

THE EVENING TIMES AND STAR, ST. JOHN, N. B., TUESDAY, DECEMBER 12, 1922

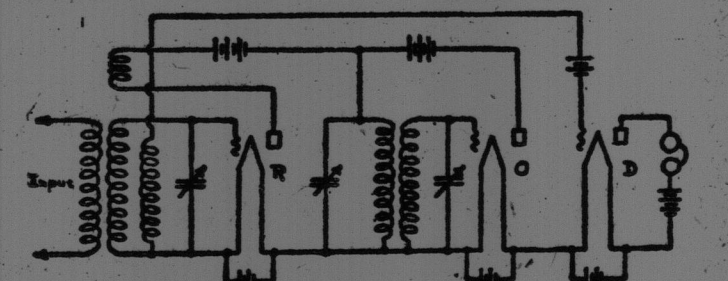
FIFTEEN MINUTES OF RADIO EACH DAY

By Edward N. Davis
Formerly Technical Electrical Expert For U. S. Government

Lesson No. 179. THE ARMSTRONG SUPER-REGENERATIVE CIRCUIT PLATE VOLTAGE VARIATION.

There are several methods by which super-regeneration may be accomplished through utilization of the circuits originated by E. H. Armstrong. One method employed two tubes, the first tube performing the functions of a regenerator and detector while the second tube acts as an oscillator and in this method exceptional amplification of signal is obtained by giving the circuit an alternately positive and negative resistance.

A second method uses three tubes, the first tube acting as a regenerator, the second tube as an oscillator and the third tube as a detector, this method obtaining super-regeneration through variation of the plate voltage. During the amplification of the incoming signal by simultaneous variation in both positive and negative resistance, the first tube acting as a regenerator and oscillator and the second tube as a detector.



In the accompanying diagram, super-regeneration is brought about through the method of varying the plate voltage with resultant variation in the amount of regeneration. The incoming signals are impressed upon the grid circuit of the regenerator tube (R) and after being amplified by the tube are further magnified through the magnetic coupling of the tickler coil by which a portion of the energy of the plate circuit is "fed back" to the grid circuit, thus producing a cumulative regenerative action. The tickler coil coupling is so arranged as to increase regeneration beyond the normal oscillating point of the tube. Tube (O) in connection with properly adjusted oscillatory circuits, produces oscillations which may have a frequency of 10-300 cycles per second, corresponding to a wave length of 30,000 meters.

It is apparent from the diagram that the plate voltage of the tube (R) varies at a rate of 10,000 cycles per second due to the fact that the plate oscillatory circuit is common to the plate circuit of the regenerator tube. During the half-cycle when the 10,000 cycle oscillations made the plate more positive, exceptional amplification of signal is obtained due to the fact that regeneration is increased beyond the normal oscillating point of the tube. Under normal conditions of regeneration, oscillations would be produced in the tube but before the oscillations can start the succeeding half-cycle of the impressed frequency causes a considerable reduction in the plate voltage. This decrease in plate voltage causes regeneration to be reduced and a consequent introduction of positive resistance in the grid circuit, thus preventing the formation of oscillations.

Tube (D) is utilized as a detector and the amplified voltage variations are impressed upon the grid circuit of the detector tube (D). It will be noted that a biasing battery of low voltage is so connected as to give a negative potential to the grid and thus obtain efficient rectification by operating on a proper point of the characteristic curve. A grid condenser and grid leak may be used, however, in place of the biasing battery.

It is thus apparent that super-regeneration may be effectively accomplished by variation of the plate voltage and that during the interval when the impressed frequency of the oscillator tube increases the positive value of the plate, amplification of the incoming signal is obtained to a degree heretofore unapproached.

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FREDERICK PERSONALS.

(Gleaner, Monday.)

The Countess of Ashburnham, who spent the last two weeks in Boston the guest of Mr. and Mrs. Arthur Thompson, arrived home at noon today from Boston where she was the guest of Mr. and Mrs. Arthur Thompson and other friends and relatives.

Miss Ada Wiley, of Woodstock, is spending a few days in the city, the guest of Miss Jean Hallett.

Mr. Howard Crangle and his little son and daughter will leave tonight for Portland, Me., where they will reside. Mr. Crangle has been located there for some time.

Mail—S. D. Burns of this city is ill with pneumonia.

