Full Programmes for Next

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NOTES AND COMMENTS

(By "Switch.")

Accumulators of the lead plate type maintain their voltage very well until almost completely discharged. Although this is a desirable characteris-tic, it makes the voltmeter a poor in-dicator. A hydrometer is the most dicator. A hydrometer is the most satisfactory device, and has the added advantage of being inexpensive. If a voltmeter is used, the battery should be tested under "load." Usually the receiver draws very little current, so merely turning on the filaments helps only slightly. There are voltmeters on the market which have a low resistance of high current carrying capacity. of high current carrying capacity, which is connected across the battery when it is tested. These are quite sat-

An American writer asks: "How can any human being ever be blase about the wonders of broadcasting when he realises that the isolated lumberjack, sitting down to his crude meal of can-ned billy and hard bread, may mellow his supper with the greatest music the world has ever offered? How can any one accept as a matter-of-fact the radio programmes sent out to-day, when he knows that men, women and children to whom finer music was an unknown thing now have the best of it in their daily lives?"

If the set is to be taken away for use on a motor tour and is to be operated anywhere near the car, it is operated anywhere near the car, it is a simple matter to use the car battery for an A battery, thus avoiding the necessity of carrying an accumulator or dry cells specially for the purpose. If the car battery is of the 12-volt type it will be necessary to take off only 6 or 4 volts, according to the type of valves used. In that case portion of the battery may also be used as a C battery.

The new shielded grid valve has high amplification constant, which makes it possible to attain a radio frequency voltage amplification per stage of from 30 to 50 depending on the circuit constants with which the tube is operated. This gain is much more than would be lost in a reasonably well designed and coupled chain of tuned

In cases where interference is caused by the electric motors used in vacuum cleaners or vibrators, the trouble may often be reduced by shunting two 1 mfd. bypass condensers connected in series, across the 110 volt line, at the outlet where the electrical appliance is connected. The mid point of the two condersers is connected to ground. preferably through a 6 ampere fuse, so that in case one of the condensers be-came defective, the fuse would operate and prevent a fire. Of course, any motor which produces had radio interference is usually in need of attention, such as cleaning the brushes and commutator, which can be done by any reliable electric service shop.

In Australia there are many listeners perhaps a majority, who rely on the crystal sets for their services. Some particulars supplied by the Commonwealth Postmaster-General's Department to the Royal Commission last year showed that in the metropolitan areas, excepting Hobart, the crystal list teners amounted to over 60 per cent of the total number of listeners

When listening-in away from home than 50 feet, and should be as high as circumstances will permit. It is a good plan to use insulated wire if there is any fear of poor insulation with bare wire. The temporary earth may consist of a wire making good electrical connection with a spade, pick, or iron rod driven a short distance in moist

An ordinary 2 ampere tungar battery charger may be used as an A battery eliminator by connecting five 1½ volt dry cells in series across the output of the charger, with the positive of the 73 volt group of dry cells connected to the positive charging lead, and the negative of the dry cell group to the negative charging lead. The dry cells act as a filter condenser of high capacity, and will last practically their shelf life, since little current is drawn from them while the set is in operation. It is important, however, to turn off the receiving set filament switch as well as the 110 volt power input to the charger, when finished with reception, for other-wise the dry batteries will quickly be run down.

A loudspeaker output unit or an output filter is a device which provides an auxiliary path for the direct current to the power valve which prevents it flowing in the windings of the speaker. It is so designed that the alternating or speech current goes through the speaker, where it is wanted. An output transformer performs the same function. The object is to prevent burning out the speaker winding, and, what is more important, to eliminate this constant strain which impairs the quality and possible output of some types of speak-

KDKA at Pittsburg, U.S.A., broad-casts simultaneously on 3.15.8, 62.5 and 27 metres nightly, except Sundays, be-tween 8 and 10 p.m. Occasionally the 42.95 metres wavelength is used. Transmission on 2.5 metres has been abandoned for the present.

Sunday, March 18th

1YA AUCKLAND (333 METRES)—SUNDAY, MARCH 18.

