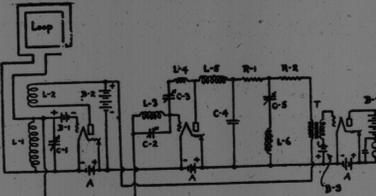


FIFTEEN MINUTES OF RADIO EACH DAY

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

Lesson No. 167. THE ARMSTRONG SUPER-REGENERATIVE SYSTEM. When the radio receiver, employing the vacuum tube, is so connected that a portion of the energy of the plate circuit, is "fed back" to the grid circuit, the radio oscillation in the grid circuit is reinforced and causes a considerable increase in the amplification of the plate current.



In the accompanying diagram of the Armstrong "Super-Regenerative" circuit, the various elements are assigned the following values to allow tuning of the circuit up to wave lengths of 700 meters. For the loop antenna, from seven to twelve turns of No. 18 bell wire may be used spaced an inch apart and wound upon a three-foot frame, the loop being connected in parallel to the primary (L-1) of a variocoupler.

The tuning condenser (C-1) which is variable has a capacity of 0.001 microfarad. (C-2) may be either a fixed or variable condenser having a capacity of 0.0025 microfarad. Condenser (C-3) is a variable condenser of 0.001 microfarad capacity and may be used to adjust the tuned circuit if a new tube is inserted. The fixed condenser (C-4) is a telephone condenser having a capacity of 0.005 microfarad, while the condenser (C-5) is variable and has a capacity of 0.005 microfarad and is used to control the effect of the iron core choke coil (L-6).

The battery for heating the filament of the respective tubes is shown at (A). In the accompanying diagram separate filament batteries are shown.

shown, but one filament battery may be used by properly connecting the filaments and rheostat in multiple as in an ordinary amplifier. The transformer (T) is an audio-frequency amplifying transformer of standard design.

Battery (B-1) is a biasing battery having a potential of 0 to 5 volts and consists of the small flashlight type of dry cells with the negative terminal connected to the grid. (B-2) is a plate battery having a range in potential of 80 to 100 volts. The grid biasing battery (B-3) is a "B" battery having a potential of 22 volts and is connected in series with the secondary of the amplifying transformer. The plate battery (B-4) has a potential of 100 to 200 volts.

Briefly, the necessary adjustments for efficient operation of this system consists in rotating the loop until it is in the direction of the broadcast station, whose signals are to be received. The capacity of the condenser (C-1) is then varied to tune the loop and primary circuits to resonance with the incoming wave.

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RECENT DEATHS

Mrs. Charles Morris. The death of Mrs. Mary Elizabeth Morris occurred at her residence, 123 City Line, West St. John, yesterday and the news will be learned by many with sincere regret.

FAIRVILLE TALKS FIRE PROTECTION

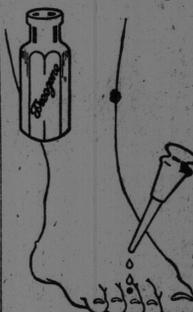
The matter of fire protection for Fairville was discussed at a meeting last evening in Temperance Hall called by the Board of Management of the Parish of Lunenburg.

Cavour, W. A. Nelson, George Pett, J. L. O'Brien, Ed. Barnhill, S. C. Pippet, H. M. Stout, W. J. Liffin, Patrick J. McMurray, Mr. Phessey and O. D. Hanson. The committee will meet next Tuesday and organize and will get under way at once to obtain definite information.

Chicago, Nov. 29.—Before an audience that packed the auditorium here, Georges Clemenceau yesterday pleaded with the U. S. to save France from possible extinction.

CORNS

Lift Off with Fingers



Doesn't hurt a bit! Drop a little "Prezone" on an aching corn, instantly that corn stops hurting, then shortly you lift it right off with fingers. Truly! Your druggist sells a tiny bottle of "Prezone" for a few cents, sufficient to remove every hard corn, soft corn, or corn between the toes, and the calluses, without surgery or irritation.

Order an ADJUSTO-LITE. The lamp you have been looking for. Ready for every emergency. Very acceptable as an Xmas Gift. Call and see our complete line of electrical appliances and specialties. Electrically at your service.

LIQUOR CURSE IN INDIA. (Toronto Telegram). Dr. J. Niyogi, of Calcutta, arrived in Toronto this morning to attend the Anti-alcohol convention. He says: "I am a friend of Ghandi's, but we do not wish the British to leave India. We want them to stay and help us to help ourselves; we need them, and it would be cruel of them to leave us now, as there would be great danger of a pan-Islamic move which would end in war and breed perpetual religious intolerance, such as exists in other parts of the Empire."

MORNING NEWS OVER THE WIRES. At a conference held in Fredericton yesterday between the Senate of the University of New Brunswick and the faculty it was decided to equip the drafting room of the engineering building with a new lighting system and to supply a new transit for the forestry department, and new equipment for the department of physics, electrical engineering and mechanical engineering.

This Week. We are offering another exceptional bargain. Men's Best Quality Boots. Regularly priced from \$9 to \$12 a pair, in black and brown, in a number of styles. All One Price. YOUR CHOICE AT 6.75

For Xmas give Gloves. The pledge of quality goes with every pair of DENT'S Gloves - whether Kid Cape or Fabric. It's good taste and good sense to insist on DENT'S. Sold Everywhere!

