Programmes Continued (Continued from page 11.)

9,29: Humour-Mr. Geo. Titchener, "I'd Like to Shake, Shake Shake-

speare. 9.34: Instrumental—The Orchestra, request numbers.

9.42: Duet-Messrs. F. Bryant and R. S. Allwright, "Here's to the Lass" (Newton).

9.46: Concertina—Mr. R. M. Stratmore, "Sweet Chiming Bells" (traditional). 9.51: Light vocal—The Glad Idlers, "Wandering Time" (Weston and Milton). 9.56: Quartet—Melodie Four, "Slow River" (Schwab, arr. Frank Crowther). 10.0: Dance programme—Vocal choruses by the Glad Idlers.

11.0: Close down.

3YA CHRISTCHURCH (306 METRES)—SATURDAY, JUNE 9.

2.45 p.m.: Relyay description of Rugby football at Lancaster Park. Children's session—Uncle Sam and Aunt May—Bedtime stories, songs, music and choruses.

7.15: News session. 7.30: Sports results.

8.0.: Chimes and overture. Mr. Ernest Rogers, (a) "Our Dinah," with bones and tambourine effects by Mr. Alf Cotton, (Scott Gatty), (b) "For You Alone"

(Gheel).

(Gheel).

8.13: Mouth organ solos—Mr. Alfred Tohill, (a) "Marcheta" (MS), (b)

"The Bells of St. Mary's" (MS).

8.19: Bass solo—Mr. J. Filer, "Bombardier" (Rawlings).

8.23: Scottish humour in song—Mr. Bracey Wilson, "Hooch Aye" (Frame).

8.26: Plantation chorus—Avonian Minstrels, "It's Gone," with bones and fambourine effects by Mr. Alf. Cotton (Scott Gatty).

tamourine elects by Mr. All. Cotton (Scott Gatty).

8,32: Instrumental Trios—Christchurch Broadcasting Trio—(a) "Andante" (Papini), (b) "Capriccio" (Reissiger).

8,42: Tenor solo—Mr. D. Clapperton, "Meadow Lark" (Keilen).

8,46: Burlesque—Mr. Sidney Comfort, "Told by the Steeplejack" (own ar-

rangement). 8.52: Happy songs at the piano with ukulele obligato—Misses Muriel Johns (piano) and Edna Johnson (ukulele), one or two happy songs (own arrangement).

8.58: Weather forecast. Overture.

Plantation chorus-Avonian Minstrels. "A Darktown Lullaby," with 9.5:bones and tambourine effects by Mr. Alf. Cotton (Jones-Hinds). 9.9: Scottish humour—Mr. Bracey Wilson, "The Waggle o' the Kilt"

(Lauder). 9.14: Bass solo-Mr. J. Filer, "The Bosom of the Deep" (Johnson).

9.18: Instrumental Trios—Christchurch Broadcasting Trio, (a) "Y Lilies" (Hope), (b) "Gavotte" (Thomas).
 9.28: Humorous recital—Mr. Sidney Comfort, "The Curate" (original).

9.23: Tenor and bass duet-Messrs. E. Rogers and J. Filer, "The Battle Eve" (Bonheur). §.37: Happy songs at the piano with ukulele obligato, Misses Muriel Johns

(piano), and Edna Johnson (ukulele), More Happy Songs (own arrangement). 9.43: Mouth organ solos—Mr. Alfred Tohill, (a) "Destiny Waltz" (MS), (b)

"Pack Up Your Troubles in Your Old Kit Bag" (MS).

9.49: Monologue—Mr. Frank Olds, "Hello! What Are You Doing Here?"

951: Plantation chorus—Avonian Minstrels, "De Lecture." with bones and tambourine effects by Mr. Alf. Cotton (Scott Gatty).

Dance music until 11 p.m.

God Save the King.

4YA DUNEDIN (463 METRES)—SATURDAY, JUNE 9.

2.45 p.m.: Relay description of Rugby football match (senior grade) from Carisbrook Grounds.

