.30 p.m.—Wireless Notes. 7.50 p.m.—Time and Technical Wireless Talk. 8.0 p.m.—Relay of an Operetta from the Lyric Theatre. 9.55 p.m. (approx.)—News.

## MUNICH

Deutsche Stunde in Bayern. WL. 535.7 m. (560 kc); 4 kw. Programme relayed by Nürnberg, on 303 m. (990 kc) and Augsburg, 566 m. (530 kc). Transmits at intervals from 11.45 a.m. 6.5 p.m.—Pianoforte Recital. 6.30 p.m.—Talk, "Explosions." 7.5 p.m.—Concert. 1. "Russian and Ludmilla"—Overture (Glinka). 2. Coppélia—Ballet Suite (Delibes). 3. "Faust"—Waltz (Gounod). 4. "Schwartzwald mädel"—Potpourri (Jesse). 5. Pétropium Mobile (Gungl). 6. "Das Mittel zum Zweck"—Sketch (Knopff). 7. Liebesbotschaft (Siede). 8. Variety.

Programmes for Wednesday.—(Cont.)

9. Soprano Songs. 10. Bavarian Dances. 9.20 p.m.—News. 9.35 p.m.—Orchestral Concert. 10.30 p.m. (approx.)—Close Down.

NAPLES

Unione Radiofonica Italiana (INA). WL. 333.3 m. (900 kc); 1.5 kw. Transmits at intervals from 12 noon. 7.20 p.m.—Wireless Notes. 7.40 p.m.—News. 7.48 p.m.—Harbour Notes. 7.50 p.m.—Concert: 1. Don Juan—Overture (Mozart). 2. "Orpheus"—Soprano Song (Glück). 3. "I Puritani"—Tenor Song (Bellini). 4. "Otello"—Soprano Song (Verdi). 5. "L'Arlesienne"—Frederick's Lament and Berceuse (Cilea). 6. "Il Trovatore"—Soprano and Tenor Duet (Verdi). 7. "Zingari"—Selection (Leoncavallo). 8. "Cosi fan tutte"—Soprano Song (Mozart). 9. "Il miracolo"—Soprano Song (Lacetti). 10. Andrea Chenier—Tenor Song (Gioradano). 11. Adrienne Lecouvreur—Soprano and Mezzo-Soprano Duet (Cilea). 12. La Cabrera (Dupont). 13. Manuela Menendez—Intermezzo (Filiassi). 14. Don Carlos—Soprano and Tenor Duet (Verdi). 15. "Faust"—Symphony (Donizetti). 9.55 p.m.—Calendar and Programme Announcements.

OSLO

Kringkastingselskapet. WL. 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 (690 kc); Notodden, 423 m. (709 kc); and Riskan, 448 m. (670 kc). Transmits at intervals from 10.10 a.m. 5.40 p.m.—French Lesson. 6.13 p.m.—News. 6.30 p.m.—Talk, "Russian Legends." 7.2 p.m.—Orchestral Concert. 1. Polonaise Solennel (Svendson). 2. Peer Gynt—Suite No. 1 (Grieg). 3. Jon Gabriel Borkmann—Symphonic Poem (Borgström). 4. Peer Gynt—Suite No. 2 (Grieg). 8.30 p.m.—Talk. 9.15 p.m.—Topical Talk. 9.30 p.m.—Gramophone Dance Music.

PARIS

Ecole Supérieure (FPTT). WL. 458 m. (655 kc); 0.5 kw. Transmits at intervals from 8 a.m. 6.0 p.m.—Radio Journal de France. 8.0 p.m.—Talks on "Gardening," "The Cinema," "Literature." 9.0 p.m.—"La Dame Blanche"—Opera (Boieldieu). Followed by Dance Music. 12 midnight (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). 9.26 a.m.—Time Signal. 5.45 p.m.—Le Journal Parlé. Talks on "Charlie Chaplin," "Science," etc. 7.10 p.m.—Weather. 7.30 p.m.—Concert. 1. Mezzo-Soprano Solos: (a) La vie du Poète, (b) Invocation à la Nuit (Charpentier), (c) Three Melodies (Gounod). 2. Espana (Albeniz). 3. Tenor Aria from "Aida" (Verdi). 4. Tango (Albeniz). 5. Mezzo-Soprano Solos: (a) l'Allée est sans fin, (b) Tous doux, (c) l'Heure exquise (Hahn). 6. Three Mexican Songs for Tenor. 7. Espana Malaguena (Albeniz). At 7.56 p.m. Time Signal (on 32 m.; 9,375 kc). 8.30 p.m.—Educational Programme. Talks on "Agriculture," "Sports," etc. 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.—Concert. 1. Selection from "Hans the Flute Player" (Ganne). 2. Madrigal (Gaubert). 3. Prelude to "Adonis" (Georges). 4. Sarabande (Gounod). 5. Rhapsody on Airs of the Pays d'Oc (Lacombe). 6. Songs of the Second Empire. 7. "La Petite Mariée"—Overture (Lecocq). 8. Aveu dans le soir (Mouton). 9. Romance (Chapelier). 10. Chanson javanaise (Rubinstein). 11. Danse macabre (Saint-Saëns). 12. Czardas (Michiels). News in the interval.

1.50 p.m.—Exchange Quotations. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Concert. 4.45 p.m.—Market Prices. 7.0 p.m.—Agricultural Report. 8.0 p.m.—Exchange and News. 8.30 p.m.—Concert. 1. "Gwendoline"—Overture (Chabrier). 2. L'Oiseau de feu (Stravinsky). 3. Third Act of the "Walkyrie" (Wagner). News in the interval.

POSEN

Polskie Radio. WL. 344 m. (872 kc); 1.5 kw. Transmits at intervals from 12.0 noon. 6.35 p.m.—Agricultural Talk. 7.0 p.m.—Programme from Warsaw. 7.30 p.m.—Concert. 1. "William Tell"—Overture (Rossini). 2. Tenor Solos: (a) "A Masked Ball"—Aria (Verdi), (b) "La Bohème"—Aria (Puccini). 3. Sonata for 'Cello (Locatelli). 4. Soprano Solos: (a) "La Bohème"—Aria, (b) Serenade (Tosti). 5. Two Waltzes for Orchestra (Waldteufel). 6. "Eugen Onegin"—Tenor Song (Tchaikovsky). 7. Soprano Solos: (a) Song (Moniuszko), (b) Quand je meurs (Niewiadomski). 8. 'Cello Solos: (a) Serenade (Herbert), (b) Selection (Hubay). 9. (a) Serenade (Moszkovsky), (b) Hungarian Dances (Brahms), for Orchestra. 9.0 p.m.—Time and Variety Items. 9.20 p.m.—Weather and News. 9.40 p.m.—Dancing Lesson. 10.0 p.m.—Dance Music, relayed from the "Palais Royal." 11.0 p.m. (approx.)—Close Down.

PRAGUE

Strasnice. WL. 348.9 m. (880 kc); 5 kw. Transmits at intervals from 9.30 a.m. 4.30 p.m.—German Transmission. 4.40 p.m.—Agricultural Report. 4.50 p.m.—Talk for Labourers. 5.25 p.m.—"The Brandenburgers in Bohemia" (Smetana), relayed from the National Theatre, Prague. 9.0 p.m.—Time, News and Orchestral Selections.

ROME

Unione Radiofonica Italiana (IRO). WL. 448.4 m. (669 kc); 3 kw. Transmits at intervals from 11.30 a.m. 4.30 p.m.—Vocal and Instrumental Concert.

7.0 p.m.—German Lesson. 7.30 p.m.—Time, News, Exchange and Weather. 7.45 p.m.—Astronomy Talk, "The Earth and the Moon." 8.0 p.m. (approx.)—Relay from a 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.—3.30 a.m. (Thursday). 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)—Phoebe Crosby (Soprano). 12.30 a.m.—"The Soconyans" from New York. 1.0 a.m.—The Remington Rand Band from Ilion, N.Y. 1.30 a.m.—"Radio Rollickers." 2.0 a.m.—Time. 2.2 a.m.—"Ipana Troubadours," from New York. 2.30 a.m.—Goodrich Silvertown Cord Quartet and Orchestra. 3.30 a.m.—News from "Time." 4.0 a.m. (approx.)—Close Down.

STOCKHOLM

Radio-tjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1,380 m.; (217 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. 5.0 p.m.—Children's Corner. 5.30 p.m.—Light Music. 5.45 p.m.—Topical Talk. 6.5 p.m.—Light Music. 6.20 p.m.—German Lesson. 6.50 p.m.—Symphony Concert with introductory talk, from Göteborg: 1. Symphonic Poem (Smetana). 2. Concerto for 'Cello and Orchestra (Dvorak). 8.15 p.m.—News and Weather. 8.40 p.m.—Drama—R.U.R. (Capek) from Göteborg.

STUTT GART

Süddeutscher Rundfunk. WL. 380.7 m. (788 kc); 4 kw. Transmits at intervals from 11.30 a.m.; 3.15 p.m.—Spring Concert. 1. The

Spring must come—March (Siede). 2. The children of Spring—Waltz (Waldteufel). 3. Spring Sonata (Beethoven). 4. Reminiscences of Bach (Urbach). 5. Spring Suite (Nevin). 6. Spring Sonata (Beethoven). 7. Oh, Spring, how lovely art thou—Waltz (Lincke). 8. The Entry of Spring—March (Blon). 5.0 p.m.—Time, Weather and Agricultural Notes. 5.15 p.m.—Talk, "A Year in Japan." 5.45 p.m.—Talk from Karlsruhe. 6.15 p.m.—English Lesson. 6.45 p.m.—Time and Weather. 7.0 p.m.—"John Gabriel Borkman"—Play (Ibsen). 9.0 p.m.—Dance Music. 9.50 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.—Orchestral Concert. 8.30 p.m.—Concert. 1. Impressions d'Italie (Charpentier). 2. Peer Gynt (Grieg). 9.0 p.m.—"Lakmé"—Opera Selection (Delibes).

VIENNA

Radio-Wien. WL. 576 and 517.2 m. (520 and 580 kc); 0.75 and 3 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. 6.0 p.m.—Italian Lesson. 6.30 p.m.—Health Talk. 7.0 p.m.—Programme Notes. 7.5 p.m.—English Literature Lesson. 7.30 p.m.—Fritz Delius Programme, followed by a Comedy by Mérimée and Concert.

WARSAW

Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw. Transmits at intervals from 11.0 a.m. 5.15 p.m.—Orchestral Concert. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.35 p.m.—Talk, "Along the Polish Rivers." 7.0 p.m.—Talk. 7.30 p.m.—Concert. In the interval: News in French. 9.0 p.m.—Time, News and Weather. 9.30 p.m. (approx.)—Close Down.

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# PROGRAMMES FOR THURSDAY (March 22)

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

**BARCELONA**  
Radio-Barcelona (EAJ1). WL. 344.8 m. (870 kc.); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Quintet Selections. 6.30 p.m.—Children's Programme. 6.40 p.m.—Reading, "The Streets of Barcelona."

**BERGEN**  
Kringkastingselskap. WL. 369.9 m. (811 kc.); 1.5 kw. Transmits at intervals from 10.15 a.m. 12.0 noon.—Ibsen Memorials in Bergen. 5.30 p.m.—Programme for Boys. 6.30 p.m.—"The Old Theatre": (a) Prologue, (b) Recitation, (c) "The Feast of Solhoug" (Ibsen), followed by Time, Weather and News. 11.0 p.m. (approx.)—Close Down.

**BERLIN**  
Königs wusterhausen. WL. 1,250 m. (240 kc.); 35 kw. Transmits at intervals from 1 p.m. 4.0 p.m.—Programme from Voxhaus. 5.0 p.m.—Talk, "World Politics." 5.30 p.m.—Spanish Lesson. 5.55 p.m.—Talks. 7.10 p.m.—Programme from Voxhaus.

**BERLIN**  
Voxhaus 484.6 m. (610 kc.); 4 kw. Transmits at intervals from 9.10 a.m. 4.0 p.m.—Concert: 1. Sonata for Flute and Piano, Op. 78 (Juon). 2. Two Intermezzi, Op. 6 (Rögeley). 3. Sonata, Op. 61 (Blumer). 5.15 p.m.—Talk in English, "The English Hospital System." 5.45 p.m.—Talk, "India, the Land of the Buddha." 6.10 p.m.—Legal Talk. 6.40 p.m.—Talk on "Careers." 7.10 p.m.—"Gasparone"—Oprettia (Millöcker). 9.15 p.m.—Time, News and Sports Notes. 9.30 p.m.—Dancing Lesson, followed by Dance Music. 11.30 p.m. (approx.)—Close Down.

