Programmes Continued

These programmes are copyright, but individual daily programmes may be published on day of performance.

8.39; Jazz songs (with banjo, manadan, and plane accompaniment)—
Birch Trio Entertainers, (a) "My Palm Leaf Zulu" (Jerome);
(b) "My Creole Belle" (Lampe).

8.45; Contraite and baritone duet—Miss Nellie Lowe and Mr. A. G. Thompson, "Grey Days" (Chappell).

8.48; Mouth-organ solos—Mr. Harry Rowe, (a) "Poor Old Joe" (MS.); (b)

"The Regiment Passes By" (MS.). 8.54: Humorous recital—Mr. L. T. J. Byan, "My Wedding Anniversary" (MS.).

9.0: Weather forecast.

9.1: Weather received.
9.1: Overture.
9.8: Soprano solos—Mrs. G. L. Bull. (a) "A Garden of Afterwards" (Cleaver); (b) "Cuckoo" (Snaw).
9.14: Pianoforte solo—Miss Aileen Warren, "Dance of the Geisha" (from piano cycle, "Japan") (Niemann).
9.18: Baritone solos—Mr. A. G. Thompson, (a) "Trooper Johnny Ludlow" Temple); (b) "To My First Love" (Lohr).
9.22: Flugel horn solo—Mr. E. N. Trenberth, "Der Lieberstraum" (Hock).
9.26: Contralto solo—Miss Neilie Lowe, (a) "When You're Away" (Sanderson); (b) "Absent" (Metcalf).
9.33: Instrumental trios—Christchurch Broadcasting Trio, (a) "Serenade" (Schubert); (b) "Bolero" (Moskowski).
9.42: Dramatic recitals (piano accompaniment)—Mr. L. T. J. Ryan, (a) "Earthenware" (Weston and Lee Lemont); (b) "The Kid" (Clarke and Kilfoy).

(Clarke and Kilfoy).
9.49: Mouth-organ solos—Mr. Harry Rowe, (a) "Yes, Sir! That's My Baby" (MS.); (b) "Darkie Dances" (MS.).

9.56; Jazz songs, with steel guitar and piano accompaniment—Birch Trio Entertainers, (a) "Moonbeams" (Jerome); (b) "Put Your Arms Around Me" (Von Tilzer). Ged Save the King.

4XA, DUNEDIN (463 METRES). WEDNESDAY, JULY 18.

7 p.m.: Town Hall chimes. 7.1: Request gramophone concert.

7.40: News session. 8.0: Town Hall chimes.

8.1: Relay of orchestral music from the Octagon Theatre Orchestra, under the conductorship of Monsieur Henri de Rose (Mus.Bac.).

8.15: Humorous recitals—Mr. J. B. McConnell, (a) "I'm Excited" (Foy);

(b) "The Country J.P." (Blascheck).

8.23: Saxophone selections—McCaw's Saxophone Band, "Childhood "Childhood

Memories" (Somers).
8.27: Light vocal solo—Miss Betty Roberts. "Charmaine" (Rapee and Polleck).

8.30: Hawaiian guitar duets—Messes. Sheehy and Campbell, (a) "My Hawaiian Evenin' Star" (Sheridan); (b) "Waiting for the Moon" (Lerner).

(Lerner).

8.36: Monologue—Miss Hilda Scurr, "My Financial Career" (Leacock).

8.41: Popular song hits—Dunedin Banjo Trio, (a) "Let It Rain, Let It Pour" (Donaldson); (b) "Colorado" (Dellon); (c) "Let Me Be the First to Kiss You Good-morning" (Robinson); (d) "Red Lips" (Wendling).

8.57: Light mezzo-soprano solos—Miss Thelma Blackman. (a) "In the Middle of the Night" (Donaldson); (b) "Three Roses" (Arden).

Weather forecast.

0.3: Weather forecast.
9.6: Relay of orchestral selections from the Octagon Theatre.
0.21: Humorous recital—Mr. J. B. McConnell, "The Clown" (McKeoch).
0.26: Saxophone selections—McCaw's Saxophone Band, (a) "Savoy Scottish Medley" (Somers); (b) "My Blue Heaven" (Donaldson).
0.34: Light vocal solos—Miss Betty Roberts, (a) "The World is Waiting for the Sunrise" (Seity); (b) "Will You Remember Me" (Hall).
9.40: Hawaiian guitar duet—Messrs. Sheeby and Campbell, "Am I Wasting Mr. Time on You" (Johnson).

My Time on You" (Johnson). 0.43: Humorous monologues—Miss Hilda Scurr, (a) "Singers and Tulkers"

9.45; Humorous monologues—Aliss fund Scale, (2) Single's and Lunders (b) "Knitting."