5.9: Close down. 7.15: News session.

7.30: Address on "Psychology" by Mr. II. McQueen of the Technical Colloge (under the auspices of the Workers' Educational Association).

8.0: Town Hall chimes.

8.1: Relay of orchestral music from the Empire Theatre.
8.10: Vocal quartet—4YA Harmonists. "Alice, Where Art Thou?" (Asher).
8.14: Pianoforte solos—Miss Aroha Allan, (a) "The Doll Dance" (Brown).
(b) "Polly" (Zamecnik).

(b) "Pony" (Zamechik).
8.19: Soprano solo—Miss Roma Buss. "Song of Sunshine" (Thomas).
8.22: Violin solos—Mr. A. R. Watson, (a) "Polonaise" (Bohm), (b) "Romance" (Thelma).
8.30: Tenor solo—Mr. R. A. Mitchell, "Passing By" (Purcell).
8.33: Cornet solo—Mr. George Christie, "The Mocking Bird" (Cox).
8.40: Mezzo-soprano solo—Miss Mollie Andrews, "The Hills of Donegal" (Sandarson)

(Sanderson).

8.43: Relay of orchestral music from the Empire Theatre.
8.50: Baritone solo—Mr. F. M. Tuohy, "The Night Nursery" (Arundale).
8.53: Flute solos—Mr. J. W. Stewart, (a: "Belladonna" (Buckner), (b)
"Philomeleus Klage" (Popp).

9.3: Weather forecast.
9.5: Vocal quartet—4YA Harmonists, "A Lover's Ditty" (Stanford).
9.8: Pianoforte solos—Miss Aroha Allan (a) "Simple Aven" (Thome), (b)

"Hebestraume" (Lizst).

0.15: Soprano solo—Miss Roma Buss. "The Willow" (Thomas).

9.19: Violin solo—Mr. A. R. Watson, "Carnival de Venice" (Haddock).

9.21: Tenor solo—Mr. R. A. Mitchell, "Be Thou Faithful Unto Death" (Mendelssohn). 9.29: Cornet solos—Mr. George Christie, (a) "Tranquillity" (Hume), (b)

"Romance" (Jenkins). 9.35: Mezzo-soprano solo-Miss Mollie Andrews, "Love, Here Is My Heart"

(Silesu). 9.38: Flute solo—Mr. J. W. Stewart, "Loreley" (Paraphrase), (Brook). 9.43: Baritone solo—Mr. F. M. Tuohy, "Eleanore" (Coleridge-Taylor). 9.46: Vocal quartet—4YA Harmonists, "Good-night, Good-night, Beloved"

(Pinsuti). 9.50: Relay of orchestral selections from the Empire Theatre

10.0: Close down

Sunday, June 10

1YA AUCKLAND (333 METRES)—SUNDAY, JUNE 10.

3 p.m.: Afternoon session—selected studio items.

4.0: Literary selection by the Announcer. 4.8: Selected studio items.

4.30: Close down.

6.0: Children's song service conducted by Uncle Leo, assisted by cousins from Dominion Road Methodist Sunday School.

7.0: Relay of evening service from St. Andrew's Church. Preacher, Rev. Lamb Harvey. Organist, Dr. Neil McDougall.
 8.50: Relay of Auckland Municipal Band Recital from Town Hall (under the conductorship of Mr. Christopher Smith).

9.39: Close down.

2YA, WELLINGTON (420 METRES), SUNDAY, JUNE 10.

11 a.m.: Relay of morning service of the Cambridge Terrace Congregational Church. Preacher, Rev. Thomas Yates; organist and choirmaster,

8 p.m. to 4.30: Afternoon session. 6.0: Children's session—Uncle Ernest and St. James's Presbyterian Choir. 6.55: Relay of evening service from St. Thomas's Anglican Church, Newtown.

Preacher, Rev. F. S. Ramson, L.T.I. (Vicar of Petone); organist and choirmaster, Mr. Wenzel Collie, L.L.C.M.