Mr. Alex. Gibson is kept to her home by illness. William Sharon, trainer of horses, has an attack of blood-poisoning.

FIRE NEAR MIDDLETON, N. S. Middleton, N. S., Dec. 12.—The home of James Hurley, on the Falls Road, Nictaux, a village four miles from here, was destroyed by fire at daylight this morning, and the occupants escaped with only a few personal belongings.

The Turkish boat was introduced in the United States in 1863.

Germany is the chief purchaser of cod hides from India.

Every Good Gift Watch Is on Sale

Twenty shapes—fifty styles of carrying and coloring in gold, silver and platinum and reductions at the very least 1/4 off—such are the possibilities of the money-raising early-shopping sale here only. Some are even 20 karat solid gold—all are guaranteed in full, and there is a handsome presentation case with each.

\$10 Off at \$15.
Filled Gold Bracelet Watch with expanding bracelet or choice of grey and black ribbon band—15 jewels and \$30 value for \$15.

Solid Gold \$34.50.
Most any shape in 9k English solid gold tiny cases with 15 jewel movement—a \$46.50 purchase for \$34.50.

Sterling Silver \$19.
Three shapes, plain polished or carved, all with 15 jewel Rolex movements and a \$30 gift for \$19.

\$60 White 14k 18k gold watches are \$45. Green, Guine, and yellow gold beauties with the finest movements and most intricate dial designs and engravings are at various prices. And that means Sale prices only at

L. L. Sharpe & Son
21 King Street

"Hundreds of people come into my store whom I can never hope to meet personally. So I figure that the next best thing I can do is to make a definite impression of my personality through my daily newspaper advertising."

The basis of successful advertising for any local merchant is disclosed in that conversation.

Reason it out.

Issued by The Canadian Daily Newspapers Association, Head Office, Toronto.

LOCAL NEWS

Fairville school concert tonight, 7.45.

PROMPTED BY LOVE is the gift to wife or mother which will save her strength, giving her more time for pleasure and rest. The ideal gift—the BlueBird Electric Clothes Washer and Wringer, within reach of all, is being demonstrated at the store of W. H. Thorne & Co., Ltd., Come early!

CARPENTERS AND JOINERS
Regular meeting Wednesday Dec. 13, 8.15-10.15

ANNUAL MEETING
St. John Ambulance Association annual meeting, Wednesday Dec. 13, at 8. W. A. Hall, 8 o'clock—Speakers presentation of certificates.

DeMott's Chapter I. O. O. F. carnival ball and bridge, Lyttelton Castle, Thursday, December 14 at 9 o'clock p.m. Tickets \$2. For tickets apply Mrs. S. A. Jones phone main 1467.

The members of the Ladies' Auxiliary to the B. R. T., are requested to attend the meeting Wed. Dec. 13, 1922. Business of importance and election of officers. By order of the President.

MOLLIE I. TOBIN
Secretary, 5734-12-18

NOTICE
A meeting of the nineteen ratepayers that voted "yes" for water and sewerage on Dec. 7 will be held at J. A. Sheehan's grocery store, East St. John, Friday evening, Dec. 15 at 8 o'clock.

Fairville school concert tonight, 7.45.

ILLUSTRATED LECTURE
Keep this date, Dec. 15, illustrated lecture Halifax to Seattle by Dr. C. Clark Y. W. C. A. recreation centre. Special music, tickets 25c.

FREE XMAS GIFTS
Buy your Xmas cigars, cigarettes, pipes and tobacco here. Free gift coupons given. See window. Louis Green's Cigar Store, 80 Charlotte St.

Royal scarlet Chapter Friday
Exaltations. 5766-12-19

Special Xmas supper Montreal Daily Star and Family Herald. 594-41.

"Studio" tonight Dancing Studio tonight.

WILL CONTINUE UNTIL WEDNESDAY OF THIS WEEK
Increased attendance and enthusiastic interest on wonder! results have called for a continuation of the demonstration of the BlueBird Electric Washer and Wringer, until Wednesday, at the store of W. H. Thorne & Co., Ltd. This is for your benefit. Come early!

Protect Your Health.
The Tonic and Laxative Effect of Laxative BROMO QUININE Tablets will keep the system in a healthy condition and thus ward off all attacks of Colds, Grip or Influenza. 80c. Made in Canada.

