

FIFTEEN MINUTES OF RADIO EACH DAY

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Lesson No. 214
POINTS TO REMEMBER

REMEMBER THAT:

The value of the antenna for interception of radio waves depends not only upon its height above the earth but upon the distance above grounded objects. For this reason when the antenna is erected on the top of tall apartment houses, having a steel frame, it should be kept as high as possible above the roof due to the fact that the steel construction of the building is grounded and consequently brings the ground potential in closer proximity to the antenna.

Radio-frequency amplification increases the energy of a feeble incoming signal to a point where it has sufficient strength to operate the detector. This amplification is carried on at the original frequency at which it was radiated from the transmitting station and transmitted through the other. Audio-frequency amplification takes place after the incoming signal has been detected and converted into an audible frequency and this form of amplification is in general use for building up the signal, at an audible frequency, to a strength which is sufficient to operate a loud speaker.

Rules issued by the National Board of Fire Underwriters forbid the use of gas pipes for ground connections. This is due to the fact that in many cases there is no electrical connection available between the gas system and ground. The presence of a high potential surge would be very liable, under these conditions, to result in a fire as the system being thus electrically insulated would oppose the flow of current to the ground.

The velocity of radio waves is constant and has a value of 300,000,000 meters per second. If the frequency of the wave is known, the wave length may be easily computed by dividing this velocity by the frequency. If, on the other hand, the wave length is known, the frequency may be determined by dividing the velocity by the wave length. For example, wave length of 400 meters has a frequency of 750,000 cycles per second, this value being obtained by dividing the velocity (300,000,000) by the wave length (400).

When the storage battery is charged from a direct-current supply such as the house lighting circuit, the positive terminal of the battery must be connected to the positive lead of the lighting circuit. To determine which lead of the lighting circuit is positive, dip the two ends of the wires leading from the circuit into a glass of water in which has previously been dissolved a teaspoonful of salt. Care should be exercised to keep the ends of the wires from touching each other. Bubbles of gas will be given off from the negative wire and, on charging, this wire should be connected to the negative terminal of the battery, the other wire, being the positive lead, should be connected to the positive terminal.

Many more stages of radio-frequency amplification can be used satisfactorily than of audio-frequency amplification, due to the fact that the former amplifies only such signals as are of radio-frequency, that is, signals which have a frequency above audibility. Audio-frequency amplification, on the other hand, magnifies the noises due to the "A" and "B" batteries, the mechanical vibrations of the tubes, and other foreign sounds, which results in a pronounced "squealing" if several stages of this type of amplification are employed.

When a large antenna is used for short wave reception, it is usually necessary to reduce the natural period of the circuit by inserting a variable condenser between the antenna and the tuning coil or between the tuning coil and ground. The use of this condenser permits the addition of more turns in service on the tuning coil in the antenna circuit and louder signals are obtained due to the fact that considerably more energy is transferred from the primary to the secondary circuit.

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RECENT DEATHS

Mrs. Edward Coleman.
The death of Mrs. Edward Coleman, a former resident of the North End, occurred recently in Wilmington, Vermont. She leaves two sons and two daughters. Mrs. C. D. Strong of this city is a niece. The funeral will be held here on Wednesday afternoon from Chamberlain's undertaking rooms.

Rev. Sister Quinn.
Rev. Sister Quinn, for fifty-seven years a member of the Community of the Mother House of the Grey Nuns, Montreal, died yesterday. She was in her seventy-sixth year.

John D. Kirk.
The death of John D. Kirk occurred on Saturday night at his home in Yarmouth, death being due to heart failure. He was seventy-seven years of age.

John D. Kirk was one of the outstanding citizens of Yarmouth and was identified with about every undertaking and enterprise which had for its purpose the promotion of the town. He was president of the Liberal Association of Yarmouth and the party in Yarmouth county loses a man who was a tower of strength to the organization. He was an able accountant and an indefatigable worker in the firm of Edward Allen & Co., which suffers a great loss in his demise after his faithful service of forty years. Mr. Kirk was also president of the Minard's Liniment Company, and devoted daily some time to the affairs of this company. He was prominent in the Board of Trade and was among the first to put forth efforts to bring the name of his town into prominence. He served last year as president of the Yarmouth Board of Trade. He was one term in the Town Council, 1917-18.

The late Mr. Kirk was prominently connected with shipping in this town and was a partner in the K. and S. (Kirk and Sweeney) Shipbuilding Company. Several fine vessels were built and are regularly fishing as the result of his enterprise.

Mr. Kirk was also interested in the various fish traps in this county and his connection with these has helped materially in their ultimate success. He took an active interest in the Rotary Club.