8.15 (approx.): Relay of band recital of the Port Nicholson Silver Band from the Grand Opera House. (Conductor, Mr. J. J. Drew.)

3YA CHRISTCHURCH (306 METRES)—SUNDAY, JUNE 10

5.30 p.m.: Children's song service, conducted by Uncle Sam, assisted by scholars from the Tennyson Street Congregational Sunday School.
6.30: Relay of evening service from Trinity Congregational Church. Preacher, Rev. D. Gardner Miller.

8.15: Relay of 2YA Wellington (Band Concert by the Port Nicholson Band, from the Grand Opera House, Wellington). God Save the King.

4YA DUNEDIN (463 METRES)—SUNDAY, JUNE 10.

5.30 p.m.: Children's song service conducted by Big Brother Bill, assisted by the Y.M.C.A. Boys' Division Choir.

6.30: Relay of service from the Methodist Central Mission. Preacher, Rev. W. Walker. Organist, Mr. Chas, A. Martin, 8.0: Relay from His Majesty's Theatre of concert by the Kaikorai Band,

under the conductorship of Mr. E. Franklin.

9.15: Close down.

Features

(Continued from Page 7). Deep," "Come to the Fair," and "Home, Boys, Home." In two instances there will be chorus accompaniment.

Miss Joyce Seth-Smith's items on Monday evening will be "Blackbird's Song," "The Faery Pipers," "The Nightingale," and "The Forge."

A talk on aviation will be given by

Captain J. L. Findlay, M.C., on Monday evening.

Following on their success with several musical plays, notably "The Quaker Girl," which was presented recently, the Radiolian Quartet will on Wednesday give a radio production of "Our Miss Gibbs," when the principal vocal items of this very popular play will be sung. .The members of this quartet are:—Mrs. Claris Shaw, Miss Mildred Russell, Mr. Gregory Russell, and Mr. W. J. Richards.

Also to be heard on Wednesday even ing will be the Studio Trio-Mr. E. G. Williams (tenor trombone), Mr. S. N. Crisp (euphonium), and Mr. George Ferris—who will give an excerpt from "The Sentimental Bloke."

A vocal programme in which New Zealand composers will feature prominently has been prepared for Thursday evening. Some of the songs to be sung will be well known, notably those by Mr. Alfred Hill, but others will be heard for the first time by a great many listeners. In the hands of the Madame Gower-Burns Grand Opera Quartet, however, full justice will be done to the melodies.

Apart from the musical composi-tions, the works of New Zealand authors such as W. Pember-Reeves and Will Lawson will be interpreted by Miss Lucy Cowan and Mr. J. F. Can-The two pieces worthy of mention are "The Passing of the Forest" and "The Song oof the Saws." Instru-mental items on the programme will be contributed by the Studio Trio-Mr. S. E. Munday (clarinet), and Mr. Percy W. Reeves (trumpet).

"Monsieur Beaucaire," the romantic opera by Massager, will form the basis of the vocal portion of the entertainment on Friday evening, the singers being the members of Miss Frances Ham-erton's Melodious Quartet. Messayer made his name famous with light opera compositions, and there are many bright and tune-ful melodies in "Monsieur Beau-

Assisting the vocalists on Friday evening will be the Studio Trio-Mr Harold Beck ('cello), Miss Winifred Smith (elocutioniste).

There will also appear for the first time at 3YA on Friday the Munro Orchestra, which will dispense music of the popular kind.

Plantation melodies, complete with bones and tambourine effects, will figure on 3YA's radio vaudeville programme on Saturday evening. The vocalists will be the popular Avonion Minstrels, and Mr. Alf. Cotton will be responsible for the accompaniment. The same vocalists will also be heard in solo items, while one member, Mr. Frank Olds, will give a monologue.