**BERNE**  
Radio-Berne. WL. 411 m. (730 kc.); 1.5 kw. Transmits at intervals from 12 (noon). 6.30 p.m.—Time and Weather. 6.35 p.m.—Music Review. 7.0 p.m.—Concert of Duets, Arias and Orchestral Selections. News and Weather in the Interval. 9.30 p.m. (approx.)—Close Down.

**BILBAO**  
Union Radio (EAJ9). WL. 400 m. (750 kc.); 0.5 kw. 2.0 p.m.—Sextet Selections. 1. Rosarillo—pasodoble (Urmeneta). 2. Jubilee Overture (Weber). 3. Arabesque (Montagne). 4. Bien agarrao (Urmeneta). 5. Los borachos—Selection (Gimenez). 6. Serenata ideal (Cepeda). 7. Foxtrot (Kern). 9.4 p.m.—Time, Calendar, Shipping Intelligence, Weather and Exchange Quotations. 10.0 p.m.—Programme relayed from Madrid (EAJ7). 11.30 p.m. (approx.)—Close Down.

**BREMEN**  
Norag. WL. 252.1 m. (1,190 kc.); 0.7 kw. 7.0 p.m.—Concert. 1. Meerestille und Glückliche Fahrt (Mendelssohn). 2. Songs: (a) O Sonne, du ziehest wohl über die Berge, (b) Vom Berge, (c) Ich weiss nicht warum, (d) Folk Song (Alexander v. Fielitz). 3. Selection from "Das Wunder" (Humperdinck). 4. Songs: (a) Abendseg'n, (b) Mir träumte von einem Königskind (R. Trunk), (c) Autumn (Sinding), (d) Two Brown Eyes (Grieg). 5. Sonata in A major for Flute and Piano (Hugo Rüter). 6. Songs: (a) Als ich dich kaum gesehen, (b) Ueber die stillen Strassen (Hugo Kaun), (c) Vesper (Breitenbach), (d) Die Sonne scheint nicht mehr so schön (Brahms). 7. Sonata for Violin and Piano (Breitenbach). Followed by relay of foreign stations.

**BRESLAU**  
Schlesische Funkstunde. WL. 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. 6.5 p.m.—Shorthand Lesson. 6.55 p.m.—Reading from the works of Goethe. 7.15 p.m.—Concert: 1. "Orpheus in the Underworld"—Overture (Offenbach). 2. Trios: (a) Sonata in C Minor (Sor), (b) Old French Gavotte, (c) Minuet in G Major. 3. Tenor solos. 4. Ballet Music from "Rosamunde" (Schubert). 5. Seville (Albeniz). 6. Tenor Solos. 7. (a) New York—One-step (Padilla), (b) Symphonie Foxtrot. 8. Trios: (a) Thüringer Reigen (Alwe), (b) Fraembel mit Fugheita (Rocmer). 9. Tenor Solos. 10. In der Schweiz und in Tirol (Profes), followed by News and "Wireless Letter Box." 9.30 p.m.—Dance Music from Berlin. 10.0 p.m.—Dance Music. 11.0 p.m. (approx.)—Close Down.

**BRUNN**  
Komarov. WL. 441 m. (680 kc.); 3 kw. Transmits at intervals from 11.15 a.m. 5.40 p.m.—Talk. 6.0 p.m.—Shorthand Talk. 6.5 p.m.—Talk. 6.30 p.m.—Programme from Prague.

**BRUSSELS**  
Radio-Belgique. WL. 508.5 m. (590 kc.); 1.5 kw. 5.0 p.m.—Children's Corner. 6.0 p.m.—Flemish Lesson. 7.45 p.m.—Radio-Chronique. 8.15 p.m.—Concert from Liège. 1. "Hans the Flute Player"—Selection (Ganne). 2. Viola Solos. 3. Fontainebleau Suite (Sumkay). 4. Flute Solos. 5. Topical Talk (in the Interval). 6. "La Bohème"—Selection (Puccini). 7. Viola Solos. 8. La cocarde de Mimi-Pinson (Goublier). 9.0 p.m.—Mozart Gala Concert under the auspices of the Théâtre de la Monnaie. 10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

**BUDAPEST**  
Magyar Radio Ujsag. WL. 555.6 m. (540 kc.); 3 kw. Transmits at intervals from 8.30 a.m. 5.15 p.m.—Talk. 6.0 p.m.—Instrumental and Vocal Music. 7.0 p.m.—English Lesson. 7.40 p.m.—Trio Concert. 9.0 p.m.—Dance Music from the Ritz Hotel.

**COLOGNE**  
Westdeutscher Rundfunk. WL. 283 m. (1,060 kc.); 4 kw. Transmits at intervals from 9.30 a.m. 12.5 p.m.—Orchestral Concert: 1. March (Esslinger). 2. Blumen-Walzer (Tchaikovsky). 3. "Sakuntala"—Overture (Goldmark). 4. "I Pagliacci"—Prologue (Leoncavallo). 5. Flute Concerto (Lange). 6. Prelude in E Minor (Chopin). 7. Dance Song Potpourri (Spolianski). 8. Navaho—Intermezzo (Astayne). 3.0 p.m.—Talk, "Joy in Architecture." 3.30 p.m.—Selection from "Musiker Brandeau." 4.0 p.m.—Talk on "Russian Poetry." 4.30 p.m.—Topical Talk. 4.40 p.m.—Talk, "What is a Patent?" 5.0—6.30 p.m.—See Langenberg. 6.30 p.m.—Natural History Talk. 6.50 p.m.—Talk on Following Opera. 7.0 p.m.—"Cosi Fan Tutti"—Opera (Mozart). Relayed from Bochum-Duisberg. Followed by News, Sports Notes and Concert from the Café Handelshof, Essen. 11.0 p.m. (approx.)—Close Down.

**COPENHAGEN**  
Copenhagen Radio. WL. 337 m. (890 kc.); 1 kw. Programme relayed by Kalundborg on 1,153.8 m. (260 kc.). Transmits at intervals from 6.30 a.m. 5.0 p.m.—Programme for boys. 6.0 p.m.—News, Exchange and Time. 6.30 p.m.—Talk, "The Danish Textile Industry." 7.0 p.m.—Talk, "Hillerod." 8.0 p.m.—News. 8.15 p.m.—Soloist Concert: 1. Solfeggetto (Bach). 2. Pastorale and Caprice (Scarlati). 3. Fantasia in D minor (Mozart). 4. Invitation to the Dance (Weber). 5. Gavotte (Gluck). 6. Rigaudon (Raff).

8.45 p.m.—Symphony Concert from the works of Haydn: 1. "L'isola disabitata"—Overture. 2. Concerto in F major, No. 6. 3. Symphony in D major, No. 96. 10.0 p.m.—Dance Music from the Palace Hotel. 11.0 p.m.—Chimes. 11.30 p.m. (approx.)—Close Down.

**CORK**  
Cork Broadcasting Station (6CK). WL. 400 m. (750 kc.); 1.5 kw. 2.30 p.m.—Weather, Stock Market Report and Gramophone Selections. 6.15 p.m.—Programme from Dublin.

**CRACOW**  
Polskie Radio. WL. 566 m. (530 kc.); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.30 p.m.—English Lesson. 7.0 p.m.—Programme from Warsaw. 9.30 p.m.—Concert from a Restaurant. 10.30 p.m. (approx.)—Close Down.

**DUBLIN**  
Dublin Broadcasting Station (2RN). WL. 319.1 m. (940 kc.); 1.5 kw. Transmits at intervals from 1.30 p.m. 6.15 p.m.—Children's Corner. 7.0 p.m.—Gramophone Records. 7.15 p.m.—News. 7.30 p.m.—French Lesson by Mlle. Giudicelli. 7.45 p.m.—History Talk by S. MacCathmaoil. 8.0 p.m.—The Station Orchestra. 8.20 p.m.—Instrumental and Vocal Varieties by Hilda and Queenie Shea. 8.30 p.m.—"Modern Italian Opera," by the Station Orchestra. 8.45 p.m.—Hilda and Queenie Shea (continued). 9.0 p.m.—Talk, "Irish Place Names." 9.15 p.m.—The Havana Dance Band. 10.30 p.m.—News, Weather and Close Down.

**FRANKFURT-AM-MAIN**  
Südwestdeutscher Rundfunk. WL. 428.6 m. (700 kc.); 4 kw. Programme relayed by Cassel on 252.1 m. (1,190 kc.). Transmits at intervals from 12.30 p.m. 3.30 p.m.—Concert of new popular music. 4.45 p.m.—Reading. 5.15 p.m.—Wireless Notes and other Announcements. 5.30 p.m.—Talk, "House and Garden," from Cassel. 5.45 p.m.—Talk, "Traffic and public health." 6.15 p.m.—Talk, "Marriage and its Origin," from a Catholic point of view. 6.45 p.m.—Programme arranged by the Frankfurter Zeitung. 7.15 p.m.—Programme from Stuttgart. 9.30 p.m.—Programme from Voxhaus. 11.30 p.m. (approx.)—Close Down.

**GENEVA**  
Radio Geneva. WL. 760 m. (395 kc.); 0.5 kw. 5.0 p.m.—Gramophone Selections and News. 7.15 p.m.—News. 7.17 p.m.—Talk, "Round the World." 7.30 p.m.—Esperanto Talk. 7.40 p.m.—Concert. 1. Three Melodies (Bernard): (a) Ecrit sur les feuilles mortes, (b) Ma vie est la feuille qui tombe, (c) Innocence. 2. Duets: (a) Stabat Mater (Pergoles), (b) Amie consolatrice (Mendelssohn), (c) Rio d'Ys (Lalo). 3. Songs: (a) Air de Muszio (Handel), (b) L'Amie errante (Aubert), (c) Réve crépusculaire (R. Strauss). 8.45 p.m.—News. 9.0 p.m. (approx.)—Close Down.

**HAMBURG**  
Norag (ha, in Morse). WL. 396 m. (757 kc.); 4 kw. Programme relayed by Bremen on 272.7 m. (1,100 kc.); Hanover, 297 m. (1,009 kc.); and Kiel, 256 m. (1,172 kc.). Transmits at intervals from 5.55 a.m. 4.0 p.m. (Hamburg and Kiel)—Concert from Café Wallhof. 5.0 p.m.—Orchestral Music. 6.0 p.m.—Talk, "Else Lasker-Schüler." 6.25 p.m.—Talk, "The obstinate child," from Bremen. 6.55 p.m.—Weather. 7.0 p.m.—Hamburg, Hanover and Kiel—Selections from works of Mecklenburg Humorists, from Schwirin.

9.15 p.m. (approx.)—News, followed by Concert from Café Wallhof (Hamburg and Kiel). 10.25 p.m.—Ice Report. 10.30 p.m.—(Hamburg, Bremen and Kiel)—Cabaret Concert. 11.30 p.m. (approx.)—Close Down.

**HILVERSUM**  
Algemeene Vereeniging Radio Omroep. WL. 1,069 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.—Talk for Women. 5.10 p.m.—Concert. 1. "Titus"—Overture (Mozart). 2. Danza piemontese (Sinigaglia). 3. Waltz from "Eugen Onegin" (Tchaikovsky). 4. Baritone Solo. 5. Selection from "Cavalleria Rusticana" (Mascagni). 6. Baritone Solos. 7. Cavatina for Cello (Saint-Saëns). 8. (a) Vous êtes marquis (Gillet), (b) Entr'acte gavotte (Gillet). 9. Valse fantastique (Heinecke). 10. Selection from "Paganini" (Lehár). 11. El Capitan—March (Souza). 6.55 p.m.—English Lesson. 7.25 p.m.—Police News. 7.55 p.m.—Symphony Concert from the Amsterdam Concert Hall. 10.10 p.m.—Weather and News. 10.20 p.m.—Dancing Instruction. 10.55 p.m. (approx.)—Close Down.

**HUIZEN**  
WL. 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. 5.40 p.m.—Education Talk. 6.40 p.m.—Book-keeping Lesson. 7.10 p.m.—Lesson. 7.40 p.m.—Concert of Military Music from Den Helder. 10.10 p.m.—News.

**KATTOWITZ**  
Polskie-Radio. WL. 422 m. (710 kc.); 10 kw. Transmits at intervals from 11.30 a.m. 7.0 p.m.—Programme from Warsaw. 7.30 p.m.—Concert. 9.0 p.m.—Time and News. 9.30 p.m.—Concert from the Café Atlantic.

