

FIFTEEN MINUTES OF RADIO EACH DAY

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Lesson N. 166.

RADIO DICTIONARY.

MEG OHM.

A large value of resistance, equal to one million ohms and used as a practical unit for denoting the resistance of certain elements employed in radio circuits, for example, the high resistance element, known as the "Grid Leak" connected in the grid circuit, may have a value of two megohms or two million ohms.

"SUPER-REGENERATION."

In the usual form of regenerative receiving circuits employing a "tickler coil," the intensity of the radio signal may be increased by tightening the coupling of the "tickler coil" up to a point where the tube starts to oscillate, at which point further amplification is stopped, owing to distortion of the received signal. By means of the "Super-Regenerative" method, originated by E. H. Armstrong, formation of tube oscillations is prevented, thus permitting the continuance of regeneration beyond the oscillating point and resulting in great amplification of the received signal.

QUENCHED GAP.

In a simple form the "quenched gap" consists of a number of flat copper discs approximately four inches in diameter by thin insulating washers, so adjusted that the space between the sparking surface does not exceed one-hundredth of an inch. This space should be air-tight and 1,200 volts is allowed for each gap. This type of spark gap in the circuit of a spark transmitter provides an efficient means of quenching the primary oscillations and gives a high value of antenna current.

FUNDAMENTAL WAVE LENGTH.

With reference to the antenna, the fundamental or natural wave length is the length of wave emitted by the antenna when no additional inductance and capacity are inserted in the antenna circuit. In this condition the antenna possesses a definite period of oscillation, and consequently a definite wave length when a charge of electricity is applied to it, due to the fact that it possesses distributed inductance and capacity.

HARMONIC.

A wave whose frequency is a multiple of a given wave is known as a "harmonic." For example, in an antenna possessing distributed inductance and capacity, if the "fundamental frequency" is denoted by "F" there may be present in the antenna other resonance frequencies known as "harmonic frequencies" having the value "3F," "5F," and "7F."

END TURNS.

In radio circuits employing inductance coils having a variable number of turns, certain adjustments may be made by which only a portion of the inductance coil is actively connected in circuit, leaving a number of unused turns. These turns are commonly known as "end turns," and unless provision is made for temporarily disconnecting them entirely from the circuit they produce considerable effect upon the resistance and frequency of resonance of the circuit.

STRAY.

Electrical disturbances which cause considerable interference with the reception of radio signals due to the noises produced by these disturbances in the receiving telephones. "Strays" are also commonly termed "static" or "atmospherics." The grinding, hissing or series of clicks produced in the telephone receivers by "strays" is commonly the result of atmospheric conditions, particularly the lightning flashes during the thunderstorms of the warmer period of the year. "Strays" are also present to a less degree during the rain and snow storms of the cooler months. Radio communication in tropical latitudes is subject to serious interference from this type of electrical disturbance.

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RECENT DEATHS

Abner Hatfield.

The death of Abner Hatfield occurred at his residence, 37 Peters street, early this morning. Mr. Hatfield, who conducted a business as commission merchant in the city market, had been ill for the last few months. He is survived by his wife, one daughter, Mrs. W. Carey Hatfield, St. John; four brothers, Samuel F. St. John, Walter T. Temple, York county, N. B.; John W. and G. Corey, Boston; and one sister, Mrs. Gilead Second, Boston.

Smith S. Dinges.

The death of Smith S. Dinges occurred on Wednesday morning, November 22, in Gagetown, after an illness of several weeks. He is survived by his wife, three sons, two daughters, three brothers and one sister. Lewis Dinges of St. John is a brother. The funeral was held on Thursday morning.

Mrs. Alice Silliphant.

One of the city's oldest residents passed away last evening in the person of Mrs. Alice Silliphant who died at her home in West St. John at the advanced age of ninety-nine years. She was born in Bladeford, England, in 1823, just three years after George IV came to the throne. He was followed by William IV, Victoria, Edward VII and George V. Her husband, John Silliphant, died several years ago. Mrs. Silliphant is survived by a total of 162 descendants.

Her sons are: John, William, Orlando and George, all of West St. John. The daughter is Mrs. H. McLeod, also of West St. John. The funeral will take place on Wednesday afternoon at 2:30 o'clock from the residence of her daughter, 35 King street west. Interment will be in Greenwood cemetery.

Tenders for the purchase of the assets of the Clark & Young Co., Ltd., Edmonton, were opened yesterday at the office of the Canadian Credit Men's Trust Association, Ltd., authorized assignee.

GOOD SHOES REDUCED

We are making a clean-up on a number of styles of Men's Shoes. These include the best Canadian and American makes.