3 p.m.: Afternoon session-Selected studio items. 40: A literary selection by the Announcer 4.30: Close down.

60: Children's service, conducted by Uncle Leo, assisted by cousins from the Beresford Street Sunday School.

6.45: Close down.
6.55: Relay of evening service from the Devonport Methodist Church.
Preacher, Mr. Martin; organist, Mr. Len. Elliott; choirmaster, Mr.
F. W. Beck.

During the evening, J. H. Maunder's "Song of Thanksgiving" will be rendered by the choir and selected soloists.

8.30: Relay of Municipal Band concert from the Auckland Town Hall. Band-

master, Mr. Christopher Smith. 9.30: A thought.

9.32: God Save the King.

2YA WELLINGTON (420 METRES)—SUNDAY, MARCH 18.

6 p.m.: Children's service, conducted by Uncle Ernest, assisted by St. Peter's Choristers.

6.55: Relay of evening service from the Terrace Congregational Church.

Preacher, Rev. Ernest R. Weeks; musical director, Mr. Len. Barnes; organist, Mr. H. Brusey. 8.36: Studio concert.

Studio concert.

Vocal quartet—Etude Quartet, "There is No Death" (O'Hara).

Pianoforte solo—Mr. Gordon Short, "Rhapsodie in B Minor" (Brahms).

Baritone solo—Mr. Ray Kemp, "O, My Father" (Dubois).

Soprano solo—Miss Gretta Stark, "Songs My Mother Sang" (Grimshaw).

Instrumental trio—Symons-Ellwood-Short Trio, "First Part of Trio in

a Minor" (Tschaikowsky).

Tenor solo—Mr. Frank Skinner, "A Song and a Dream" (Cadman).
Instrumental trio—Symons-Ellwood-Short Trio, "Second Part of Trio in
a Minor" (Tschaikowsky).

Contralto solo—Miss Rita Arnold, "I Wonder If Ever the Rose" (Slater).
Vocal quartet—Etude Quartet, "Rest, Gentle Maiden" (Bishop).

3YA CHRISTCHURCH (306 METRES)-SUNDAY, MARCH 18.

5.45 p.m. Children's song service, conducted by Uncle Sam, assisted by scholars from the Papanui Methodist Sunday School.

6.30: Relay of evening service from the Church of Christ, Moorhouse Avenue.

Preacher, Rev. Howard Earle; organist, Miss E. Hepburn; choirmaster, Mr. H. Ames. Choral and solo items included in church

The following concert will be given from 3YA studio after the church service: 8.0: Soprano solo—Mrs. Frank O'Brien, "The Dear Little Shamrock" (arr.

Rimbault).

8.4: Clarionet solo-Mr. M. E. Withers, "Adagio from Concerto, Op. 107" (Mozart).

8.9: Tenor solo—Mr. Frank Morrison, "God's Garden" (Lambert).

8.12: Recitation—Miss Maiona Juriss, A.T.C.L., "The Gift of T

(Whittier).

(Whittier).

8.17: Contralto solo—Miss Constance Flamank, "The Enchantress" (Hatton).

8.21: Pianoforte solos—Miss Bessie Pollard, A.T.C.L., (a) "Folk Song" (Mendelssohn); (b) "Scherzo Cappriccio" (Mendelssohn).

8.26: Soprano solo—Mrs. Frank O'Brien, "Believe Me If All Those Endearing Young Charms" (arr. Rimbault).

8.31: Clarionet solo—Mr. M. E. Withers, "Mignon" (Thomas).

8.36: Tenor solo—Mr. Frank Morrison, "Vale" (Russell).

8.39: Recitation—Miss Maiona Juriss, A.T.C.L., "White Roses" (Barclay).

8.46: Contralto solo—Miss Constance Flamank, "Entreat Me Not to Leave

8.46: Contralto solo—Miss Constance Flamank, "Entreat Me Not to Leave Thee" (Gounod).