**KÖNIGSBERG**  
Ostmarken Rundfunk. WL. 330.3 m. (908 kc.); 1 kw. Relayed by Danzig, on 272.7 m. (1,100 kc.). Transmits at intervals from 10.0 a.m. 6.30 p.m.—Talk, "Handwork." 7.0 p.m.—Weather. 7.10 p.m.—Verse Recital, and Zither Music (Königsberg only). 7.10 p.m.—"Auf der Brücke"—One-Act Play (Salten) (Danzig only). 8.10 p.m.—Orchestral and Choral Concert. 1. Overture in D major (Handel). 2. Loooreisung der Musik, Op. 21 (Suter). 3. Serenade Op. 16 (Brahms). 4. (a) Die Stille Nacht (Knab), (b) Three Madrigals for Choir with Clarinet Accompaniment (Lang). 5. Ein Maskenzug—Scherzo, Op. 7 (Lendvai). 6. Three Chorales, Op. 17 (Lendvai). Weather, News and Sports Notes. Silent Night.

**KOVNO**  
Radio Kaunas. WL. 2,000 m. (150 kc.); 15 kw. 4.0 p.m.—Lithuanian Lesson. 5.0 p.m.—Talk in French. 6.30 p.m.—Talk on the Lithuanian Poet "Vidunas." 7.0 p.m.—"Vetra"—Tragedy (Vidunas). 8.0 p.m.—Concert of Folk Music.

**LANGENBERG**  
Westdeutscher Rundfunk. WL. 470 m. (638 kc.); 25 kw. Programme also for Aix-la-Chapelle, 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—5 p.m.—Programme from Cologne. 5.0 p.m.—Concert from Düsseldorf. 6.10 p.m.—Spanish Lesson from Münster. 6.30—7 p.m.—Programme from Cologne. 7.0 p.m.—"Cosi fan Tutti"—Opera (Mozart). Relayed from Bochum-Duisberg, followed by Programme from Cologne and Concert from the Café Handelshof, Essen. 11.0 p.m. (approx.)—Close Down.

**LAUSANNE**  
Société Romande de Radiophonie (HBZ). WL. 680 m. (441 kc.); 0.6 kw. Transmits at intervals from 6.45 a.m. 7.0 p.m.—Weather. 7.2 p.m.—Orchestral Concert. 1. "Ruy Blas"—Overture (Mendelssohn). 2. (a) Meditation, (b) Ave Maria (Gounod). 3. La Fête chez Thérèse—Second Suite (Hahn). 4. Scherzo from the Third Symphony (Beethoven). 5. "Le Roi d'Ys"—Overture (Lalo). 7.50 p.m.—Literary Review. 8.0 p.m.—Orchestral Concert from the Old India Restaurant. 1. Marche florentine (Fucik). 2. Pomone—Waltz (Waldteufel). 3. Selection from "The Girl of the Golden West" (Puccini). 4. Musette—Violin Solo (Dal Monte). 5. Potpourri of Swiss Arias (Kuhn).

**LEIPZIG**  
Mitteldeutscher Rundfunk. WL. 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. 5.30 p.m.—Spanish Lesson from Königswusterhausen. 6.0 p.m.—Talk "German Phonetics." 6.30 p.m.—Talk, "The Industry of Middle Germany." 7.0 p.m.—Weather and Time. 7.15 p.m.—Concert. 1. Orchestral Selection. 2. (a) Wer kauft Liebesgötter: (b) Die Spröde und die Bekehrte, (c) Verschiedene Empfindungen an einem Platze (Goethe). 3. Orchestral Selections. 4. (a) Kriegserklärung, (b) Liebhaber in alten Gestalten, (c) Antworten bei einem Gesellschaftlichen Fragespiel (Goethe). 5. Orchestral Selections. 6. (a) Gefunden, (b) Stirbt der Fuchs, so gilt der Balg, (c) Heidenröschen (Goethe). 7. Orchestral Selections. 9.0 p.m.—Miscellaneous. 9.5 p.m.—News. 9.30 p.m.—Silent Night.

**LILLE**  
(PTT). WL. 286.8 m. (1046 kc.); 0.5 kw. Transmits at intervals from 12.30 p.m. 7.10 p.m.—Gardening Talk. 7.30 p.m.—Concert. 8.30 p.m.—Station Orchestra, News.

**MADRID**  
Union Radio (EAJ7). WL. 375 m. (800 kc.); 1.5 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Orchestral Selections. 1. La Mujer ideal—Selection (Lehár). 2. Snegurotchka"—Selection (Rimsky-Korsakoff). 3. Talk, "The History of Art." 8.0 p.m.—Dance Music relayed from the "Alcazar." 9.30 p.m.—French Lesson. 10.0 p.m.—Programme relayed by San Sebastián (EAJ8), 335 m. (895 kc.). Time and Exchange Quotations. 10.15 p.m. (approx.)—Programme relayed from Barcelona (EAJ1). 12.20 a.m. (Friday)—News. 12.30 a.m. (approx.)—Close Down.

**MILAN**  
Unione Radiofonica Italiana (IMI). WL. 526.3 m. (570 kc.); 7 kw. Transmits at intervals from 11.15 a.m. 7.0 p.m.—English Lesson. 7.30 p.m.—Wireless Notes. 7.50 p.m.—Time. 7.52 p.m.—"I Piratani"—Opera (Bellini). In the Interval, at 8.30 p.m. (approx.)—Sports News. 9.55 p.m.—News.

**MUNICH**  
Deutsche Stunde in Bayern. WL. 535.7 m. (560 kc.); 4 kw. Programme relayed by Nürnberg on 303 m. (990 kc.) and Augsburg, 566 m. (530 kc.). Transmits at intervals from 11.45 a.m. 6.15 p.m.—Talks on "Dürer." 7.0 p.m.—Chamber Music. Quintet Op. 144 (Schubert). 7.50 p.m.—Tenor Songs (Schubert). 8.40 p.m.—News. 9.0 p.m.—Silent Night.

**NAPLES**  
Unione Radiofonica Italiana (INA). WL. 333.3 m. (900 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 Light Music. 1. "Si"—Selection (Mascagni). 2. Ronde d'amour (Van Westering). 11.0 p.m. (approx.)—Close Down.

CONTINUED ON NEXT PAGE.

Programmes for Thursday.—(Cont.)

hout). 3. Danse coquette (Barbieri). 4. Tarantelle (De Nardis). 5. Le due gemelle (Ponchielli). 7.30 p.m.—Relay of an Operetta, from the "Bellini" Theatre. 9.55 p.m.—Calendar and Programme Announcements. 10.0 p.m. (approx.)—Close Down.

OSLO Kringkastingselskapet. WL. 461.5 m. (650 kc.); 1.5 kw. Programme relayed by Hamar on 566 m. (530 kc.); Porsgrund, 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. 5.55 p.m.—Shorthand Lesson. 6.15 p.m.—News. 6.30 p.m.—German Lesson. 7.0 p.m.—Time. 7.2 p.m.—Song Recital. 7.30 p.m.—Recitations. 8.0 p.m.—Variety Concert. 9.0 p.m.—News and Weather. 9.15 p.m.—Topical Talk. 9.30 p.m. (approx.)—Close Down.

PARIS Ecole Supérieure (FPTT). WL. 458 m. (655 kc.); 0.5 kw. Transmits at intervals from 8 a.m. 6.0 p.m.—Radio-Journal de France. 8.0 p.m.—Esperanto Lesson. 8.30 p.m.—Literary Talk. 8.45 p.m.—Talk on "Mexico." 9.0 p.m.—Concert from the Works of Costeley, Gluck, Liszt, Berlioz, Beethoven.

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 "French Ballads," "Books to Read," "Wireless Novelties," etc. 7.10 p.m.—Weather. 7.30 p.m.—Concert: 1. Tenor Catholic Songs: (a) Aria from "The Passion" (Handel); (b) O dulcis Amor (Bernier); (c) O Mysterium (Clerambault); (d) Our Father (Büsser). 2. Protestant Songs: (a) Prayer; (b) Sacrifice; (c) Temptation; (d) Faith (Haudebert). 3. Brass Band, M. 11.30 p.m.

hatine. At 7.56 p.m. Time Signal (on 32 m.; 9,375 kc.). 8.30 p.m.—Educational Programme Talks on "Applied Art," "Modern Book-binding," etc. 10.26 p.m.—Time Signal.

PARIS Petit Parisien. WL. 340.9 m. (880 kc.); 0.5 kw. 9.0 p.m.—Concert: 1. "The Magic Flute"—Overture (Mozart). 2. Bourée for violin (Bach). 3. Finale from the Sonata in C minor, for Violin and Piano (Grieg). 4. Sberzo from the Third Symphony (Beethoven). 5. Havanaise for Violin and Orchestra (Saint-Saëns). 6. Adagio from the Quartet (Tchaikovsky). 7. Danse espagnole No. 9 (Sarasate). 8. Adagio from Concerto in E (Bach). 9. Finale from Shéhérazade (Rimsky-Korsakoff).

PARIS Radio-Paris (CFR). WL. 1,750 m. (171 kc.); 3 kw. Transmits at intervals from 7.30 a.m. 12.30 noon.—Protestant Address. 12.30 p.m.—Concert: 1. "Manfred"—Overture (Schumann). 2. Nutcracker Suite (Tchaikovsky). 3. La Chaise à Porteurs (Chaminade). 4. Prelude to "The Deluge" (Saint-Saëns). 5. Pianoforte Solos. 6. En Bretagne (Bâton). 7. Menuet blanc (Filipacci). 8. La Navarraise (Massenet). 9. Lohengrin (Wagner).

PARIS 1.0 p.m.—Children's Concert. News in the Interval. 1.50 p.m.—Exchange Quotations. 3.30 p.m.—Exchange Quotations. 3.45 p.m.—Classical Concert. 4.45 p.m.—Market Prices. 7.0 p.m.—Agricultural Report. 7.45 p.m.—Book-keeping Lesson. 8.0 p.m.—Exchange and News. 8.10 p.m. (approx.)—Esperanto Talk. 8.30 p.m.—Concert: 1. Selection from "Quatre-Vingt Treize" (Hugo). 2. The Tenth Quartet (Beethoven). News in the Interval.

POSEN Polskie Radio. WL. 344 m. (872 kc.); 1.5 kw. Transmits at intervals from 11.5 a.m. 6.10 p.m.—English Lesson. 6.35 p.m.—Talk on "The History of the Press and Journalism."

7.0 p.m.—Programme from Warsaw. 7.30 p.m.—Instrumental and Vocal Concert. 1. Two Fantasias (Bach). 2. Two Chorales for Organ (Bach). 3. Sacred Songs (Roessler). 4. Selections (Perosi). (a) Trios, (b) Prelude. 5. Sacred Songs (Roessler). 6. Three Chorales (Surzynski). 9.0 p.m.—Time Signal and Variety Items. 9.20 p.m.—Finance Notes, Weather, and News. 9.40 p.m. (approx.)—Close Down.

PRAGUE Strasnice. WL. 348.9 m. (860 kc.); 5 kw. Transmits at intervals from 9.30 a.m. 5.15 p.m.—Agricultural Report. 5.25 p.m.—Talk for Labourers. 5.35 p.m.—Talk. 5.45 p.m.—French Lesson. 6.30 p.m.—Concert: 1. Iphigenia in Aulis (Gluck). 2. Concerto in E flat major (Mozart). 3. Elegy (Kornauth). 4. Fantaisie Scherzo (Suk). 5. Fontana di Roma (Respighi). 8.45 p.m.—Talk. 9.0 p.m.—Time and News.

ROME Unione Radiofonica Italiana (IRO). WL. 448.4 m. (669 kc.); 3 kw. Transmits at intervals from 11.30 a.m. 7.0 p.m.—French Lesson. 7.30 p.m.—Time, News, Exchange and Weather. 7.45 p.m.—"The Count of Luxemburg"—Opera (Lehár). In the Interval: Topical Review. 9.40 p.m. (approx.)—News. 9.50 p.m.—Dance Music. 10.15 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 8.0—9.0 p.m. and by 2XAF on 31.4 m. (9,554 kc.) from 11.0 p.m. Transmits at intervals from 11.45 a.m. 11.0 p.m.—Exchange and News. 11.30 p.m.—Concert from the Hotel Kenmore, Albany, N.Y. 12.30 a.m. (Friday)—Talk. 12.45 a.m.—Studio Programme. 1.0 a.m.—3.0 a.m. (Friday)—Programme from New York. 1.0 a.m.—Dodge Programme. 1.30 a.m.—Hoover Sentinels. 2.0 a.m.—Time and "Clitquot Club Eskimos" from New York.