Stores Open 9.30 a.m.; Close 6 p.m.; Saturday 10 p.m. Phone 2400.

Evening Frocks For Holiday Gaieties

THERE'S an indefinable kind of charm about these Evening Frocks for the holiday season. Crepes, Panné Velvets, Broche Velvets, Georgettes, and Satins; plain or in combination with metallic laces and ribbons are in styles denoting the latest trend of fashion.

Draped and straight line frocks hold equal honors and both are ably represented in our present delightful collection.

Rich color and beauty of material both go to make a gown of American beauty velvet broche one of unusual charm. Apart from a braided belt and corsage bouquet of American beauty and silver combined, this dress is devoid of trimming. The neck is becomingly fashioned in the new boat shape and the sleeves are slit from shoulder to elbow (tacked here and there to hold in shape.) Skirt line is relieved by a soft one-sided drape. The price is \$80.

A beautiful satin crepe gown of apple green has net draperies of self shade artistically caught at the waist line on each side. This frock is topped with a heavily sequined tunic in straight line effect and in shade to match foundation of dress. It is undoubtedly a beauty. The price is \$75.

A girlish frock of resida green panne velvet is fashioned with quaint basque waist, ornamented by semicircle of silver colored flowers. Neck is finished by deep bertha of silver and white lace. It's really very smart. The price is \$40.

Tangerine georgette is used to advantage for a very youthful frock. This is made with full overskirt joined to the waist by a frilly heading and decorated with a dainty band of vari-colored flowers. Edges of dress are finished with silver threads. The price is \$29.75.

Perhaps your favorite color and most admired style has not been mentioned in this group of dresses. It's more than likely you'll find it here though. We'd be pleased to have you call and see.

(Costume department—2nd floor.)

Manchester Robertson Allison Limited. KING STREET - GERMAIN STREET - MARKET SQUARE.



FIRE SALE OF \$60,000 Stock AT Amdur's, Ltd. No. 1 King Square. Goods must be cleared immediately to make way for regular Christmas lines. Sale Hours: 9 to 11.30 a.m.; 1 to 5 p.m.; 7 to 9.30 p.m.

Beauty Unsurpassed. The wonderfully refined, creamy-white complexion rendered, brings back the appearance of youth. Highly antiseptic. Exerts a soft and soothing action. Over 10 years in use. Send 15c for Trial Size. FEED T. HOPKINS & SON, Montreal.

Gouraud's Oriental Cream. The wonderfully refined, creamy-white complexion rendered, brings back the appearance of youth. Highly antiseptic. Exerts a soft and soothing action. Over 10 years in use. Send 15c for Trial Size. FEED T. HOPKINS & SON, Montreal.

D'Allaird's 8th Anniversary Sale Starts Friday, December 1st. This is our "8th Anniversary" and we decided months ago to celebrate this event by our First Anniversary Sale—a Christmas Sale. It will feature such values that can demonstrate to the Women of Montreal the real savings possible in buying direct from the manufacturer. We will show what can be done by buying direct from the source of production. We cut out the middlemen in our buying; why shouldn't you? Try the D'Allaird plan. Look for To-morrow's Announcement. It will offer you garments at what the materials alone would cost you. Watch for To-morrow's Announcement. D'Allaird 81 King St. Blouses & Lingerie.

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Order an ADJUSTO-LITE. The lamp you have been looking for. Ready for every emergency. Very acceptable as an Xmas Gift. Call and see our complete line of electrical appliances and specialties. Electrically at your service. THE WEBB ELECTRIC CO. 91 Germain Street Phone M. 2152.

Santa knows! Ganong's XMAS PACKAGE. "THE GIFT OF GLADNESS".

Pre-Christmas Reduction Sale Women's Coats and Fur-Trimmed Suits GREAT BARGAINS. A number of beautiful high grade garments to be sold at great reductions to make room for Christmas business. Sale Commences Thursday Morning. Real beaver trimmed fawn broadcloth coats. Sizes 18 and 36. Regular \$94.75. Now \$63.50. Real beaver trimmed broadcloth coats in taupe and fawn. Sizes 18 to 36. Regular \$94.75. Now \$63.50. American beaver trimmed fawn broadcloth coats. Sizes 18 and 36. Regular \$64.75. Now \$43.50. High Grade Model Suits Reduced. Isabella Fox trimmed suit of brown Ramona cloth. Size 38. Regular \$135.00. Now \$89.00. Mole trimmed blue Ramona suit. Size 16-34. Regular \$120.00. Now \$80.00. Persian lamb trimmed velour suit. Size 36. Regular \$69.75. Now \$46.50. Squirrel trimmed tan duvel de laine suit. Size 36. Regular \$89.75. Now \$49.50. Persian lamb trimmed taupe duvel de laine suit. Size 42. Reg \$74.75. Now \$48.50. Plain tailored velour and broadcloth suits, tans, browns or navy. Sizes 36 to 43. Regular \$74.75. Now \$49.50. F. W. DANIEL & CO. LONDON HOUSE HEAD OF KING ST.