8.52: Pianoforte solos—Miss Bessie Pollard, A.T.C.L., (a) "Shadow Show" (McDowell); (b) "La Reveille-Matin." God Save the King.

4YA DUNEDIN (463 METRES)—SUNDAY, MARCH 18.

5.45 p.m.; Children's song service, conducted by Big Brother Bill, assisted by some young singers from Knox Church Sunday School.

7.0: Relay of harvest festival service from Methodist Central Mission.

Preacher, Rev. W. Walker; organist, Mr. Chas. A. Martin.

8.15: Studio concert.

Monday, March 19th

1YA AUCKLAND (333 METRES)—MONDAY, MARCH 19. SILENT DAY.

2YA WELLINGTON (420 METRES)-MONDAY, MARCH 19.

3 p.m.: Chimes of the General Post Office clock, Wellington.

We Announce a Complete line of Radiolas for all methods of operation Radiolas for all requirements of location Included in the new Radiola because of their unrivalled perfection of tone and simplicity of operation. Insluded in the new Radiola line are dry battery sets, storage sets and, of course, the sets that operate directly from the electric light cur-rent. You haven't really heard radio until you have listened to a RADIOLA. Send for pamphlets.

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WELLINGTON

3.1: Selected gramophone items.

6.0: Children's hour—Uncles Toby and Jeff and a party of performers from the Wellington Technical College. Songs, stories, greetings, and

7.0: News session, market reports, and sports results.7.40: Lecturette—Mr. H. E. Mastyn, of the Labour Department, "Weights and Measures."

8.0: Chimes of the General Post Office clock, Wellington.

8.1: Overture—Selected. A special performance of the Indian song cycle, "The Golden Threshold," by Sarojini Naidu, music by Liza Lehman, will be given by the Ariel Singers.

Ariel Singers.

8.5: Vocal quartet—Ariel Singers, "Nightfall in the City of Hyderabad."

Bass solo—Mr. J. M. Caldwell, "Song of a Dream."

8.12: Flute solo—Mr. L. W. Rothwell, "Dainty Dance Caprice" (Lemmone).

8.17: Elocution—Mr. Sydney Tingey, "Sergeant Buzzfuz" from "The Pickwick Papers" (Dickens).

8.22: Instrumental trio—Symons-Ellwood-Short Trio, "Second and Third Movements from Trio in E Flat" (Beethoven).

8.32: Contralto solo—Miss Ngaire Coster, "The Serpents Are Asleep Among the Poppies."

the Poppies."

Vocal duct—Mr. Roy Hill and Mr. J. M. Caldwell, "Palanquin Bearers."

8.40: Violin solo—Miss Ava Symons, "Second Romance" (Tours).

8.45: Soprano solo, with flute obbligato by Mr. L. W. Rothwell—Miss Jeanette Briggs, "The Snake Charmer."

Bass solo and quarteet—Mr. J. M. Caldwell and Ariel Singers, "The Royal Tombs of Golconda."

8.53: Cornet solo—Mr. H. Dutton, "Zanette" (Code).

9.0: Weather report and forecast.

8.53; Cornet solo—Mr. H. Dutton, "Zanette" (Code).
9.0: Weather report and forecast.
9.2: Tenor solo—Mr. Roy Hill, "You Flaunt Your Beauty in the Rose."
Vocal duet—Miss Ngaire Coster and Roy Hill, "Like a Serpent to the Calling Voice of Flutes."
9.10: Flute solo—Mr. L. W. Rothwell, (a) "Valse, Op. 64, No. 1" (Chopin);
(b) "Minuet" (Beethoven).
9.16: Elocution—Mr. Sydney Tingey, "Cardinal Wolsey's Farewell" from "Henry VIII" (Shakespeare).
9.21: Instrumental trio—Symons-Ellwood-Short Trio, "Death of Ase" and "Morning" from "Peer Gynt Suite" (Greig).

"Morning" from "Peer Gynt Suite" (Greig). 931: Vocal trio—Ariel Singers, "New Leaves Grow Green on the Banyan Twigs."