Other star items on the evening's programme will be Mr. Bracey Wilson in Scottish humour, Misses Johns and Johnston in happy songs, with piano and ukulele. the Studio Trio, Mr. Alfred Tohill (mouth-organ), and Mr. Sidney Comfort (humorous recitations). Dance music will continue

The Rev. D. Gardner Miller, preacher at Trinity Congregational Church, will be on the air on Sunday evening. Afterwards will follow a rebroadcast of a concert given by the Port Nicholson Band in the Grand Opera House, Well-agton.

The Radio Depot 165 Manchester St., Christchurch,

E. G. SHIPLEY. RADIO SPECIALIST. Thone 4770.

Glossary of Wireless Terms

UNDER this heading we will give regularly sections of the glossary of wireless terms which is a prominent feature of the N.Z. Radio Listeners' Guide. In that book, although set in the smallest type, it occupies some 13 pages, and is definitely in our opinion the most comprehensve and complete glossary on modern lines which has been made available in the Dominion. For the benefit of our readers the glossary will be reprinted in our columns.

readers the glossary will be reprin

"A" RATTERY.—The alternative name for the low-tension (L.T.) battery. It is employed for heating (or lighting) the valves in a radio set. The "A" battery may comprise "dry" or "wet" cells (accumulator-type). It usually comprises one, two or three cells. In a "wet" "A" battery each cell has a normal voltage of about 2 volts. In a "dry" "A" battery each cell is of about 1½ volts. The terminal in the centre of the dry "A" battery each cell is the "plus" or "positive" and the terminal on the rim of the cell is the "minus" or "negative." In "wet" "A" batteries (or accumulators) the practice is to mark the "plus" or "positive" terminal with red colouring or to stamp the metal terminal with the "plus" (?) sign. The "minus" or "negative" terminal is invariably black coloured, and is marked with the "minus" (—) sign.

ABSORPTION.—The reduction in applitude of an other years days to lear

minus" (—) sign.

ABSORPTION.—The reduction in amplitude of an ether wave due to loss of energy occasioned by the resistance offered to it in its travel from the transmitter to the receiver. Trees, buildings, mineral deposits, mountains, etc., all mineral deposits, mountains, etc., all take their toll, resulting in depleted energy arriving at the receiver. The receiving aerial itself is capable of absorbing energy from aether waves in terms of its efficiency or receptivity.

A.C.—See "Alternating Current."

A.C. RECELVERS.—Receivers with many special valves and attachments allowing them to be plugged straight into A.C. mains without the necessity of batteries.

ACCUMULATOR.—A chemical appliance used for the storage of electrical energy, comprising a cell or cells, each containing a liquid acid or alkali and two metal plates (an anode or positive

plate and a cathode or negative plate). Small accumulators are sometimes rated commercially at the intermittent discommercially at the intermittent discharge plate, which is generally double that of the actual rate. An accumulator with acid electrolyte will deliver 2 volts per cell, while one with an alkaline solution shows about 1.2 to 1.5 volts.

ADAPTOR .- A term emplyed to de-ADAPTOR.—A term emplyed to describe various devices intended to adapt one piece of apparatus by its application so that some other device may be attached or used in conjunction with it, generally without the need of altering the existing appliance. An adaptor may also be a device for changing the characteristics of certain apparatus. A shortwave adaptor enables a wireless receiving set to extend its tuning range so that it will receive the ultra-short wave signals or broadcasting. Another type signals or broadcasting. Another type of adaptor permits the household electric

lighting mains to be used as an aerial.

AERIAL.—The wire or wires by means of which wireless waves are transmitted or received. In effect the aerial acts as one plate of a condenser, of which the earth is the other plate, and the air between is the insulating material, or, as it is generally called, the dielectric.

dielectric.

AERIAL CIRCUIT.—The aerial circuit embraces the aerial and all devices connected between the aerial and the earth, usually including a variable coneser and tuning coil.

AETHER.—Theoretically a medium of great elasticity, presumed to pervade all space and all solid and liquid bodies. It is the medium through which light, heat and radio waves are supposed to be transmitted. Not to be confused with the anaesthetic known as ether.