8:00 to 10:00

Shoes, selling at

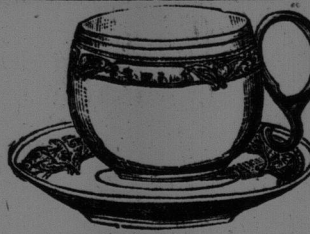
5.00

Some of these styles now shown in our men's window, others inside which we will be glad to show you.

Your size is likely among them.

McROBBIE
Foot St. John 50 King
Fitters Street

Use the Want Ad. Way



Special Sale —OF— China

English Cups and Saucers in great variety at greatly reduced prices.

W. H. HAYWARD CO.
LIMITED
85 to 93 PRINCESS STREET

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.**

Valuable Advice!

No man can afford to spend days, months and even years, in acquiring a knowledge of Jewelry, that will safeguard him in all his purchases, therefore, it is well to take the advice of a reputable house.

QUALITY STONES OF PERMANENT VALUE

You may purchase here, only diamonds that have been selected after minute inspection, and critical comparisons.

The finer the Diamond, the greater its natural increase in value.

You can depend upon our recommendations, as honest, and authoritative.

FERGUSON & PAGE
THE JEWELERS - - - 41 KING STREET

AUTO OWNERS

Operating Cars on or after Dec. 1 should carry Collision Insurance.

ASK FOR RATES
C. E. L. JARVIS & SON
74 Prince William St.
ST. JOHN 11-29

QUADRUPLE ALLIANCE.

Two Families Were United by Four Marriages.

London, Nov. 8.—(By Mail)—Joseph Edward Moore-Gwyn, a well-known landowner in South Wales, died at his seat, Dyffryn, Neath, from pneumonia. The oldest son of the Rev. Joseph Moore, vicar of the Buckland, Berks, he was born in 1850, and was adopted by his uncle, Mr. Howard Gwyn, of Dyffryn, to whose large estate he succeeded on the death of Mr. Gwyn's widow in 1900, taking the additional name and arms of Gwyn. Mr. Moore-Gwyn was a magistrate and deputy-lieutenant for Breconshire (high sheriff in 1902) and for Glamorganshire. He married, in 1876, Edith Fotheringham, daughter of the Rev. W. Jephson, and had two sons

and three daughters. It is remarkable that four of this family of five married children of the late Mr. Arthur Gilbertson, of Glamorgan, County Glamorgan. The elder son, Major Joseph Gwyn Moore-Gwyn, married Mr. Gilbertson's second daughter; the younger son, Captain Howell Gwyn Moore-Gwyn, D. S. O., M. C., married his third daughter; Miss Gladys Ellen Moore-Gwyn married his third son; and Miss Ellen Christabel Moore-Gwyn married his fifth son. Mr. Moore-Gwyn's eldest daughter married a son of His Honor Judge Gwyn Williams, of Miskin Manor.

arrange for the public exhibition of the pictures. Miss H. T. Meiklejohn addressed the meeting, asking for support of the health centre. Mrs. Hugh Mackay gave her report as educational secretary.



FROCKS

For the Coming
Social Activities

The Yuletide Season adds impetus to the merry round of social activities for all ages, and Madam or Mademoiselle finds that the need of a new frock becomes a necessity. Here are gowns for afternoon or evening, a wondrous group of shimmering silks and glittering metallic cloths replete with loveliness and charm.

LONDON HOUSE
F. W. DANIEL & CO. HEAD OF KING ST.

Stores Open 8:30 a.m.; Close 6 p.m.
Saturday 10 p.m. Phone 2400.



It's Time to Think of Christmas Things

Whether it's an everyday practical gift you seek or, a something with marked individuality, this big gift store is ready to help you. Every department fairly sparkles with bright suggestions that are bound to appeal.

A Silk Negligee

The Gift Prized by Every Dainty Woman

Selecting a Silk Kimono or Breakfast Coat from a collection such as you'll find here will prove a pleasure. Very attractive plain and lace trimmed styles are showing in soft boudoir shades of pink, sky, honeydew, rose, orchid, flesh, etc. They are in beautiful silks, satins, crepe-de-chine and georgette. Every garment as charming as one could wish for. \$7 to \$30

Dressing Jackets in silk, satin and crepe-de-chine are trimmed with laces or dainty embroideries. Flesh, sky, rose and orchid. \$4 to \$9

A very dainty style in combination of cream lace and chequer-de-chine. \$5 to \$10

Boudoir Caps are here in delightful assortment. Sheer creations of net and ribbons or the more substantial kinds that will stand plenty of wear. You'll think any one of them attractive. \$5 to \$4.75 each

Boudoir clippers are in black, navy, pink, sky and Copenhagen colored in contrasting color. \$55 pair

Silk Underwear

When You See This Collection You'll Quickly Appreciate Its Gift-Giving Value.