Bass solo and quartet—Mr. J. M. Caldwell and Ariel Singers, "To a Buddha, Seated on a Lotus."

9.39: Violin solo—Miss Ava Symons, "Poem" (Fibich).

9.43: Contralto solo—Miss Ngaire Coster, "Alabaster."

9.48: Cornet solo—Mr. H. Dutton, "Wendource" (Code).

9.54: Vocal quartet—Ariel Singers, "Nightfall in the City of Hyderabad."

10.0: God Save the King.

3YA CHRISTCHURCH (306 METRES)-MONDAY MARCH 19.

3 p.m.: Afternoon session—Selected studio items. 4.30: Close down.

6.0: Children's hour-Uncle Jack and Aunt Edna. Stories, songs, and birthday greetings. 7.15: News and reports.

Chimes.

Band concert by Christchurch Municipal Band and assisting 3YA artists. Band concert by Christchurch Municipal Band and assisting 3YA artists.

Band under the conductorship of Mr. A. J. Schnack.
Contralto solos—Miss Nancy Bowden, (a) "Caprice" (Furnell); (b)

"When the House is Asleep" (Haig).

March—The Band, "Old Comrades" (Teike).

Bass solo—Mr. W. H. Inkster, "The Link Divine" (Piccolomini).

Selection—The Band, "Maritana" (Wallace).

Mezzo-soprano solos—Miss Rita Lucas, (a) "To the Forest" (Tschaikowsky); (b) "Damon" (Stange).

Waltz—The Band, "Songe d'Automue" (Joyce).

Recital—Mr. Hiram Dunford, "Mary Ann."

Weather report and forecast.

Recital—Mr. Hiram Dunford, "Mary Ann."
Weather report and forecast.
Hymn—The Band, "Nearer, My God, to Thee" (Mason).
Contralto solo—Miss Nancy Bowden, "The Sands of Dee" (Clay).
Fantasia—The Band, "Friendships" (Rippen).
Bass solos—Mr. W. H. Inkster, (a) "On the Shores of the Aegean Sea"
(Marsh Little); (b) "Shipmates of Mine" (Sanderson).
One-step—The Band, "Parce" (Padilla).
Mezzo-soprano solo—Miss Rita Lucas, "Cradle Song" (Kreisler).
Selection—The Band, "Austral" (Bulch).
Recital—Mr. Hiram Dunford, "A Modern Sermon on Old Mother
Hubbard."
March—The Band "On the Quarter-deck" (Alford)

March-The Band, "On the Quarter-deck" (Alford). God Save the King.

4YA DUNEDIN (463 METRES)-MONDAY, MARCH 19. SILENT DAY.

Tuesday, March 20th

1YA AUCKLAND (333 METRES)-TUESDAY, MARCH 20,

3 p.m.: Afternoon session—Selected studio items.
3 30: Talk on "Electric Cooking," by a representative of Messrs. Turnbull and Jones.

4.0: Literary selection by the announcer.

4.30: Close down.
6.0: Children's hour—Cinderella.
7.15: News and reports.

8.1: Relay of forchestral overture from Majestic Theatre Orchestra, under the conductorship of Mr. J. Whiteford-Waugh.
8.16: Soprano solos—Mrs. J. Parry, (a) "In a Garden" (Hawley): (b) "The

Wreath" (Wilson).

Wreath" (Wilson).

8.22: Instrumenal trio—Bosworth-Hemus-Towsey Trio, "Trio in B Flat, First Movement" (Schubert).

8.31: Baritone solo—Mr. Walter Brough, "Fishermen of England."

8.35: Violin solo—Miss Ina Bosworth, "Variations" (Tartini).

8.40: Contralto solo—Madame Irene Ainsley, "Aria—Ah! Rendimi" (Rossi).

8.45: Instrumental trios—Bosworth-Hemus-Towsey Trio, (a) 'Poem' (Fibich);

(b) "Spanish Dance" (Moskowski).

8.53: Tenor solo—Mr. Robert Peter, "All Hail, Thou Dwelling" from "Faust" (Gound)

(Gounod).

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