In religion he was a Presbyterian and one of the largest contributors to that denomination. The late Mr. Kirk was a Mason, a member of Scotia Lodge, and recently had joined Royal Arch Chapter.

He was extremely kindly in disposition and generous to a fault, and Yarmouth indeed mourns his passing. He is survived by a widow, a daughter of the late William Burrill, who is at present visiting her sister in Picton.

Get Sun-Maids - Always Good

To insist upon Sun-Maids is to get the kind of raisins that you know are good.

Suggest you try Sun-Maid Seed. They are washed, seeded, sterilized and packed, while still hot from the sterilizers, in new, clean cartons. Made from finest California table grapes.

Your grocer has them for you.

Ask merchants for Sun-Maid Raisins

GREATEST VALUE

IS OBTAINED BY USING

"SALADA" ORANGE PEKOE BLEND

Blended from the finest teas, the enjoyment gained more than outweighs the extra cost. 40c. per 1/2 lb. Write for free sample and be convinced.—SALADA, MONTREAL.

W. & R.

JANUARY SALE of Winter Footwear

Ends Wednesday Next

Last chance to share in the splendid values offered at wholesale prices, or in some cases less than wholesale.

SKATING BOOTS

Women's \$3.95
Men's \$3.65
Boys' \$2.85

GAITERS

Women's 10 Buttons 50c.
Women's 12 Buttons \$1.25

FELT SLIPPERS

Men's \$1.50 and \$1.75
Women's 95c. and \$1.19
Women's Lined Boots \$4.85

Women's 4 and 5 Buckle Jersey top, first quality Overshoes \$4.50

WATERBURY & RISING, LIMITED

61 KING - 212 UNION - 677 MAIN

Wanted

Those ladies who wear size 2 1/2, 3 or 3 1/2 to call and see the wonderful values we are offering in

LACED and BUTTONED BOOTS in these sizes.

Sale Price 1.45

There are Walkovers and leading Canadian makes among these bargains.

WOMEN'S RUBBERS—In a number of styles... 70c.

CHILDREN'S RUBBERS—In sizes 4, 4 1/2, 5, 5 1/2. Sale price 45c.

WOMEN'S OVERSHOES—In button and strap styles. Sale price \$1.95

WOMEN'S LOW OVERSHOES—nearly all styles. Sale price \$1.35

See our window and bargain table for these and other special values.

McROBBIE
Foot St. John 50 King
Fitters Street

HOPE TO REVEAL ROYAL MUMMY

Luxor Excitedly Awaits the Opening of Inner Tomb of Tutenkhamun—Expect the Body is Well Preserved.

Luxor, Egypt, Jan. 29.—An air of suppressed excitement pervades the whole upper Nile valley as the day approaches for the opening of the inner or mortuary chamber of the tomb of King Tutenkhamun, recently discovered in the valley of the kings. Not since the American Egyptologist, Theodore Davis, unearthed more than a half dozen tombs in the same valley has the Egyptian populace shown such pronounced interest and curiosity. Pressure is being exerted by the local population to have the mummy of Tutenkhamun, if it is found in the inner chamber, kept in the tomb instead of being removed to Cairo. They make no secret of their motive in the matter, declaring that, if exhibited to the public view in the tomb, the mummy of Pharaoh would attract thousands of tourists to Luxor and stimulate trade, the hotel business and the sale of antiques.

At present, in all the tombs of the imperial necropolis, there remains only one royal mummy, that of Amenophis II, which is on view in its original burial place. The whole Theban burial area, including the valley of the kings and queens, contains the bodies of countless generations. Here all, from the mighty Pharaohs to the humblest of citizens, sought their final rest. A workman cannot strike a spade into the ground in this area without uncovering skeletons of the ancient Egyptian people, and in many cases the bodies are surprisingly well preserved, particularly those of the nobility who could afford the expense of embalming with aromatic oils, pitch and spices. Herbert Winlock of the American archaeological mission, declared today,

"If Lord Carnarvon finds the body of Tutenkhamun, as I hope he will, I am confident that it will be in an excellent state of preservation, especially if the burial vault was not previously invaded by the robbers."

You Won't Cough After Taking Dr. Wood's Norway Pine Syrup

On the first appearance of a cough or cold do not neglect it; get rid of it at once before it has a chance to grow worse and gets settled on the lungs, causing bronchitis, pneumonia, or other serious lung troubles. In Dr. Wood's Norway Pine Syrup you will find a remedy that will relieve the cough or cold on its first inception by soothing the irritation, and healing the diseased lining of the lungs and bronchial tubes. Mrs. Percy McRae, Little Shemogue, N. B., writes:—"Three years ago I had the 'flu' which left me with a very bad cough. I tried different medicines which did me no good, so I took Dr. Wood's Norway Pine Syrup. It relieved me of that awful cough in a short time."