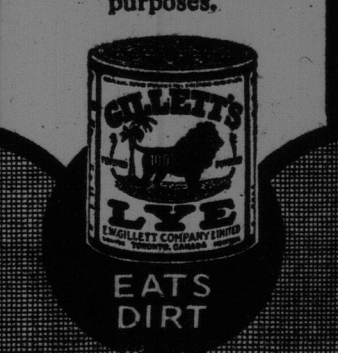
LA SAVOIE LOST TWENTY HOURS ON VOYAGE
Havre, Dec. 12.—The La Savoie, a steamship, arrived here last night twenty hours late on the voyage from New York. Her starboard engine was out of commission through the breaking of two low pressure piston rods.

DIED IN CALIFORNIA.
Frederick Gleaner.—A telegram received yesterday by Ald. C. Camp contained the sad news of the death of Wendell Goodwin Gunter, his brother-in-law, at Santa Rosa, Cal. He was a son of the late Dell Gunter and of Mrs. Martha Gunter, of this city, and is survived by his mother, two brothers, Dr. J. H. Gunter, of Philadelphia, and Andrew Gunter, of Los Angeles, and four sisters, Mrs. C. C. Camp and Miss Lida Gunter, of this city; Mrs. C. H. McCloskey, of Cobalt, and Mrs. Ussell, of Atlantic City.

GILLETT'S LYE

Comparatively few people realize to what extent Gillett's Lye can be used to advantage in every home. For instance, with one can of Gillett's Lye and five and a half pounds of lard or grease, ten pounds of good hard soap can be made. Use one tablespoon Gillett's Lye in gallon of water for cleaning and disinfecting refrigerators, sinks, garbage cans, tiled floors, baths and toilets.

Useful for over 500 purposes.



CLIFF ST. GARAGE

Green & Davidson Appointed Nash Dealers

We take pleasure in announcing the appointment of Green and Davidson, Cliff Street Garage, as dealers of Nash Cars for St. John city and county, and part of Kings Co. In making this connection, we feel that the local representation has been given a stability and permanence, in keeping with the Nash policy throughout United States and upper Canada.

Nash Cars are made in thirteen different models, open and closed, four and six cylinders.

From 1917 when C. W. Nash started to build cars until April of this year the 100,000th Nash left the factory.

Nash has come from 24th to 5th place in the volume of sales in five years.

Nash Cars carry the lowest rate of insurance.

The low prices of Nash Cars make them within the reach of any buyer.

We invite inspection of these cars, as to their beautiful lines, easy accessibility to all parts, mechanical construction, finish, easy riding springs, and the fact that the local representation has been given a stability and permanence.

"Nash leads the world in motor car value." The Valley Motor Car Co., Fredericton. Distributors for New Brunswick.

ACCIDENT TO SANTA CLAUS

Old Man "Santa Claus" slipped on King street and dropped his bag containing all kinds of Toys, Gift Items, Cards and Tree Ornaments. They are now gathered together at Roche's in addition to the Kodaks, Pictures and Victrolas. Come and see if he has something for you. Store open every day at 11 o'clock.

Roche's, 121 King Street.