3.0 a.m.—Carborundum Band 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.

STOCKHOLM Radiotjänst (SASA). WL. 453.8 m. (661 kc.); 1.5 kw. Programme relayed by Motala, on 1,380 m. (217 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. 5.0 p.m.—Children's Corner. 5.30 p.m.—Light Music. 6.0 p.m.—Agricultural Talk. 6.15 p.m.—Light Music. 6.25 p.m.—Talk, "The Social System of the Middle Ages." 6.45 p.m.—Popular Concert with English Music by the Orchestra and Trinity Madrigal Club. 8.15 p.m.—News and Weather. 8.40 p.m.—Topical Talk. 9.0 p.m.—Relay of foreign stations. 11.0 p.m. (approx.)—Close Down.

STUTTGART Süddeutscher Rundfunk. WL. 380.7 m. (788 kc.); 4 kw. Transmits at intervals from 11.30 a.m. 3.15 p.m.—Concert: 1. Sonnenadler—March (Blankenburg). 2. An dich—Waltz (Waldteufel). 3. Rosenlieder (Eulenburg). 4. "King Stephen"—Overture (Beethoven). 5. Auberiana—Fantasia (Ruffin). 6. Airs from "The Geisha" (Jones). 7. Waldeszauber (Vollstedt). 8. Soldatenblut (Blon). 5.0 p.m.—Time and Weather. 5.15 p.m.—Talk, "Culture and Marriage" from Freiburg, 575.8 m. (521 kc.). 5.45 p.m.—Medical Talk. 6.15 p.m.—Chess Lesson. 6.45 p.m.—Time and Weather. 7.15 p.m.—"Barbe Bleue"—Operetta (Offenbach). News. 9.30 p.m.—Programme from Voxhaus. 11.15 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.—Orchestral Concert. 8.30 p.m.—Opera Relay from the Capitol Theatre.

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. 5.45 p.m.—Esperanto Talk. 6.0 p.m.—French Lesson. 6.30 p.m.—Concert: 1. "The Magic Harp"—Overture (Schubert). 2. Choral Hymn (Schubert). 3. Choral Selection, "Der Strom" (Stöhr). 4. "Die Wettertanne"—for Choir and Orchestra (Huber). 5. "Ralf Ringelhaar"—Ballad for Choir Soloists and Orchestra (Führich).

WARSAW Polskie Radio. WL. 1,111.1 m. (270 kc.); 10 kw. Transmits at intervals from 11.0 a.m. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.35 p.m.—English Lesson. 7.0 p.m.—Talk. 7.30 p.m.—Concert from Wilno. In the Interval: News in French. 9.0 p.m.—Time, News and Weather. 9.30 p.m.—Dance Music. 10.30 p.m. (approx.)—Close Down.

WILNO Radio Pologne. WL. 435 m. (689 kc.); 0.5 kw. Transmits at intervals from 3.25 p.m. 7.30 p.m.—Concert relayed from Warsaw. 9.0 p.m.—News. 9.30 p.m.—Dance Music. 10.30 p.m. (approx.)—Close Down.

ZAGREB Radioklub-Zagreb. WL. 310.5 m. (966 kc.); 0.35 kw. Transmits at intervals from 12.15 p.m. 6.0 p.m.—Talk: "Cosmetics." 6.30 p.m.—Programme from Prague.

ZURICH Radio-Genossenschaft. WL. 588.2 m. (510 kc.); 2 kw. Transmits at intervals from 11.30 a.m. 6.32 p.m.—Talk: "The Power of the Incalculable." 7.0 p.m.—Concert of Slavonic and Hungarian Dances. 7.30 p.m.—A Play. 8.10 p.m.—Concert: "The Dance in the Life of the People." 9.0 p.m.—Weather, News and Close Down.

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# PROGRAMMES FOR FRIDAY (March 23)

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

## BARCELONA

Radio-Barcelona (EAJ). WL. 344.8 m. (870 kc); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Fashion Talk. 6.30 p.m.—Quintet Selections. 8.30 p.m.—Music Lesson. 9.0 p.m.—Chimes and Weather. 9.5 p.m.—Exchange and News. 9.10 p.m.—Quintet Selections. 1. Hungarian Comedy Overture (Keler-Bel). 2. Dans les nouages.—Waltz (Waldteufel). 3. Asunción.—American Dance (Coté). 4. L'appel du matin (Lovreglio). 5. Minuet from "La Viejeica" (Caballero). 6. Hungarian Dance No. 6 (Brahms). 9.45 p.m.—Talk on "Charity." 10.0 p.m.—Exchange Closing Prices. 10.5 p.m.—Fourth Lenten Concert by the "Sant Miguel" Choral School. 1. Jesu medela vulnerum (Moya). 2. Un divino vull cantar. 3. At the Gate of Bethlehem. 4. Stabat Mater (Tebaldini). 11.0 p.m.—Close Down.

## BERGEN

Kringkastingselskap. WL. 368.9 m. (811 kc); 1.5 kw. Transmits at intervals from 10.15 a.m. 6.30 p.m.—"The National Play": (a) Prologue, (b) Three Acts of Peer Gynt, followed by Weather, News and Time, and Dance Music from the Hotel Norge. 11.0 p.m. (approx.)—Close Down.

## BERLIN

Königswusterhausen. WL. 1,250 m. (240 kc); 35 kw. Transmits at intervals from 1.30 p.m. 4.0 p.m.—Programme from Leipzig. 5.0 p.m.—Talk. 5.30 p.m.—English Lesson. 5.55 p.m.—Talk. 6.20 p.m.—Talk for Physicians. 7.0 p.m.—Programme from Frankfurt. 9.0 p.m.—Programme from Voxhaus.

## BERLIN

Voxhaus. WL. 484.6 m. (619 kc); 4 kw. Transmits at intervals from 9.10 a.m. 4.0 p.m.—Orchestral Concert. 5.30 p.m.—Italian Lesson. 6.0 p.m.—Legal Talk. 6.25 p.m.—Talk, "The Philosopher as Poet—The Poet as Philosopher." 6.55 p.m.—Talk, "Albrecht Alciabades von Brandenburg." 7.30 p.m.—Variety. 8.0 p.m.—Concert. 1. Talk. 2. Sonata for Horn and Trumpets (Poulenc). 3. Soprano Solos: (a) Song of Zion, (b) Separation (Milhaud), (c) A la Santé, (d) l'Adieu, (e) Une Danseuse, (f) Madame (Honegger). 4. Sonata for Violin and Piano (Ravel). 9.10 p.m.—"Wild West Programme." 1. (a) Am Lagerfeuer (Siede), (b) Alvandá (Steiner), (c) Indianer-spiele (Rehl). 2. Two American-Indian Dance Songs: (a) From the Land of the Sky-blue Waters, (b) When the Twilight Softly Creeps. 3. (a) Indian Love (Siede), (b) Aisha (Lindsay-Theimer). 4. Two American-Indian Songs: (a) I Hear from afar my Lover's Flute, (b) The Moon Sinks Slowly Down. 5. (a) In the Far West (Bantok), (b) Prairie Flowers (Dubouché), (c) Indian War Dance (Lumbye). 10.30 p.m. (approx.)—Close Down.

## BERNE

Radio-Berne. WL. 411 m. (730 kc); 1.5 kw. Transmits at intervals from 12 (noon). 6.30 p.m.—Time and Weather. 6.35 p.m.—Talk, "Rainer Maria Rilke," and Violin Solos. 7.30 p.m.—Concert of Songs and Orchestral Selections. News and Weather in the Interval. 9.30 p.m. (approx.)—Close Down.

## BILBAO

Union Radio (EAJ9). WL. 400 m. (750 kc); 0.5 kw. 7.30 p.m.—Time, Calendar, Shipping Intelligence, Weather and Exchange Quotations. 7.45 p.m.—Concert. 1. Sextet Selections: (a) Cielo Andaluz (Gáscón), (b) El niño Judío (Luna). 2. Soprano Songs: (a) "La Wally"—Romance (Catalani), (b) Ochi turchini—Romance (Denza), (c) Barcarolle (Schubert). 3. Sextet Selections: (a) El Asombro de Damá, Selection (Luna), (b) Every Little Maid (Bonnet). 4.

Tenor Songs: (a) El Caserio (Guridi), (b) Tu ventana (Alonso). 5. Violin Solos: (a) Largo (Handel), (b) Allegro (Handel), (c) Chanson Hindoue (Rimsky-Korsakoff). 6. Tenor Songs: (a) Espera—Andalusian Song (Tabuyo), (b) "Manon"—Aria (Massenet). 7. Sextet Selections: (a) Vaya postin (San Miguel), (b) Le Chant des feuilles (Gillet), (c) Fantomas (Laina).

## BRESLAU

Schlesische Funkstunde. WL. 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. 5.50 p.m.—Talk, "Inventions and Discoveries." 6.20 p.m.—Talk, "Prevention of Accidents as a Public Duty." 7.10 p.m.—Orchestral Concert. 1. Romantic Suite (Schreker). 2. Five Songs (Schreker): (a) Ich frag' nach Dir jedwede Morgenensonne, (b) Dies aber kann mein sehnen nimmer fassen, (c) Die Dunkelheit sinkt schwer wie Blei, (d) Sie sind so schön, die milden, sonnenreichen, (d) Einst gibt ein Tag mir alles Glück zu eigen. 3. "The Merry Wives of Windsor"—Overture (Nicolai). 4. Slavonic Dance (Dvorák). 5. Kaiser Walzer (Joh. Strauss). News. 9.15 p.m.—Esperanto Talk. 9.30 p.m.—Gramophone Records.

## BRUNN

Komarov. WL. 441 m. (680 kc); 3 kw. Transmits at intervals from 11.15 a.m. 5.25 p.m.—Agricultural Report. 6.40 p.m.—Talk. 6.0 p.m.—Slovakian Concert. 7.0 p.m.—English Lesson. 7.30 p.m.—Concert. 1. Hungarian Pusztas (Rek). 2. Tzigane Songs (Brahms). 3. Tzigane Melodies (Sarasate). 4. Tzigane Dance (Jeral). 5. Tzigane Songs (Dvorák). 6. Carriemen (Bizet). 7. "The Gipsy Baron" (Strauss). 9.0 p.m.—Popular Concert.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (590 kc); 1.5 kw. 5.0 p.m.—Trio Selections. 7.45 p.m.—Radio-Chronique. 8.15 p.m.—Concert from Liège. 1. Le Nouveau Seigneur du Village (Boieldieu). 2. Songs. 3. Rondo and Minuet (Haydn). 4. Violin Sonata in E minor (Verraccini-Salmon). 5. Scherzo from "A Midsummer Night's Dream" (Mendelssohn). 6. Piano-forte Solos: (a) Trois danses villageoises (Grétry), (b) Ballad Impromptu (Dupuis). 7. Schéhérazade (Rimsky-Korsakoff). 8. Songs. 9. First Movement from "The Unfinished Symphony" (Schubert). 10. Violin Solos: (a) Adagio from the Second Sonata (Leclair), (b) Minuet (Ravel). 11. Five o'clock (Ravel). 12. Walloon Rhapsody for Piano-forte (Debussy). 13. Violin Solos: (a) Andante (Faure), (b) Caprice viennois (Kreisler), (c) Romance andalous (Sarasate). 14. Fiers Wallons (Sumyak). Topical Talk in the Interval at 9 p.m. 10.15 p.m.—News. 10.30 p.m. (approx.)—Close Down.

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc); 3 kw. Transmits at intervals from 8.30 a.m. 6.45 p.m.—Concert. 1. King Stephen Overture (Beethoven). 2. Pastorale d'été (Honegger). 3. Songs. 4. Symphony in C major (Dittersdorf). 9.15 p.m.—Time, News, and Tzigane Music.

## COLOGNE

Westdeutscher Rundfunk. WL. 283 m. (1,060 kc); 4 kw. Transmits at intervals from 9.30 a.m. 12.5 p.m.—Orchestral Concert. 1.30 p.m.—Talk "How to gain and retain a good Figure." 3.10 p.m.—Theatre Talk. 3.40 p.m.—Children's Programme. Riddles, Songs and Reading. 4.25 p.m.—Topical Talk. 4.35 p.m.—Legal Talk. 5.0 p.m.—Chamber Music, with Soprano Solos. 6.15 p.m.—English Lesson. 6.45 p.m.—Talk, "Motor Accidents and their Legal Consequences." 7.15 p.m.—Programme from Dortmund (see Langenberg), followed by News, Sports Notes, Concert and Dance Music. 11.0 p.m. (approx.)—Close Down.