9.50; Mezzo-soprano solo—Miss Thelm't Blackman, selected.

9.55; Popular song-hits—Dunedin Banjo Band, (a) "My Sweetie's Turned Me Down" (Donaldson); (b) "When Lights Are Low" (Fiorizo); (c) "Miss Annabelle Lee" (Lichman).

10.5; Close down.

Thursday, July 19

1YA, AUCKLAND (333 METRES), THURSDAY, JULY 19.

3 p.m.: Afternoon session-Selected studio items.

8.30: Talk by representative of Auckland Gas Company on "Gas Cooking."

3.45: Further studio items. 4.0: Literary selection by the Announcer.

Selected studio items.

4.25: Sports results. 4.30: Close down.

4.30: Close down.

6.0: Children's session, conducted by Peter Pan. 'Cello solo, Cousin Joan, Duologue, Uncle Vernon and Cinderella, "At the Fire Station." "Gavotte." Duologne. Uncle Vernon and Cinderella. At the Fire Station." Song, Uncle Vernon. Letters and birthdays. 'Cello solo, Cousin Joan, "Danny Boy." Sketch, Uncle Vernon, Cinderella and Peter Pan, "A Sea Trip." Story-time.

7.15: Lecturette- Mr. N. M. Richmond, "The French Revolution—Its Place in History."

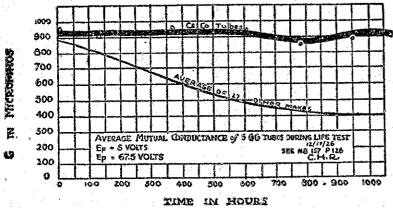
in History."

ys and market reports, book review.

8.1: Overture—"The Flying Dutchman" (Wagner).
8.9: Vocal quartet—Mr. Barry Coney's Quartet, "Coronach" (Bantock).
8.13: Recitation—Miss Maisie Carte-Lloyd, "Little Eric" (Fisk).
8.18: Baritone solo—Mr. H. Barry Coney, "On Wings of Song" (Mendels-

8.22: Instrumental—Ingali's Hawaiian Orchestra, (a) "Invercargill March" (Lithgow); (b) "Breeze" (Hanley).
8.30: Contralto solo—Miss Martha Williamson, "My Ships" (Barrett).

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(Beethoven).

circuit is used) that its red terminal is joined to the terminal on the set, which is connected to H.T. positive. (If this is not done there is risk of serious damage to the loud speaker).

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(Carnival Trie, "Scherze" from "Seventh Tried" (Weber).

(Carnival Culford Bell, "Great Authors."

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(Dyorak).

THE British beam system of wireless telegraphy has broken the world's records for long-distance telegraphic communication, by exchanging mes-sages for hours on end at a speed of 400 words per minute, with reception too clear for repetition to be neces-

THE League of Nations headquarters at Geneva, Switzerland, will soon be able to telephone to Washington, Havana, and Ottawa. Switzerland is to become a part of the trans-Atlantic radio telephone system almost imme diately. The Cuban and Canadian re-presentatives of the League Council can then discuss League problems with the home Government by telephone, while the League may also talk to Washington on questions like disarmament, in which the United States is collaborating.

STATION 2XE, the short-wave transmitter of A. H. Grebe and Co., Inc., of New York, which began operating with 250 watts power, simultaneously with WABC, has been raised to 1000 watts. The station has already been reported by listeners as far distant as Trieste, Italy. The wavelength used is 58.5 metres. At first the station was operated on 63 metres in experimental broadcasts. The short-wave station will now be employed with WABC for all programmes.

WHEN panels have been repaired, unwanted holes carefully filled in, etc., a good overall finish may be given by smearing the panel with a lubricating oil and rubbing well with a piece ing on and rubbing well with a piece of fine sandpaper is a circular motion. If the sandpaper is not fine scratches will result. A circular movement will give a better finish than backwards and forwards. Alternatively, fine emery powder and a well-olied, soft, non-finffy rag may be used instead. Finish with a good rubbing with a clean rag and a perfectly flush and smooth panel having a dull closs will

THERE are still several fields of research in wheless unexplored, and the future may hold some sur-The channels or wavelengths that would be utilised for communicating with portable sets are the ultrashort wavelengths of the order of, say. ten metres and under. These regions in the electro-magnetic spectrum of frequencies are being examined close ly and continuously or late, and addi-tional useful information is being ascertained, but it is unsafe to say that there is any encouragement provided

AUTHORITY to construct the most modern high-power broadcast station in the west has been granted to KNX, Los Angeles, California, the "Evening Express" radio station by the Federal Radio Commission. A 5000-watt transmitter is now being built in the east and will be dedicated to the radio audiences of southern Califor ia and the entire west within a very short time. The new equip-ment will embody the very latest developments in modern radio broadcast. and is expected to be heard at almos inconceivable distances. Listeners will be able to tune KNX with an ease never before possible, and the entire continent will be brought closer to Los Angeles and Southern California.