FIRE ALARM TELEGRAPH

Read Up to Date

27 No. 2 Engine House, King street.

3 No. 3 Engine House, Union street.

4 Cor. Bevil and Garden streets.

5 Infantry (Private).

6 Union St., near O. Z. Mill and Dock St.

7 Prince Wm. street, opposite M. R. A. alley.

8 Cor. North West and Nelson street.

9 Cor. Mill and Fondren.

10 Water street, opposite Jardine's alley.

11 Vanclose street, opposite Peckers street.

12 Cor. St. Patrick and Union streets.

13 Cor. Prince Edward and Richmond streets.

14 Prince Edward street, Wilson's foundry.

15 Cor. Prince Edward and Hanover streets.

16 Cor. Brunswick and Erie streets.

17 Cor. Union and Carmichael streets.

18 Cor. Courtenay and St. David streets.

19 M. R. A. stores, private.

20 Cor. Gorman and King streets.

21 Cor. Princes and Charlotte streets.

22 No. 1 Engine House, Charlotte street.

23 City Hall, Cor. Prince William and Princes streets.

24 Cor. Gorman and Duke streets.

25 Cor. Duke and Sydney streets.

26 McArthur Foundry, Water street, private.

27 Cor. Wentworth and Princes streets.

28 Cor. Gorman and Queen streets.

29 Cor. Queen and Carmichael streets.

30 Cor. Sydney and St. James streets.

31 Carmichael street, between Duke and Orange streets.

32 Cor. Crown and Union streets.

33 Cor. St. James and Prince Wm. streets.

34 Cor. Duke and Neglect streets.

35 Cor. Broad and Carmichael streets.

36 Cor. Britain and Charlotte streets.

37 Cor. Pitt and St. James streets.

38 Cor. Sydney and St. James streets.

39 East end shed, near Imperial building.

40 Knox street.

41 Waterloo, opposite Golding street.

42 Waterloo, opposite entrance Gen. Pub. Hospital.

43 Mills Row, between Wentworth and Pitt streets.

44 Cadogan street, Cor. Wellington street.

45 General Public Hospital Waterloo St.

46 Cotton Mill, Courtenay Bay, private.

47 Cor. King and Victoria streets.

48 Cor. Gorman and Duke streets.

49 Cor. King and Pitt streets.

50 King street, near Carmichael street.

51 Cor. Gorman and Duke streets.

52 Cor. Crown and Union streets.

53 Cor. St. James and Prince Wm. streets.

54 Cor. Duke and Neglect streets.

55 Cor. Broad and Carmichael streets.

56 Cor. Britain and Charlotte streets.

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76 Cor. Britain and Charlotte streets.

77 Cor. Pitt and St. James streets.

78 Cor. Sydney and St. James streets.

79 East end shed, near Imperial building.

LOCAL NEWS

Frank Allingham, captain of the Fairville fire department, has received from P. C. Beattie a cheque for \$50 for volunteer services rendered at the time of the Jordan mill fire last month. The amount had been divided between the Fairville firemen.

St. Paul's Y. P. A. had a much enjoyed social evening last night. The president, Harold Hamma, was in the chair and games of all kinds were included. Refreshments were served under the able chairmanship of Mrs. Roberts. A large number attended and the evening was a most successful one.

A meeting of the sergeant's mess was held last night in the Armouries with Sergeant-Major Ross in the chair. Besides the regular business, the question of having a Christmas tree was discussed and it was decided to have a Christmas tree and concert on New Year's eve, for the children of the members of the mess.

A design for the new war memorial was selected last night at a meeting of the sub-committee in the Board of Trade rooms with R. T. Hayes M. P. in the chair. A report will be submitted to a meeting of the full committee on Monday. The money prizes were awarded last night. In the final survey the arch designs were eliminated as being too costly.

The regular meeting of the Ladies' Aid Society of the Fairville Baptist church was held last evening at the home of Mrs. Dykeman. Mrs. A. E. Kerstead, the president, was in the chair. Reports from the various committees showed the organization to be in good standing. The report of the supper and sale held last week proved very satisfactory.

Miss Bullock, a member of the women's division of the department of immigration, who had supervision of the care of women immigrants at this port arrived in the city yesterday and was at the dock when the steamer Metagama docked. This is her second year in charge of work at Atlantic ports and she was proud in her praise last night of the manner in which the work is carried out.

At a meeting of St. John Lodge, No. 80, K. of P., held last evening in Temple Building, the following officers were elected: G. B. Lemon, C. C. W. F. Lyster, V. G. J. G. Henderson, M. W. H. White, M. of E. S. Watters, M. of F. and K. of R. and S. R. P. Seelye, M. of W. C. E. Speight, M. of R. H. Gale, I. G. R. F. Dunham, O. G. J. A. Mowry, Trustees. These officers will be installed at the meeting on January 8.

The New Brunswick Graduate Nurses' Association met last night in the nurses' home of the General Public Hospital, with Miss Margaret Murdoch, the president, in the chair. Chiefly routine business was transacted. Two new members were elected and the entertainment provided by the association was very successful.

Miss Winslow, of Fredericton, and Miss Budd, of Woodstock.

An enjoyable entertainment was given last night at the St. John Power Boat Club by the members of the Montcalm concert party. Refreshments were served and cigars were passed around. A pleasant evening was spent and the entertainment provided by the Montcalm men was of a very high class. About two hundred members of the club were present.