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (890 kc); 1 kw. Programme relayed by Kalundborg on 1,153.8 m. (260 kc). Transmits at intervals from 6.30 p.m. 4.0 p.m.—Children's Corner. 5.0 p.m.—Chimes. 5.30 p.m.—Talk, "The Present Position of our Textile Industry and its Future Prospects." 6.0 p.m.—News, Exchange and Time. 6.16 p.m.—Talk, "Marriage and Society," relayed from the University. 7.0 p.m.—Introductory Talk to the following transmission. 7.15 p.m.—Concert by the Copenhagen Boys' and Men's Choral Society. 8.15 p.m.—News. 8.30 p.m.—Reading. 9.0 p.m.—Orchestral Concert. 1. "Euryanthe"—Overture (Weber). 2. The Siegfried Idyll (Wagner). 3. First Movement of Violin Concerto in D major (Tchaikovsky). 4. The Swan of Tuonela—Finnish Legend (Sibelius). 5. Norwegian Artist's Carnival in Rome, Op. 14 (Svendsen). 10.0 p.m. (approx.)—Close Down.

## CORK

Cork Broadcasting Station (6CK). WL. 400 m. (750 kc); 1.5 kw. 2.30 p.m.—Weather, Stock Market Report, and Gramophone Selections. 6.15 p.m.—Programme from Dublin.

## CRACOW

Polskie Radio. WL. 566 m. (530 kc); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.5 p.m.—Agricultural Report. 6.15 p.m.—Variety. 6.35 p.m.—Economics Report. 7.0 p.m.—Fanfare from Notre Dame and Sports Notes. 7.15 p.m.—Programme from Warsaw.

## DUBLIN

Dublin Broadcasting Station (2RN). WL. 310.1 m. (940 kc); 1.5 kw. Transmits at intervals from 1.30 p.m. 6.15 p.m.—Children's Corner. 7.20 p.m.—News. 7.30 p.m.—Gardening Talk by G. O. Sherrard. 7.45 p.m.—Italian Lesson by Italia de Starkie. 8.0 p.m.—Choral Concert relayed from the "Ballaghaderreen," with Introduction and Interludes by the Station Orchestra. 9.0 p.m.—Music Chat by H. R. White. 9.15 p.m.—Dina Copeman (Pianist). 9.30 p.m.—Request Music by the Station Orchestra. 9.45 p.m.—"The Dublin Singers." 10.0 p.m.—The Station Orchestra. 10.10 p.m.—"The Dublin Singers." 10.20 p.m.—The Station Orchestra. 10.30 p.m.—News, Weather and Close Down.

## FRANKFURT-AM-MAIN

Südwestdeutscher Rundfunk. WL. 428.6 m. (700 kc); 4 kw. Programme relayed by Cassel on 252.1 m. (1,190 kc). Transmits at intervals from 12 noon. 3.30 p.m.—Talk, "The Protection of Our Birds." 4.45 p.m.—Reading. 5.15 p.m.—Wireless Notes and other Announcements. 5.30 p.m.—Programme of the South-West German Wireless Club. 6.0 p.m.—Talk, "The Culture of Silence," from Cassel. 6.30 p.m.—Talk, "Science and Technology." 6.50 p.m.—Film Review. 7.0 p.m.—Concert of the Museum Society, followed by Late Concert from Cassel.

## GENEVA

Radio Geneva. WL. 760 m. (395 kc); 0.5 kw. 5.0 p.m.—Children's Corner and News. 7.15 p.m.—News. 7.20 p.m.—Concert of modern Swiss Sonatas. 1. Sonata in A minor (Gagnébin) for Cello and Piano-forte. 2. Sonata in A major (Kelterborn). 3. Sonata in A minor (Honegger). 8.40 p.m.—News. 9.0 p.m. (approx.)—Close Down.

## HAMBURG

Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Programme relayed by Bremen, on 272.7 m. (1,100 kc); Hanover, 297 m. (1,009 kc); and Kiel, 255 m. (1,172 kc).

Transmits at intervals from 5.55 a.m. 4.0 p.m.—Franz Schreker Programme—on his fiftieth Birthday. 5.0 p.m. (Hamburg and Kiel).—Orchestral Music. 6.0 p.m.—Advanced English Lesson, from Königswusterhausen. 6.30 p.m.—Dialect talk from Ham-over. 6.55 p.m.—Weather. 7.0 p.m.—Beethoven Concert, under the direction of Jose Eibenschütz: 1. Concerto in D major, Op. 61, for violin. 2. Symphony in A major, Op. 92. 8.45 p.m. (Hamburg, Bremen and Kiel).—Cabaret Concert. In the Interval, Topical Talk and News. 10.25 p.m. (Hamburg, Bremen and Kiel).—Ice Report. 11.30 p.m. (approx.)—Close Down.

## HILVERSUM

Algemeene Vereeniging Radio Omroep. WL. 1,069 m. (280.5 kc); 5 kw. 11.40 a.m.—Police News. 12.10 p.m.—Trio Concert. 5.40 p.m.—Trio Concert. 6.55 p.m.—Agricultural Talk. 7.25 p.m.—Police News. 7.45 p.m.—Talk on Inland Navigation. 8.5 p.m.—Concert from the works of Sem Dresden. 1. Sonata for Cello and Piano-forte. 2. Songs. 3. Sonata for Flute and Harp. 9.5 p.m.—Talk. 9.45 p.m.—Weather and News. 9.55 p.m.—Concert. 1. Pesther Walzer (Lanner). 2. The Rift Song (Romberg). 3. Wiener Blut Waltz (Joh. Strauss). 4. Birth of the Blues (Henderson). 5. Donau Wellen—Waltz (Ivanovici). 6. Cross your heart (Gensler). 7. Wiener Bürger—Waltz (Zichrer). 8. The Trait of the Tamarind Tree (Nicholls). 9. Baltimore (Healy). 10. Lincke Wincke (Lincke). 10.55 p.m. (approx.)—Close Down.

## HUIZEN

WL. 340.9 m. (880 kc); 4 kw. (until 5.40 p.m.). Transmits from 5.40 p.m. to 1,950 m. (154 kc). 12.10 p.m.—Time and Trio Concert. 2.40 p.m.—Programme for Women. 3.40 p.m.—Gramophone Records. 4.25 p.m.—Quartet Concert from Amsterdam. 6.10 p.m.—Talk. 6.40 p.m.—Gregorian Lesson from the Seminary, Heemstede.

## KATTOWITZ

Polskie-Radio. WL. 422 m. (710 kc); 10 kw. Transmits at intervals from 3.20 p.m. 6.30 p.m.—Talk, "Sketches of Indian Life." 6.55 p.m.—Talk, "The History of Music." 7.15 p.m.—Programme from Warsaw. 9.0 p.m.—Time and News. 9.30 p.m.—Answers to Foreign Correspondents in French.

## KONIGSBERG

Ostmarken Rundfunk. WL. 330.3 m. (908 kc); 1 kw. Relayed by Danzig on 272.7 m. (1,100 kc). Transmits at intervals from 10.0 a.m. 6.30 p.m.—Elementary Spanish Lesson. 7.0 p.m.—Weather. 7.10 p.m.—Talk. 7.30 p.m.—Programme from Voxhaus. 8.0 p.m.—Orchestral Concert. 1. Uho nuit sur le mont chauvo. Symphonie Poem (Moussorgsky). 2. Piano-forte Concerto, in A minor, Op. 16 (Rachmaninoff). 3. Nutcracker Suite (Tchaikovsky). 9.15 p.m.—Weather, News and Sports Notes. 9.30 p.m.—Programme relayed from Voxhaus.

## KOVNO

Radio Kaunas. WL. 2000 m. (150 kc); 15 kw. Transmits at intervals from 4.30 p.m. 5.30 p.m.—Talk in English—"Lithuanian Folk Lore." 6.0 p.m.—Time, Weather and News. 6.30 p.m.—Variety Concert. 7.30 p.m.—Ibsen Memorial Programme.

## LANGENBERG

Westdeutscher Rundfunk. WL. 470 m. (638 kc); 25 kw. Programme also for Aix-la-Chapelle, 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. 12.5-7.15 p.m.—Programme from Cologne. 7.15 p.m.—Concert from Dortmund. 1. Quintet, Op. 114 (Schubert).

2. Soprano Solos: (a) "Per quest' bella mano" (Mozart), (b) Ariu from "Il Seraglio" (Mozart). 3. Bass Solos: (a) Ave Maria (Marschner), (b) Die drei Wanderer (Herrmann). 4. Bass Viol Solos: (a) Arioso (Handel), (b) Le Cygne (Saint-Saëns). 5. Bass Solos: (a) Der Trinker (Schäffer), (b) Ich bin Bassist (Venius). 6. Soprano Songs: (a) Heimweh (Huber), (b) Grindel Wald Song, (c) Tyrolean Songs, (d) Emmental Song. 7. Fantasia on Folk Melodies for Bass Viol (Goedecke). Followed by Programme from Cologne. 11.0 p.m. (approx.)—Close Down.

## LAUSANNE

Société Romande de Radiophonie (HBZ). WL. 680 m. (441 kc); 0.6 kw. Transmits at intervals from 6.45 a.m. 7.0 p.m.—Weather. 7.1 p.m.—Talk, "French Literature of the Fourteenth Century." 7.30 p.m.—Programme from Geneva and Berne.

## LEIPZIG

Mitteldeutscher Rundfunk. WL. 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. 3.30 p.m.—Concert from the Works of Dvorák. 1. Dumky Trio for Piano-forte, Violin and Cello, Op. 90. 2. Terzet for two Violins and Viola in C major, Op. 74. 3. Quartet for Piano-forte, Violin, Bassoon and Cello, in C major, Op. 87. 5.5 p.m.—Reading from recent Publications. 5.30 p.m.—Advanced English Lesson, from Königswusterhausen. 6.0 p.m.—Talk, "The Assimilation of Nitrogen by Plants." 6.30 p.m.—Talk, "New Scientific Animal Psychology." 7.0 p.m.—Weather and Time. 7.15 p.m.—Symphony Concert. 1. Spring Overture (Goldmark). 2. Three Songs with Orchestral Accompaniment: (a) Das Schifflein (Uhländ), (b) Morgenlein (Uhländ), (c) Einkehr (Uhländ). 3. Der Geburtstag der Infantin—Suite (Schreker). 4. Three Songs with Orchestra (Kiessig): (a) Dream-land, (b) At Midnight, (c) Song of the Winds. 5. A Puppet Play—Overture (Weinberger). 6. Five Sonnets from the Louise Labé Song Cycle. 9.0 p.m.—News. 9.45 p.m.—Dance Music. 11.0 p.m. (approx.)—Close Down.

## LILLE

(PTT). WL. 286.8 m. (1,046 kc); 0.5 kw. Transmits at intervals from 12.30 p.m. 7.30 p.m.—Market Prices. 7.40 p.m.—English Lesson. 8.30 p.m.—Concert, followed by News.

## MADRID

Union Radio (EAJ7). WL. 375 m. (800 kc); 1.5 kw. Transmits at intervals from 11.45 a.m. 7.0 p.m.—Concert of Chamber Music. 1. Quartet in E minor, Op. 59, No. 2. 2. Talk on "Liszt and his Work." 3. Variations on a popular Russian Theme. 9.30 p.m.—English Lesson. 10.0 p.m.—Time and Exchange Closing Prices. 10.10 p.m.—Concert, relayed from the Hotel Nacional. 1. Dauder (Lopez). 2. El fiesped del Sevillano—Selection (Guerrero). 3. La reina mora—Selection (Serrano). 4. De Lavapiés—Selection (Domingo). 5. El puñao de rosas—Selection (Chapi). 6. Raymond—Overture (Thomas). 7. Carnival parisien—Selection (Popy). 8. "Coppélia"—Dances (Delibes). 9. "La Dolores"—Jota (Bretón). 11.30 p.m.—Flamenco Songs, with Guitar Accompaniment. 12.0 midnight.—Dance Music, relayed from the "Alcazar." 12.20 a.m. (Saturday).—News. 12.30 a.m. (approx.)—Close Down.