THE reason that an accumulator (wet A battery) appears to have two different capacities or rates of discharge is that there are two methods of discharging it. These two methods of discharging it. These two methods are: (1) continuous dis-charge, and (2) intermittent discharge. When used for wireless pur-poses the discharge is continuous that is to say, that there is a steady drain on the battery from the time the set is switched on until the time it is switched off again. Under such cir cumstances the battery has a far more arduous duty to perform than when it is used intermittently for coil ignition of a motor-ear, or similar very short period discharges. In the latter case when a current is taken out of the accumulator for a very short time, the long rests between the discharges enable the accumulator to recuperate in some degree; and, consequently, its capacity to rield current is considerably greater when this current is taken in short discharges with long periods of rest between, than when it is taken in one long continuous discharge. As a matter of fact, about twice as much current can be got out of a battery when it is discharged intermittently as compared with when it is discharged continuously. So that if your accumulator is rated at, say, "twenty" actual ampere hours and "forty" ignition, it means to say that when used for a continuous discharge, such as wireless, it will only yield one ampere for twenty hours, or two am-peres for ten hours, but if used for short intermittent discharges almost

double the amount of current could

WHEN connecting your loudspeaker 8.34: Instrumental trio—Auckland Trio, "Scherzo" from "Seventh Trio" to the set be sure (unless a filter (Beethoven).

9.9: Weather forecast.
9.10: Soprano solos—Mrs. Burgess, (a) "Sunrise" (Aylward); (b) "Hark, Hark, the Lark" (Schubert).

9.18: Recitations—Miss Maisie Carte-Lloyd, (a) "The Lesson of the Water Mill" (Doudney and Andrews); (b) "Baby."
9.26: Pianoforte solo—Mr. Cyril Towsey, "La Cathedral Engloutie" (De-

bussy) 9.30: Baritone solo-Mr. H. Barry Coney, "The De'il's Awa with the Ex-

ciseman" (Old Scattish).

9.34: Instrumental—Ingali's Hawaiians, (a) "Coral Sands of Hawaii" (Heagney); (b) "Wreath of Princess" (Hopkins); (c) "Wailana," (traditional).

0.42: Contratto solo—Miss Martha Williamson. "Three Fishers" (Hullah).
0.46: Instrumental trio—Auckland Trio, "Autumn and Winter" (Glazounow).
0.54: Tenor solo—Mr. H. Errl..gton, "O Mistress, Mine" (Quilter).
0.58: Banjo—"Heebee Jeebees" (Reser).
10.2: Vocal quartet—Mr. Barry Coney's Quartet, "The Lady of the Lea"

(Smart). 10.6: God Save the King.

2YA, WELLINGTON (420 METRES), THURSDAY, JULY 19.

3 p.m.: Chimes of the G.P.O. clock.

3.1: Selected gramophone items.4.30 and 4.55: Sports results to hand.

Close down.

Close down.
Children's session—Aunt Gwen. Plano solo, Cousin Nessie, "Dance of the Geisha" (Niemann). Song, Cousin Rosina, "Companions" (Hill). Story, Aunt Gwen. Ukulele solo, Cousin Zac, "Medley." Birthdays. Plano solo, Cousin Nessie, "Etude in F Sharp" (Arensky). Recitation, Cousin Kathleen, "Lines and Spaces" (Milne). Song, Cousin Rosina, "Forget-Me-Nots" (Hill). Ukulele solo, Cousin Zac, "Medley." Recitation, Cousin Kathleen, "So Was I" (MS.).

News session, market reports, and sports results.
Lecturette—Miss M. S. Christmas (canine nurse), "Cats, and How to Treat Them."
Chimes of the G.P.O. clock.

Treat Them."

8.0: Chimes of the G.P.O. clock.
Studio concert by the Wellington Municipal Tramways Band (conductor, Mr. T. Goodall), assisted by 2YA artists.

8.1: March—Band, "Strauss' (Maricape).

8.3: Tenor solo—Mr. Chas. Williams, "Eleanore" (Coleridge-Taylor).

8.10: Overture—Band, "The Pied Piper" (Ham).