4YA ATTRACTIONS

A variation from the usual Tuesday band night entertainment has been arranged at 4YA, no band being available owing to the Winter Show. Nevertheless, an excellent programme has been arranged. It is of the miscellaneous popular type. Mr. Bert Rawlinson has some of the ever-popular negro spirituals to sing, and Mr. F. C. Cooper's bass voice will be heard in "Galloping Dick" and two other solos. Other singers contributing will be Mrs. J. Marshall (mezzo-soprano) and Mrs. D. Carty (soprano). Pianoforte solos will be played by Miss Marjorie Watts, and xylophone solos by Mr. Andrew Fraser. Monologues will be contributed by the talented Miss Anita Winkel, piano accordion solos by Mr. E. Heeney, and recitations by Mr. Carl Moller.

A humorous address will be given by Pastor More on Tuesday.

Thursday evening concerts at 4YA are now well noted, and next week there will be one of the same type, full of bright and amusing items.. Hymorous items can be expected from Mr. Carl Moller and Miss Hilda Seurr, while the soloists have chosen songs from light comedies.. These singers are Miss Betty Roberts, Miss Dorothy West, Mr. R. Wilson Brown, and Mr. J. B. McConneil.. Popular song numbers will be contributed by the Dunedin Banjo Trio.

Excellent music will characterise Friday's programme. Miss Mollie Vickers and Miss Florence Summer, Mr. L. E. Dalley, and Mr. J. B. Macpherson are the vocalists. Humorous recitations will be given by Miss Sheila Neilson.

Friday's concert will be preceded by a talk on books by Mr. H. Greenwood, librarian at the Athenaeum.

Saturday's concert at 4YA will be of the usual high standard. The 4YA Harmonists will be heard in solos and concerted items, leading off with the tions will be contributed, and there will be orchestral selections from the Empire Theatre.

TRANSATLANTIC TALK

REDUCTION OF RATES.

Radio telephone calls across the Atlantic increased 50 per cent, in the last two days, it was said at the offices of the American Telephone and Telegraph Company vesterday (says the "New Company yesterday (says the "New York Times" of March 6). This followed a reduction of 10 dollars (£2) a minute in rates, which, on the mininum three-minute call, meant a saving of 30 dollars (6) to the subscriber.

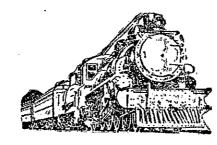
However, some doubt was expressed to to whether the increase would be maintained. It was pointed out that extension of the service to new countries or any development which at-tracted public attention has caused in the past a stimulation in business which proved temporary.

In accordance with the custom, the A. T. and T. did not announce the actual number of calls made Sunday and yesterday. Traffic by the new service has increased fairly steadily since it started a year ago, but the average of business never reaches the levels it attains on the first few days after opening of new circuits.

Increase of Business.

There have not yet been many calls from Sweden to the United States since service to that country was opened a week ago, although there have been calls in the other direction. The increased business noted in the past two days was divided about equally among all circuits. Traffic is usually heaviest between here and London. There is also substantial business to Germany, and it was said that, although a circuit to Paris has not been opened, there is already an inquiry for this service.

Storms which damaged both aerial lines and submarine cables were said to have hindered the opening of service to Paris. Early this year, winds blew down many telephone wires beold favourite, "Alice, Where Art tween London and the French capital, Thou?" Cornet, violin and flute seleccables at their terminal points. Re-building of the Paris telephone system is another factor in the delay.



Cheap Trips by Train

Popular Excursions

Beginning on 31st May

Another cheap excursion period for safe and happy holidays by rail will begin on 31st May. Excursion tickets issued from 31st May to 4th June (inclusively) will be available for return until 16th June.

The more the people take advantage of these facilities for economical comfortable trips on their own trains, the more the Railway Department will be encouraged to increase the oppor-

Extra trains — additional accommodation on King's Birthday holiday, 4th June.

Travel by Rail for Safety.

Communicate with the nearest Stationmaster, District Manager or Passenger Agent for full particulars.