## MILAN

Unione Radiofonica Italiana (IMI). WL. 526.3 m. (570 kc); 7 kw. Transmits at intervals from 11.15 a.m. 7.0 p.m.—German Lesson. 7.30 p.m.—Wireless Notes. 7.50 p.m.—Time. 7.52 p.m.—Symphony Concert. 1. Nella Selva—Symphony (Raff). 2. Literary Talk. 3. Concerto for Piano-forte in F minor (Chopin). 4. Andantino in the Old Style (Marinuzzi). 5. Nelle foresta nera—

Programmes for Friday.—(Cont.)

Symphonic impressions (Franchetti). 6. The Flight of the Lovers to Chioggia (Mancinelli).  
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. WL. 535.7 m. (660 kc.); 4 kw. Programme relayed by Nürnberg on 303 m. (990 kc.); and Augsburg, 566 m. (530 kc).  
Transmits at intervals from 10.20 a.m.  
6.0 p.m.—Symphony Concert. 1. Soprano Songs: (a) Kinderaugen, (b) Über den Wellen (Frankenstein). 2. Symphonie Pathétique in B minor (Tchaikovsky).  
7.0 p.m.—Talk, "Adventures in Africa."  
7.35 p.m.—"Der Tatzelwurm"—Musical Play (Schmid, Neuert and Erhardt).  
9.30 p.m.—Wireless Notes.  
9.40 p.m.—News.  
10.0 p.m. (approx.)—Close Down.

NAPLES

Unione Radiofonica Italiana (I.R.A.). WL. 333.3 m. (900 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.—"Lucia di Lammermoor"—Opera (Donizetti).  
9.55 p.m.—Calendar and Programme Announcements.  
10.0 p.m. (approx.)—Close Down.

OSLO

Kringkastingsselskapet. WL. 461.5 m. (650 kc.); 1.5 kw. Programme relayed by Hamar, on 566 m. (530 kc.); Porsgrund, 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 9.0 a.m.  
5.0 p.m.—Programme for Women.  
5.40 p.m.—French Lesson.  
6.15 p.m.—News.  
6.30 p.m.—Programme from Bergen.  
7.0 p.m.—Time.  
7.2 p.m.—The Three First Acts of "Peer Gynt" (Grieg).

9.0 p.m.—News and Weather.  
9.15 p.m.—Topical Talk.  
9.30 p.m. (approx.)—Close Down.

PARIS

Ecole Supérieure (FPTT). WL. 458 m. (655 kc.); 0.5 kw. Transmits at intervals from 8 a.m.  
6.0 p.m.—Radio-Journal de France.  
8.0 p.m.—Spanish Lesson.  
8.40 p.m.—Talk: "Music in the School."  
9.0 p.m.—Concert.

PARIS

Eiffel Tower (FL). WL. 2,650 m. (113 kc.); 5 kw.  
7.56 a.m.—Time Signal (on 32 m.; 9,365 kc).  
9.26 a.m.—Time Signal.  
5.45 p.m.—Le Journal Parlé. Talks on "Science," etc.  
7.10 p.m.—Weather.  
7.30 p.m.—Concert. 1. Pianoforte Solos: (a) Berceuse (Fourdrain), (b) Prelude (Franck), (c) Le do-do ou l'amour au berceau (Couperin), (d) Feux d'artifice (Debussy). 2. Songs. 3. Mezzo-Soprano Solos: (a) Menuet guillemet (Filippucci), (b) Don Quichotte lorsque le temps d'amour a fui (Massenet), (c) Le voyageur (Fauré), (d) Arioso (Delibes). 4. Aubade Sentimentale (Fourdrain). 5. Album Leaves (Levadé). At 9.56 p.m., Time Signal (on 32 m.; 9,375 kc).  
8.30 p.m.—Educational Programme, Talks on "Great Writers at Home," "Latin without Tears," etc.  
10.26 p.m.—Time Signal.

PARIS

Petit Parisien. WL. 340.9 m. (880 kc.); 0.5 kw.  
8.0—9.0 p.m.—Dance Music.

PARIS

Radio Paris (CFR). WL. 1,750 m. (171 kc.); 3 kw.  
Transmits at intervals from 7.30 a.m.  
12.30 p.m.—Concert. 1. The Italian in Algiers—Overture (Rossini). 2. Minuet de bœuf (Haydn). 3. Sérénade mélancolique (Tchaikovsky). 4. (a) J'ai aimé d'Amour

(Rachmaninoff), (b) La Femme du Soldat (Rachmaninoff), (c) "Cleopatra"—Aria (Handel). 5. Bohemian Melodies (Sarasate) for Violin. 6. Quand tu souris (Mozart). 7. Granada (Albeniz). 8. Impressions exotiques—Suite (Mouton). 9. Tarantelle—Cello Solo (Popper). 10. "Louise"—Aria (Charpentier). 11. Dernière Aubade (Lacombe). News in the interval.  
1.50 p.m.—Market Prices.  
3.30 p.m.—Exchange Quotations.  
3.45 p.m.—Literary and Musical Programme. 1. Le chant du souvenir (Filippucci). 2. Sonata for Violin (Handel). 3. Talk, "Wise Men's Mistakes." 4. "Phyllis" (Chapelier). 5. Nuits Algériennes (Chapelier).  
4.45 p.m.—Market Prices and News.  
7.0 p.m.—Agricultural News.  
7.45 p.m.—Advanced English Lesson.  
8.0 p.m.—Market Prices, News.  
8.30 p.m.—Concert. 1. Mass in B minor (Bach). 2. Daphnis and Chloe (Ravel). 3. Concerto for Pianoforte and Orchestra (Schumann). News in the intervals.

POSEN

Polskie Radio. WL. 344 m. (872 kc); 1.5 kw.  
Transmits at intervals from 12 noon.  
6.15 p.m.—Talk.  
6.55 p.m.—Finance Notes.  
7.15 p.m.—Programme from Warsaw, followed by Time, Weather and News.  
10.0 p.m.—Dance Music—relayed from the Esplanade Café.  
11.0 p.m. (approx.)—Close Down.

PRAGUE

Strasnice. WL. 348.9 m. (860 kc); 5 kw.  
Transmits at intervals from 9.30 a.m.  
5.5 p.m.—Agricultural Report.  
5.15 p.m.—Talk for Labourers.  
5.25 p.m.—German Transmission.  
6.0 p.m.—Slovakian Transmission.  
6.0 p.m.—Concert of Slovakian Music. 1. Kocurkovo (Weinberger). 2. Slovakian Suite (Novak). 3. Songs. 7.50 p.m.—Wallenstein's Camp—Drama (Schiller).  
9.0 p.m.—Time and News.  
9.10 p.m.—Orchestral Selections.

ROME

Unione Radiofonica Italiana (I.R.O.). WL. 448.4 m. (669 kc); 3 kw.

Transmits at intervals from 11.30 a.m.  
7.0 p.m.—English Lesson.  
7.30 p.m.—Time, News, Exchange and Weather.  
7.45 p.m.—Vocal and Instrumental Concert. 1. Fiorina—Symphony (Pedrotti). 2. Pianoforte Solos (Chopin): (a) Etude in F minor, (b) Study in G flat major, (c) Waltz in D minor. 3. The Marriage of Figaro—Soprano Aria (Mozart). 4. "I Puritani"—Soprano Aria (Bellini). 5. "Philemon and Baucis"—Intermezzo and Dance of the Bacchantes (Gounod). 6. "The Woman of Your Dreams"—Comedy (De Flaviis). 7. "La Couronne des Indes"—Symphonic Suite (Elgar). 8. Soprano Songs: (a) Air du papillon (Campra), (b) The Pearl Fishers—Aria (Bizet). 9. Manon Lescaut—Intermezzo (Puccini). 10. The Thieving Magpie—Symphony (Rossini).  
9.55 p.m.—News.  
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—7 p.m. and from 11 p.m.  
Transmits at intervals from 11.45 a.m.  
11.0 p.m.—"Savings Bank Programme," from New York.  
12.0 (midnight)—Exchange and News.  
12.30 a.m. (Saturday)—Health Talk.  
12.35 a.m.—The WGY Players.  
1.0 a.m.—Matilda Russ (Soprano).  
2.0 a.m.—Time, and the "Anglo-Persians," from New York.  
2.30 a.m.—Cathedral Echoes.  
3.0 a.m.—"Palmolive Hour," from New York.  
4.0 a.m. (approx.)—Close Down.

STOCKHOLM

Radiotjänst (SASA). WL. 453.8 m. (661 kc); 1.5 kw.  
Programme relayed by Motala on 1380 m. (217 kc); Göteborg, 416.7 m. (720 kc); Malmö, 260.9 m. (1150 kc); and Sundsvall, 545.6 m. (550 kc).  
Transmits at intervals from 11.35 a.m.  
6.15 p.m.—Advanced English Lesson.  
6.45 p.m.—Classical Music: 1. "Iphigenia in Aulis"—Overture (Gluck). 2. Divertimento No. 17 for Strings and Two Horns (Mozart). 3. Canzonetta and

Minuet (Boccherini). 4. Minuet in G Major (Beethoven). 5. Largo from "Xerxes" (Handel).  
7.40 p.m.—Clavichord Recital.  
8.15 p.m.—News and Weather.  
8.40 p.m.—Talk, "Statistics."  
9.0 p.m. (approx.)—Close Down.

STUTT GART

Süddeutscher Rundfunk. WL. 380.7 m. (788 kc); 4 kw. Transmits at intervals from 11.30 a.m.  
3.15 p.m.—Concert: 1. Mit Eichenlaub und Schweren (Blon). 2. Wiener Mädel (Ziehrer). 3. Blues from "Johnny spielt auf" (Krenek). 4. "Le Roi d'Yvetot" (Adam). 5. Memories of Rubinstein (Urbach). 6. Waldteufeleien—Potpourri (Kling). 7. Künstlerträume (Vollstedt). 8. Durch Sturm und Not (Blankenburg).  
5.15 p.m.—Illustrated Talk on "German Children's Folk Songs."  
5.45 p.m.—Talk on "Chemistry," from Karlsruhe.  
6.15 p.m.—Esperanto Lesson.  
6.45 p.m.—Programme Announcements in Esperanto. Time and Weather.  
7.0 p.m.—Programme from Frankfurt.  
9.0 p.m.—Programme of German Poetry and Prose of the last Hundred Years.  
9.45 p.m.—News and Sports Notes.  
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.—Orchestral Concert.  
8.30 p.m.—Accordion Recital.  
9.0 p.m.—Concert. 1. Selections from "Werther" (Massenet). 2. Programme of Tangos.

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 a.m.  
6.0 p.m.—Italian Lesson.  
6.30 p.m.—Health Talk.  
7.0 p.m.—English Literature Lesson.  
7.30 p.m.—"Columbine"—Variety Comedy (arr. Lange).

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# PROGRAMMES FOR SATURDAY (March 24)

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

## BARCELONA

Radio-Barcelona (EAJI). WL. 344.8 m. (870 kc); 1.5 kw. Transmits at intervals from 11.0 a.m. 6.0 p.m.—Exchange Quotations. 6.10 p.m.—Good Luck—March (Mignard). 6.15 p.m.—Divine Service from the "Basilica de la Merced." 6.25 p.m.—Quintet Selections. 8.30 p.m.—French Lesson. 9.0 p.m.—Chimes and Weather. 9.5 p.m.—Exchange and News. 9.10 p.m.—"Fingal's Cave"—Overture (Mendelssohn). 9.20 p.m.—Concert. 10.0 p.m.—Exchange Closing Prices. 10.5 p.m.—Programme relayed from Madrid (Union Radio).

## BERGEN

Kringkastingselskap. WL. 359.9 m. (811 kc); 1.5 kw. Transmits at intervals from 10.15 a.m. 5.0 p.m.—Children's Corner. 6.30 p.m.—Talk, "Ibsen's 'Doll's House.'" 7.0 p.m.—Programme from Oslo. 9.0 p.m.—Weather, News and Time. 11.0 p.m. (approx.)—Close Down.

## BERLIN

Königswusterhausen. WL. 1,250 m. (240 kc); 35 kw. Transmits at intervals from 10.50 a.m. 5.0 p.m.—Culture Talk. 5.30 p.m.—French Lesson. 5.55 p.m.—Talk on "Faust." 6.20 p.m.—Talk on "Bach." 7.30 p.m.—Programme from Voxhaus.

## BERLIN

Voxhaus. WL. 484.6 m. (619 kc); 4 kw.