8.17: Vocal quartet—Lyric Quartet, "Sally in Our Alley" (Carey).

8.21: Waltz—Band, "Innocence Dreams" (Picorini).

8.27: Bass solo—Mr. W. Binet Brown, "The Last Call" (Sanderson).

8.28: Cornet duct—Mr. T. Goodall and Bandsman W. Kay, "Forest Warblers" (Rimmer).

8.28: Vocal quartets—Lyric Quartet. (a) "Humpty, Dumpty" (Hughes);

(b) "Three Crows" (Maccy).

5.44: Overture—Band, "Esmerelda" (Hermann).

8.51: Contralto solos—Miss Evelyn Robinson, (a) "Greatest Miracle of All" (Guion); (b) "O Golden Dawn" (Atkinson).

8.57: Weather forecast.

8.57; Weather forecast,
8.59; Vocal duet—Messrs. Chas, Williams and Will Goudie, "The Two
Beggars" (Lane Wilson).
9.4: Selection—Band, "Macbeth" (Verdi).
9.16: Vocal quartet—Lyric Quartet, "Fishing" (Parks).
9.20: March—Band, "Frangesa" (Marlo Costa).
9.26: Contraite solos—Miss Evelyn Robinson, (a) "My Exquisite Love"
(McGeogh); (b) "The Rose, the River and the Sea" (Johnson).
9.32: Humoresque—Band, "Who's Dat a-calling?" (Truman).
9.39: Baritone solo—Mr. Will Goudie, "West Country Courting" (Sanderson).

son \

9.41: Characteristic sketch—Band, "The Gazeka's Parade" (Dupont), 9.50: Vocal quartet—Lyric Quartet, "The Rosary" (Nevin), 9.54: March—Band, "Le Roi" (Shipley-Douglas),

God Save the King.

SYA, CHRISTCHURCH (306 METRES), THURSDAY, JULY 19.

3 p.m.: Afternoon session-Selected studio items. 4.25: Sports results.

for the prophets who foresee the early arrival of miniature and portable intercommunicating outlits.

A therefore is any encouragement provided and specific provided by Chuckle and Aunt Pat. Chorus, "How Do You Do, Everybody?" by Chuckle and Aunt Pat. Maori communicating outlits.

A therefore is any encouragement provided and specific provided by Chuckle and Aunt Pat. Chorus, "How Do You Do, Everybody?" by Chuckle and Aunt Pat. Maori songs by Cousins "Pungatair" and "Atawhai." Maori legends stories by Chuckle. Choruses and songs by the little Maori folk from Waipounimai College. 7.15: News session.

7.30: Talk by Mr. Battersby on "Popular Electricity."

7.30: Talk by Mr. Battersby on "Popular Electricity."

8.0: Chimes and overture.

A programme of songs of the Victorian period.

8.5: Contralto solos—Mrs. Ann Harper, (a) "A Song of Sleep" (Somerset); (b) "Echo" (Somerset).

8.13: Pianoforte solos—Miss Alleen Warren, (a) "Water Wagtail" (Cyrll Scott); (b) "Elevation" (Chaminade).

8.17: Soprano and tenor duet—Madame Gower-Burns and Mr. Harold Prescott "Go, Pretty Rose" (Marzials).

8.21: Flute solo—Mr. T. H. Amos, "Beneath Thy Window" (Le Thier).

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8.21: Flute solo—Mr. T. H. Amos, "Beneath Thy Window" (i.e Thier).
8.25: Soprano solos—Madame Gower-Burns, (a) "The Beating of My Own Heart" (Macfarren); (b) "Twickenham Ferry" (Molloy).
8.33: 'Cello solo—Mr. Harold Beck, "Ave Verum" (Mozart).
8.37: Tenor solo—Mr. Harold Prescott, "Maiden, Mine" (Sterndale-Bennett).

8.41: Instrumental trio—Christchurch Broadcasting Trio, "Andantino and Finale" (Gade).

8.40: Recitation—Miss K. O'Brien, "Walnuts and Wine,"

8.53: Cornet duet—Messrs. R. Ohlson and Albert Benson, "Hold Thou, M.J. Hand" (Briggs).

8.59: Weather report. Overture.

9.5: Overture.

9.5: Soprano and contralto duet—Madame Gower-Burns and Mrs. And Harper, "Pack Clouds Away" (Hunt).

9.9: Pianoforte solos—Miss Alleen Warren, "Idylle Arabe" (Chaminade) (b) "Legende del Castillo Mors" (Chavarri).

9.14: Tenor solos—Mr. Harold Prescott, (a) "The Devout Lover" (White) (b) "Once Again" (Sullivan).

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