The regular meeting of St. John Council No. 188, Royal Arcanum, was held last night in the Market Building. Important business was transacted and the election of officers for the ensuing year resulted as follows: Regent, William A. Coleman; vice-regent, H. F. Nae; orator, H. C. Shoolbred; secretary, George G. Wetmore; collector, W. S. Costain; treasurer, William A. Wetmore; chaplain, R. G. Thomson; guide, F. E. Wetmore; warden, Roy C. Gray; sentry, H. A. Porter; trustees, H. H. James, R. G. Thomson and John Kirk. The retiring regent, Charles McCabe, occupied the chair last night.

At the meeting of the Young People's Society of Centenary church last night an interesting debate took place on the resolution "That students should be passed on daily work rather than on the results of examinations at the end of term." The affirmative was led by Harry Humphrey and the negative by Charles Barker. The debate was well handled, both sides putting forward good arguments and presenting them effectively. The judges were Miss Alicia Macdonald, in the Rev. R. G. Fulton. Their decision was in favor of the negative, although the sides were very close. Mr. Fulton was the chairman for the evening and there was a large attendance.

Makes you feel fine Hot Bouiril

Blue Bird Tea "BRINGS HAPPINESS"

Ship Runs Aground Soon After Leaving Port of New York

(Canadian Press Despatch.)

New York, Dec. 11.—The American Line passenger steamer Monrovia, sailing for Hamburg tonight, went aground on her way down the bay.

Masters of wrecking tugs which went to her assistance expected to release her before midnight. She was fast in the mud off Bay Ridge. Two hours after she went aground a heavy fog descended over the harbor and officials at quarantine and at Sandy Hook reported she was lost to their vision. They were in communication with the Monrovia, however, by wireless.

SCHOOL FOR BLIND TURNS 1921 DEFICIT INTO 1922 SURPLUS

(Canadian Press Despatch.)

Halifax, Dec. 11.—Turning a 1921 deficit of \$14,000 in current expenditures into an income over expenditures of \$8,000 in 1922, was the experience of the management of the School for the Blind here, according to the report presented at the fifty-second annual meeting of the institution this afternoon. Of the surplus of \$7,500 had come from sums collected. The report of the superintendent, Sir Frederick Fraser, showed that one hundred and forty-five students were registered on Nov. 30 of this year.

EARLIEST SKATING IN TWENTY YEARS HELD IN HALIFAX

(Canadian Press Despatch.)

Halifax, Dec. 11.—The earliest skating in Halifax in twenty-two years was reported when the local Arena opened its public sessions tonight. A hockey practice was held in the rink on Saturday.

FIRMLY OPPOSED TO USE OF DOGS TO TRAIL DEER

(Canadian Press Despatch.)

New York, Dec. 11.—Preservation of game birds and animals—both of which were declared to be rapidly disappearing in this country—was the subject of an all-day session of the Ontario Game Protective Association here today. An attack on "sportmen" who trail deer with dogs was made by Sam Harris, president of the Ontario Sportsmen's Game and Fish Protective Association. He declared that sections of the United States and Canada which still permitted the use of dogs in deer hunting were experiencing the rapid depletion of these animals.

S. A. OFFICER AND IMMIGRATION MINISTER CONFERRED IN OTTAWA

Ottawa, Dec. 12.—(Canadian Press.)—Commissioner Lamb, international secretary of the Salvation Army, conferred with Immigration Minister, minister of immigration, yesterday. There was no official announcement. Stewart, who is ill, returned to his home shortly after the conference.

Hudson Seal COATS

Deep Skunk Collar and Bell Cuffs \$400, \$450, \$475, \$525

FRENCH SEAL—Skunk Collar and Bell Cuffs—\$200 and \$225.

FRENCH SEAL—Large Cape Collar, reverse strips in collar and around bottom—\$135.

RUSSIAN PONY—\$100 to \$150. Trimmings of Aust. Opossum, Raccoon, Wolf and Black Lynx.

C. & E. Everett LIMITED
27-29 Charlotte St.

There Is One Event in History

That is ever fresh and welcome to the great Christian world—Christmas. Old and young, rich and poor, look forward to its coming and you can make this the happiest event by giving Father, Mother, Sister, Brother or Sweetheart a handsome piece of furniture for their Xmas gift. Leather Chairs and Rockers at \$14.00.

Handsome Willow Chairs and Rockers at \$10.00 upwards. A large assortment to choose from. Music cabinet, parlor tables, ladies' work basket, etc., at all prices.