Transmits at intervals from 9.10 a.m. 3.30 p.m.—Concert: 1. Oriental March (Ailboud). 2. Die Schönen von Valencia—Waltz (Morena). 3. Fahrend Volk—Overture (Leuchner). 4. (a) Romance, (b) Schmetterlingsreigen (Schmalstich). 5. Selection from "The Bartered Bride" (Smetana). 6. (a) Irrlichter und Kobbold (Hoffmann), (b) Norwegian Peasant Dance (Schytte). 7. Petite Suite (de Micheli). 8. In Dingsda—Onestep.

5.10 p.m.—Talk, "The Manufacture of Cigarettes."

5.30 p.m.—Talk, "The Humorous Song."

6.0 p.m.—Legal Talk. 6.25 p.m.—Talk, "Weather and the Big City."

6.55 p.m.—Talk, "The Housing Problem."

7.30 p.m.—"From Pankow to Potsdam"—A Variety Programme.

9.15 p.m.—Time, News and Sports Notes.

9.30 p.m.—Dancing Lesson and Dance Music.

11.30 p.m. (approx.)—Close Down.

## BERNE

Radio-Berne. WL. 411 m. (730 kc); 1.5 kw.

Transmits at intervals from 12 noon. 6.30 p.m.—Time and Weather. 6.35 p.m.—Talk.

7.0 p.m.—National Concert.

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

9.30 p.m.—Dance Music.

11.0 p.m. (approx.)—Close Down.

## BRESLAU

Schlesische Funkstunde. WL. 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.—Orchestral Concert.

5.0 p.m.—Talk on Charity.

5.30 p.m.—French Lesson from Königswusterhausen.

5.55 p.m.—Weather. 6.30 p.m.—Talk, "The Work of the League of Nations."

7.10 p.m.—Dance Music Concert. Selections from the Works of Weber, Goethe, Mozart, Beethoven, Müller, Joh. Strauss and Brahms, etc., followed by News.

9.30 p.m.—Dancing Instruction from Berlin.

10.0 p.m.—Dance Music.

11.0 p.m. (approx.)—Close Down.

**BRUNN**

Komarow. WL. 441 m. (680 kc); 3 kw. Transmits at intervals from 11.15 a.m. 5.40 p.m.—Talk.

6.0 p.m.—Popular Concert.

6.40 p.m.—French Lesson.

7.0 p.m.—A Comedy by Langor.

9.0 p.m.—Programme from Prague.

## BRUSSELS

Radio-Belgique. WL. 508.5 m. (560 kc); 1.5 kw.

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

6.0 p.m.—English Lessons.

7.45 p.m.—Radio-Chronique.

8.15 p.m.—Concert from the Works of Dupuis, from Liège.

8.45 p.m.—Theatre Talk.

8.55 p.m.—"Pique Dame"—Overture (Tchaikovsky).

9.0 p.m.—Topical Talk.

9.5 p.m.—Concert 1. Songs. 2. "Francesco de Cezeili"—Ballet (Gaillard). 3. Violin Solos, (a) Prelude and Allegro (Pugnani-Kreisler), (b) Liebeslied (Kreisler).

4. "Cavalleria Rusticana"—Selection (Mascagni). 5. Songs. 6. Dances (Moszkovsky). 7. Violin Solos, (a) Perpetual Motion (Hubay), (b) Mouvement (Paganini). 8. In a Persian Market (Kettelby). 9. Waves of the Danube (Ivanovici).

10.15 p.m.—News.

10.30 p.m. (approx.)—Close Down

## BUDAPEST

Magyar Radio Ujsag. WL. 555.6 m. (540 kc); 3 kw.

Transmits at intervals from 8.30 a.m. 5.20 p.m.—Concert.

8.30 p.m.—Time, News and Chamber Music.

**COLOGNE.**

Westdeutscher Rundfunk. WL. 283 m. (1060 kc); 4 kw.

Transmits at intervals from 9.30 a.m. 12.5 p.m.—Concert: 1. Durch Nacht zum Licht—March (Lankin). 2. Valse Triste (Sibelius). 3. "Antigone"—Overture (Buisson). 4. "Othello" (Verdi). 5. Fantasia for Clarinet (Gade). 6. Eastern Sketches (Schumann). 7. Auf wiederhören—Potpourri (Weninger). 8. Blues.

2.40 p.m.—Wireless Talk.

3.0 p.m.—See Langenberg.

3.30 p.m.—Programme from Königswusterhausen.

4.0 p.m.—Talk for Women.

4.30—7.15 p.m.—See Langenberg.

7.15 p.m.—Variety Concert, followed by News, Sports Notes, Concert and Dance Music.

12 (midnight—approx.)—Close Down

## COPENHAGEN

Copenhagen Radio. WL. 337 m. (860 kc); 1 kw. Programme relayed by Kalundborg on 1,153.8 m. (260 kc).

Transmits at intervals from 6.30 a.m. 5.30 p.m.—French Talk, "Marcel Proust."

6.0 p.m.—News, Exchange, and Time.

6.20 p.m.—Programme Announcements for the coming week.

6.30 p.m.—Talk, "Our Daily Bread."

7.0 p.m.—Literary Cabaret. 1. Recitations. 2. Songs: (a) Little Merry One; (b) The Wicked Painter (Kjerulf). 3. Recitations: (a) Requiem (Pedersen); (b) A Spring Song (Kristensen); (c) Love Song (Bonnellycke). 4. Recitations: (a) The Sailor's Song (Henriques); (b) The Flag (Rygaard). 5. Songs: (a) I sit and wait for you (Enna); (b) There is nothing in the world (Andersen); (c) The flowers are sleeping (Andersen). 6. Recitation. 7. Songs (Elizabeth Mayer). 8. Recitations: (a) "A Special Number" (Jensen); (b) A merry song; (c) Sunshine.

8.30 p.m.—News.

8.45 p.m.—Concert of old dance music.

9.45 p.m.—Dance Music from the Industru Restaurant.

11.0 p.m.—Chimes and Close Down.

## CORK

Cork Broadcasting Station (6CK). WL. 400 m. (750 kc); 1.5 kw.

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

7.20 p.m.—Programme from Dublin.

**CRACOW,**

Polskie Radio. WL. 566 m. (530 kc.); 1.5 kw.

Transmits at intervals from 11.0 a.m. 6.5 p.m.—Agricultural Report.

6.15 p.m.—Variety.

6.35 p.m.—Programme from Warsaw.

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

10.30 p.m. (approx.)—Close Down.

## DUBLIN

Dublin Broadcasting Station (2RN). WL. 319.1 m. (940 kc); 1.5 kw.

Transmits at intervals from 1.30 p.m. 7.20 p.m.—News.

7.30 p.m.—Talk by Patricia Hocy.

7.45 p.m.—Irish Talk by Scamus O'Duirlane.

8.0 p.m.—The Augmented Station Orchestra.

8.20 p.m.—Keith Falkner (Bass).

8.30 p.m.—Scenes from "The School for Scandal," by E. Young and Company.

9.0 p.m.—Freddie Stone (Pianist).

9.15 p.m.—Amhrain Ghaolacha by Donnchadh MacCeiligh.

9.25 p.m.—The Top Knots Concert Party.

10.0 p.m.—The Augmented Station Orchestra:

10.15 p.m.—Keith Falkner.

10.25 p.m.—The Augmented Station Orchestra.

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

## FRANKFURT-ON-MAIN

Südwestdeutscher Rundfunk. WL. 428.6 m. (700 kc); 4 kw.

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

Transmits at intervals from 12 noon. 2.30 p.m.—Concert of Operetta Music.

4.0 p.m.—Reading.

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

5.30 p.m.—The Letter Box.

5.45 p.m.—Talk, "Great German Writers of the Latter Part of the 13th Century."

6.15 p.m.—Shorthand Lesson.

6.45 p.m.—Talk, "Henrik Ibsen as Advocate of the Rights of Youth."

7.15 p.m.—Variety Concert.

9.30 p.m.—Programme from Voxhaus.

10.0 p.m. (approx.)—Close Down.

## GENEVA

Radio Geneva. WL. 760 m. (395 kc); 0.5 kw.

5.0 p.m.—Dance Music from the MacMahon.

6.45 p.m.—Selection by the Romand Orchestra: Prelude to "Parsifal" (Wagner).

7.0 p.m.—Gramophone Selection, "The Holy Grail," from "Parsifal."

7.25 p.m.—News.

7.27 p.m.—Humorous Talk.

7.45 p.m.—Mondez (Entertainer).

8.5 p.m.—Programme from Bern.

9.0 p.m.—News.

9.10 p.m.—Dance Music from the Fantasio.

10.0 p.m. (approx.)—Close Down.

## HAMBURG

Norag (ha, in Morse). WL. 396 m. (757 kc); 4 kw. Programme relayed by Bremen on 272.7 m. (1,100 kc); Hanover, 297 m. (1,009 kc); and Kiel, 256 m. (1,172 kc).

Transmits at intervals from 5.55 a.m. 4.0 p.m.—Concert of Hungarian Music.

5.0 p.m. (Hamburg and Kiel)—Variety.

5.55 p.m. (Hamburg and Kiel)—Talk, "Enamel Work."

6.20 p.m. (Hamburg and Hanover)—Topical Talk.

6.35 p.m.—Legal Talk.

6.55 p.m.—Weather.

7.0 p.m.—"Der wahre Jakob"—Farce (Franz Arnold and Ernst Bach). News, followed by Cabaret Concert (Hamburg, Bremen and Kiel).

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

11.30 p.m. (approx.)—Close Down.

## HILVERSUM

Algemeene Vereeniging Radio Omroep. WL. 1,069 m. (280.5 kc.); 5 kw.

11.40 a.m.—Police News.

12.10 p.m.—Trio Concert.

3.30 p.m.—Italian Lesson.

4.10 p.m.—German Lesson.

4.55 p.m.—French Lesson.

5.40 p.m.—Concert. 1. "Poet and Peasant"—Overture (Suppé). 2. Flowers—Suite (Siede). 3. Stephanie Gavotte (Czibulka). 4. An Evening at Toledo (Schmelting). 5. Dollar Waltz (Fall). 6. Rocco—Liebeslied (Meyer-Helmund). 7. Hallo America (Lubbe). 8. Ay Ay Ay (Freire). 9. Sons of the Brave (Bidgood).

6.55 p.m.—Horticultural Talk.

7.25 p.m.—Police News.

7.50 p.m.—Programme organised by the Workers' Radio Society. Concert and Talk.

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

11.30 p.m. (approx.)—Close Down.

## HUIZEN

WL. 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 Records.

5.40 p.m.—Literary Talk.

6.10 p.m.—Gramophone Records.

6.40 p.m.—Talk.

7.10 p.m.—Dutch Lesson.

7.40 p.m.—Concert.

## KATTOWITZ

Polskie Radio. WL. 422 m. (710 kc); 10 kw.

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

7.0 p.m.—Programme from Warsaw.

7.30 p.m.—"La Fille de Madame Angot"—Operetta (Lecocq).

9.0 p.m.—Time and News.

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

## KONIGSBERG

Ostmarken Rundfunk. WL. 330.3 m. (908 kc); 1 kw. Relayd by Danzig, on 272.7 m. (1,100 kc).

Transmits at intervals from 8.0 a.m. 6.30 p.m.—Elementary English Lesson.

6.55 p.m.—Weather.

7.0 p.m.—"Madame Butterfly"—Opera (Puccini). Weather, Time, and Sports Notes, and Dance and Orchestral Music.

10.45 p.m. (approx.)—Close Down.

## KOVNO

Radio Kaunas. WL. 2,000 m. (150 kc); 15 kw.

Transmits at intervals from 2.30 p.m. 6.0 p.m.—Time, Weather and News.

6.20 p.m.—Programme Announcements.

6.30 p.m.—"La Juive"—Opera (Haëvy). Relayd from the National Theatre. In the Interval—News.

10.45 p.m. (approx.)—Close Down.

## LANGENBERG

Westdeutscher Rundfunk. WL. 470 m. (638 kc); 25 kw. Programme also for Aix-la-Chapelle 401 m. (748 kc); Cologne, 283 m. (1060 kc); and Münster, 241.9 m. (1240 kc).

Transmits at intervals from 9.30 a.m. 12.5—3 p.m.—Programme from Cologne.

3.0 p.m.—Reading from "The Wanderer" (Knut Hamsun) from Dortmund.

3.30 p.m.—Programme from Königswusterhausen.

4.0 p.m.—Programme from Cologne.

4.30 p.m.—English Lesson from Münster.