"Dr. Wood's" is 30c and 60c a bottle at all dealers; put up in a yellow wrapper; three pine trees the trade mark; manufactured only by The T. Milburn Co., Limited, Toronto, Ont.

Sale of Men's Furnishings

STILL GOING ON

Even though your present supply of Furnishings is fairly complete, it will be worth your while to buy Shirts or Half Hose now for use later on.

Bargains Offered During This Event Are Most Unusual.

Below are mentioned but a few of the many:

Buy Shirts From These Assortments, Two Special Groupings

At \$1.29—New spring patterns in good quality cord cloth. Well made with full sized bodies and double sewn seams. Five patterns in three colorings from which to make selection.
At \$1.89—Odd lots and sizes in better grade shirts. This is a big clean-up assortment and includes a variety of serviceable cloths in desirable patterns and colorings.



Clearance Lines of Gloves and Mittens.

Every Pair A Real Bargain

Men's Scotch Knit Gloves..... 65c pr
Tan Cape or Brown Mocha Gloves with warm wool linings..... \$1.39 and \$1.65 pr
Heavy Fleece Lined Driving Mittens..... 75c pr
Heavy Driving Mittens made from old dressed deerskin. Lined with fleece..... \$1.75 pr

Men's and Boys' Sweaters

Unusually Low Priced

Men's Coat Sweaters in medium weight with shawl collar. A special bargain lot \$3.00 each
Men's Pull-Overs in navy worsted. Roll collars \$2.50 each
Men's Black Cardigan Jackets \$3 each
Men's Pull-Overs in popular colors..... 75c, \$1 and \$1.25 each
Boys' Coat Sweaters with shawl collars \$1.75 each

Men's Winter Underwear, Neckwear, Braces, Handkerchiefs, Mackinaws, Sheep Lined Coats, and many reliable kinds of Baggage. All at Clearance Prices.

(Men's Shops—1st and 2nd floors.)

Manchester Robertson Allison Limited

KING STREET - GORDIAN STREET - MARKET SQUARE.



Two Day Sale of Doubly Reduced Women's Wear

A group of Coats worth from \$22.50 to \$39.75—all at \$15 till Wednesday closing—a group worth \$15 to \$16.75, all at \$7.50 these next two days—and like price treats in Tailored Suits, Serge and Tropicote Dresses, Novelty Skirts and Kimonos. Here is a Sale with some snap to it, but for just two days.

SPRINGY COATS IN \$15 SALE

There's a mannish air and grace to these belted, raglan shouldered models you can wear till mid-May. A few number have pleated breast patch pockets, some leather buttons and some half linings of silk. Materials are Chinchilla, Velour and Tweed. Colors—navy, browns and greens. 25 Coats in all. If quick enough you'll have your size. Remember, \$15 gets you a value up to \$39.75.

A \$54.75 SUIT FOR \$19.50

Easter and economy are peeping right at you in Tailored Suits of a class far above the price. Tropicote, Velour and Tweed. Two lined in Satin, banded and collared in Nutria. Colors—navy, midnight blue, browns, 15 choices at \$19.50, where former prices ran from \$29.50 to \$54.75.

STREET DRESSES FOR \$13.90

A second time it saves you, when you step out of your winter coat, or think of its trimness for business. Normally it would cost you from \$17.25 to \$29.75—tomorrow and next day pay no more than \$13.90. Sizes 16—40. A few black and navy Tropicotes, but mostly Serges and Tropicotes.

VELOUR KIMONAS, \$7.88

A Moleton at this figure would be a great bargain, so imagine what it means to have a Satin Trimmed Velour, Tans, Mauve, Blue, Grey—all flowered.

F. W. Daniel & Co.

Head of King St.

KAYSER'S ITALIAN GLOVE SILK HOSE

Black and Black Shades \$1.95 a Pair Pointex Heel

AMDUR'S, LTD. No. 1 King Square

Sweaters and Mufflers in Pure Wool for Grand Sports and for Carnival Week

Pure Wool Mufflers 69c
Ladies' and Men's White Pullover Sweaters \$3.95 Upwards
Men's Jumbo-Knit Pure Wool Sweaters \$3.50
Ladies' Pullover Sweaters \$3.95, \$4.95, \$5.50
Popular Styles and Colors

AMDUR'S WOOLEN CENTRE

Lowest Prices in the City For Pure Wool Garments

A Woman's Pride

The useful pride which makes woman careful of her appearance and complexion finds a help in the purity and delicate clinging fragrance of

BABY'S OWN SOAP

Best for Baby Best for You
ALBERT SOAPS LIMITED - MONTREAL