Night Gowns, Underskirts, Envelope Chemises, Camisoles, Princess Slips, etc., are showing in soft washable silks, satins and crepe-de-chines. You may choose from plain tailored or elaborate lace and ribbon trimmed styles. White and dainty colors.

Night Gowns \$4 to \$15.75
Envelope Chemises \$3 to \$12
Camisoles \$1.50 to \$7.75
Underskirts \$2.25 to \$9.75
Princess Slips \$4.50 to \$8.50
Satin Brassiers in pink and white \$1.85 and \$3

SILK AND SATIN KNICKERS, in black, flesh, sky, navy, green, American beauty and fancy designs \$3.75 to \$7.75
PONGEE KNICKERS \$1.95 to \$3.75

(Whitewear—2nd floor.)

We Can Help You Choose Gifts For Men

Men usually prefer practical gifts. Almost any article of furnishings is very good—but it is the little fine points and distinct characteristics which mean everything. In this store you will find men's furnishings with the shades of distinction men prefer.

Gloves, Hosiery, Neckwear, Handkerchiefs, Shirts, Sleeping Garments, Jewelry, Bath Robes, Dressing Gowns, Smoking Jackets, Sweaters.

As well as a great variety of Gift Brushes, Thermos Goods and Baggage.

(1st and 2nd floors.)



Today's Gift Special

Pure Irish Linen
Huck Towels with
damask ends and
space for initial.
Guest size
75¢ each.
Larger size
\$1 each.

Inquire about the unusual opportunity to buy a "Hoover" electric Vacuum Suction Sweeper. (Germain street entrance.)



Toyland Where Dreams that Come True Are Made

And—you'll see plenty of toys worth dreaming about here.

For Boys There Are:

Electric Trains that run on a long stretch of track and have with them station, crossing signal, electric lights and—just about everything a real train has. Then there are Mechanical Toys of all descriptions; Meccano Sets of toy engineering; Drums to beat; horns to blow—and all sorts of other things we can't tell you about here.

For Girls There Are:

The most beautiful Dolls that walk, talk and sleep. Big and little, many of them with real eyelashes and curly heads. Doll's Furniture, too, such as stoves, beds, chairs, swings, etc., will be found here in just the right kinds—as well as a great variety of games, books and innumerable more things. We want you to come and see the toys as soon as possible.

(Germain street entrance.)



Why Not Give a Warm Bath Robe?

If you decide to do so it would be a wise idea to make your selection now while assortment of patterns and colors is complete. We can show you some very comfortable ones in colors and qualities you are bound to like.

Velours \$6.50 up.
Corduroys \$8 to \$10.50.
Padded Silk, plain and embroidered \$11.75 to \$18.

A Knitted Shawl For Chilly Times

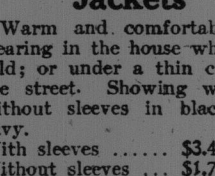
Made from very fine Shetland wool in the new scarf shape. Ends are trimmed with heavy fringe or full tassels. White, pink and blue. \$1.65 to \$2.50 each



Silk "Breeks" in Dark Colors. A Very Special Price \$5

Made from heavy Jap tafeta in good shades of brown, green, navy, purple and black. Knee is finished with a laced-up cuff making it a particularly attractive garment to be worn in place of an undershirt.

Exceptionally nice quality—and a good bargain.



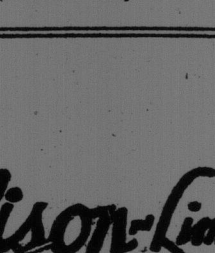
Padded Silk Jackets

Warm and comfortable for wearing in the house when it's cold; or under a thin coat on the street. Showing with or without sleeves in black and navy. With sleeves \$3.40 each
Without sleeves \$1.75 each



Hat and Scarf Sets of Angora Wool

Particularly smart for skating or any out-door winter sport. A splendid outfit for a cold day. Showing in blue, beige and grey. \$5.50 set
Beige or blue \$8 set



Smart Sport Sweaters

Every girl that skates will be wanting one of these. They are made in pullover style with V neck and are trimmed with rows of colored stripes. Heavy ribbed wool in white only \$3.75 each
(Costume Dept.—2nd floor.)

Manchester Robertson Allison Limited
KING STREET - GERMAIN STREET - HARNEY SQUARE