5.0 p.m.—Concert of 17th and 18th Century Music from Dortmund: 1. Sonata for Cello and Cembalo (Handel). 2. Italian Concerto for Cembalo (Bach). 3. "Süsse Stille"—Tenor Aria with Cembalo and Flute Obligato (Handel). 4. Cembalo Solos: (a) Sonata Pastorale (Scarlatti), (b) Tamburin (Rameau). 5. Flute Solos, with Cembalo Accompaniment: (a) Bourrée from the Sonata in G Major (Handel), (b) Minuet (Handel). 6. Tenor Solos, with Cembalo Accompaniment: (a) Selection from Augsburg Part Songs, (b) The Rose (Görner), (c) Spring Song (P. E. Bach).

6.15 p.m.—Literary Talk from Düsseldorf.

6.45 p.m.—Talk, "The Police Summons and the Criminal," from Dortmund.

7.15 p.m.—Programme from Cologne.

12 (midnight, approx.)—Close Down.

## LAUSANNE

Société Romande de Radiophonie (HB2). WL. 680 m. (441 kc); 0.6 kw.

Transmits at intervals from 6.45 a.m. 7.0 p.m.—Weather.

7.2 p.m.—Inaugural Programme of the New Studio.

## LEIPZIG

Mitteldeutscher Rundfunk. WL. 366.3 m. (810 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.—Orchestral Concert of Russian Music.

5.0 p.m.—Talk from Königswusterhausen.

5.45 p.m.—Legal Talk.

6.0 p.m.—Talk, "The Future of Your Child."

6.30 p.m.—Talk, "The World Press of the Present Day."

Programmes for Saturday.—(Cont.)

9.0 p.m.—Weather and News.
9.15 p.m.—Topical Talk.
9.30 p.m.—Dance Music from the Grand Hotel.
11.0 p.m. (approx.)—Close Down.

PARIS

Ecole Supérieure (FPTT). WL. 458 m. (655 kc); 0.5 kw.
Transmits at intervals from 8 a.m.
2.0 p.m.—Concert: 1. Symphony in G Minor (Mozart). 2. Cavatine (Raff). 3. Ballet Music from "Romeo and Juliet" (Gounod). 4. Menuet des Mousquetaires (Simon).
3.15 p.m.—Padeloup Concert.
5.15 p.m.—Radio-Journal de France.
8.30 p.m.—Sports Notes.
9.0 p.m.—Recital of French Songs, followed by Dance Music.
12 (midnight—approx.)—Close Down.

PARIS

Eiffel Tower (FL). WL. 2650 m. (113 kc); 5 kw.
7.56 a.m.—Time Signal (on 32 m; 9375 kc).
0.26 a.m.—Time Signal.
5.45 p.m.—Le Journal Parlé. Talks on "The Week in Paris," etc.
7.10 p.m.—Weather.
7.30 p.m.—Concert: 1. La Rôtisserie de la Reine Pédaque (Lévade). 2. Songs: (a) La Gioconda (Ponchielli), (b) Manon (Puccini). 3. Tenor Solos, Popular Armenian Airs. 4. Pastorale and Clair de Lune for Flute and Pianoforte (Callias). 5. Song (Maeterlinck). 6. Song, "Le cortège d'Amphitrite. 7. Pianoforte Solos, Three Impressions of Holland. 8. La Plainte de la Princesse—for Song, Flute and Pianoforte. 9. "Klong," Cello Solo. 10. Le Billet du Vert Galant—Song. 11. Des vierges au crépuscule (Samain). 12. Duet. At 7.56 p.m.—Time Signal (on 32 m; 9,375 kc).
8.30 p.m.—Educational Programme: Talks on "Sociology," "The Child and Psycho-analysis," etc.
10.26 p.m.—Time Signal.

PARIS

Petit Parisien. WL. 340.9 m. (880 kc); 0.5 kw.

9.0 p.m.—Concert. 1. "Le Paradis de Mahomet"—Overture (Planquette). 2. L'Amour mouillé (Varney). 3. Le Voyage de Suzette (Vasseur). 4. Les vingt huit jours de Clairette (Roger). 5. "Les Cloches de Corneville" (Planquette). 6. Les petits mousquetaires (Varney). 7. La Timbale d'argent (Vasseur). 8. Joséphine vendue par ses sœurs (Roger). 9. "Rip" (Planquette).

PARIS

Radio Paris (CFR). WL. 1,750 m. (171 kc); 3 kw.
Transmits at intervals from 7.30 a.m.
12.30 p.m.—1. Trio Selections. 2. "Les Dragons des Villars"—Selection (Maillart). 3. Trio Selections. In the Intervals—News.
3.30 p.m.—Exchange Quotations.
3.45 p.m.—Concert, arranged by Rosati.
4.45 p.m.—News.
7.0 p.m.—Agricultural Report.
8.0 p.m.—Talk, "Spring in Indo-China," followed by Stock Exchange Quotations and News.
8.30 p.m.—Children's Corner.
9.0 p.m.—Concert, organised by "Le Matin." News in the Intervals.

POSEN

Polskie Radio. WL. 344 m. (872 kc); 1.5 kw.
Transmits at intervals from 12.0 noon.
6.15 p.m.—French Lesson.
6.35 p.m.—Talk.
7.0 p.m.—Talk and Operetta from Warsaw.
9.0 p.m.—Time and Variety Items.
9.30 p.m.—Economics Notes and Weather.
9.50 p.m.—Dance Music from the "Palais Royal" Restaurant.
11.0 p.m.—Dance Music.
1.0 a.m. (approx.)—Close Down.

PRAGUE

Strasnice. WL. 348.9 m. (860 kc); 5 kw.
Transmits at intervals from 9.30 a.m.
5.25 p.m.—Agricultural Report.
6.15 p.m.—"The Melody Makers."
7.0 p.m.—Weather and News.
7.10 p.m.—Popular Concert.
8.10 p.m.—A Drama.
9.0 p.m.—Time and News.
9.10 p.m.—Orchestral Selections.

ROME

Unione Radiofonica Italiana (IRO). WL. 448.4 m. (666 kc); 3 kw.
Transmits at intervals from 11.30 a.m.
4.30 p.m.—Vocal and Instrumental Concert, from the Works of Brahms, Moussorgsky, Glazounov, Zandonai, Giordano, Dvorak, Rubinstein, De Kristoff, Zanella and Verdi.
7.0 p.m.—German Lesson.
7.30 p.m.—Time, News, Exchange and Weather.
8.0 p.m. (approx.)—Relay from Rome Theatre. In the Interval: Review and News.

SCHENECTADY, N.Y.

General Electric Company (WGY). WL. 379.5 m. (790 kc); 50 kw.
Programme relayed by 2XAF on 31.4 m. (9,554 kc) from 11.25 p.m.
Transmits at intervals from 11.45 a.m.
11.30 p.m.—Concert from the Hotel Onondaga, Syracuse, N.Y.
12.30 a.m. (Sunday)—Statler's Pennsylvanians from New York.
1.0 a.m.—"The High Jinkers," from New York.
2.0 a.m.—Time.
2.2 a.m.—"Sojourners Club Banquet," from the Waldorf Astoria, New York.
3.30 a.m.—Organ Recital from the Eastman Theatre, Rochester.
4.0 a.m.—Dance Music from the Ten Eyck Hotel, Albany, N.Y.
5.0 a.m. (approx.)—Close Down.

STOCKHOLM

Radiojäst (SASA). WL. 453.8 m. (661 kc); 1.5 kw. Programme relayed by Motala on 1,380 m. (217 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.
4.0 p.m.—Light Music.
5.0 p.m.—Children's Corner.
5.30 p.m.—Topical Talk.
6.0 p.m.—Folk Music.
6.30 p.m.—Play.
7.0 p.m.—Cabaret Selections.
7.15 p.m.—Band Music.
8.15 p.m.—News and Weather.
8.45 p.m.—Dance Music.
11.0 p.m. (approx.)—Close Down.

STUTT GART

Süddeutscher Rundfunk. WL. 380.7 m. (788 kc); 4 kw.
Transmits at intervals from 11.30 a.m.
2.0 p.m.—Vocal and Orchestral Concert.

5.0 p.m.—Time and Weather.
5.15 p.m.—Talk, "Light Athletics."
6.15 p.m.—Legal Talk.
6.45 p.m.—Time, Weather and Sports Notes.

7.15 p.m.—Concert: 1. Military March No. 2 (Schubert). 2. "Czar and Carpenter"—Overture (Lortzing). 3. Song from "The Marriage of Figaro" (Mozart). 4. Duet from "The Marriage of Figaro." 5. Der gestrichene Scheffel (Kopisch). 6. Invitation to the Dance (Weber). 7. Volkliedchen und M rchen (Komzak). 8. Song from "Das Nachtlager von Granada" (Kreutzer). 9. Duet from "The Armourer" (Lortzing). 10. "La Belle Hélène"—Overture (Offenbach). 11. Geschichten aus dem Wiener Wald (Joh. Strauss). 12. Scenes from "Der Evangelistmann" (Kienzl). 13. Enthaltensanket (Busch). 14. The Voices of Spring (Joh. Strauss). 15. "Flotte Bursche"—Overture (Suppé). 16. Schönerwunder Waltz (Lanner). 17. Des Ehemanns Klage (Hochstetter). 18. Bitte schon (Joh. Strauss). News.
9.30 p.m.—Programme from Voxhaus.
10.0 p.m.—Dance Music.
11.30 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.—Orchestral Concert.
8.15 p.m.—Talk, "The Benefits of the 'Anti-tubercular Stamp.'"
8.30 p.m.—Concert. 1. Scènes Alsaciennes (Massenet). 2. "The Merry Wives of Windsor" (Nicolai).
9.0 p.m.—Concert. Selections from "Fra Diavolo" (Auber). 2. "L'Arlésienne" (Bizet). 3. Egyptian Ballet (Luigini).

VIENNA

Radio-Wien. WL. 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 a.m.
3.10 p.m.—Orchestral Concert.
4.40 p.m.—Concert: 1. Songs: (a) Morgen (Strauss), (b) Waldseligkeit, (c) Nocturne (Marx), (d) Im Kahne (Grieg), (e) Seligkeit (Schubert). 2. Violin Sonata in D Major, Op. 15 (Kornauth). 3. Songs: (a)

Gute Nacht, (b) Der Lindenbaum, (c) Wegweiser, (d) Wirtshaus (Schubert). 4. Variations on a Beethoven Theme for Two Pianofortes (Reger).

5.45 p.m.—Talk, "The Legal Bond between Germany and Austria."
6.15 p.m.—Concert of Tenor, Violin, Guitar and Vocal Quartet Music.
7.5 p.m.—"Three Episodes: 1. Eva. 2. Kitty. 3. Sybil." (Hagemann).
9.20 p.m.—Concert of Viennese Music: 1. "Die Fledermaus"—Overture (Strauss). 2. Loreley-Rheinklänge Waltz (Strauss). 3. Song from "Der verwunschene Schloss" (Millöcker). 4. Die Schönbrunner—Waltz (Lanner). 5. Duet, A Waltz from Strauss (Lorens). 6. The Band is Coming—March Song (Sehild). 7. Mein Lebenslauf ist Lieb' und Lust—Waltz (Strauss). 8. Song, Mein Mutterl war ein Wienerin (Gruber). 9. Song (Ziehrer). 10. Weana Madlen—Waltz (Ziehrer). 11. Song (Fiebrich). 12. Hochdeutsch und Wienerisch—Potpourri. 13. Jodel Song. 14. Beim Burgtor am Michaelerplatz (Arnold). 15. A Sunday Afternoon in the Prater—Humorous Symphony (Skurawy).
11.0 p.m.—"At Midnight by St. Stephen's Spire"—A Vision (Kutschera).

WARSAW

Polskie Radio. WL. 1,111.1 m. (270 kc); 10 kw.
Transmits at intervals from 11.0 a.m.
6.5 p.m.—Agricultural Report.
6.15 p.m.—Variety.
6.35 p.m.—Literary Talk.
7.0 p.m.—Talk.
7.30 p.m.—"La Fille de Madame Angot"—Operetta (Lecocq). In the interval—News in French.
9.20 p.m.—Time, News and Weather.
9.30 p.m.—Dance Music.
10.30 p.m. (approx.)—Close Down.

WILNO

Radio Pologne. WL. 435 m. (689 kc); 0.5 kw.
Transmits at intervals 3.25 p.m.
6.0 p.m.—Wireless Notes.
6.25 p.m.—Time and Variety Items.
7.30 p.m.—Concert. Relayed from Warsaw.
9.0 p.m.—News.
9.30 p.m.—Dance Music.
10.30 p.m. (approx.)—Close Down

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