

FIFTEEN MINUTES OF RADIO EACH DAY

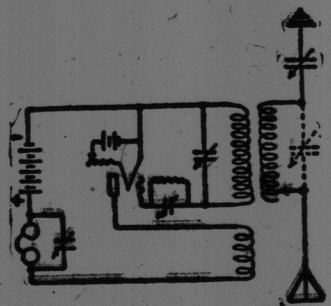
By Edward N. Davis
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Lesson No. 14.

VARIABLE CONDENSERS IN RECEIVING CIRCUITS.

The variable condenser constitutes a very important part of the receiving set, even the simpler sets having at least one such condenser. In its usual form the variable condenser consists of alternate metal plates semi-circular in form, each alternate plate being attached to a shaft capable of rotation so that surface of the movable plates opposite the other plates which are stationary may be changed by turning the shaft, thus varying the capacity contained in the device. The air between the plates constitutes the dielectric and the maximum capacity is determined by the area of the plates, number of plates and the spacing between the plates.

The most common place to connect a variable condenser in the receiving circuit is across the secondary of the loose coupler or variocoupler, where it serves to increase the total capacity of the circuit and thus the wave length of tuning the secondary closely to the desired wave length. When receiving through heavy interference the coupling may be reduced between primary and secondary by cutting out some of the turns in the secondary, using the switch provided for that purpose, at the same time keeping the same wave-length by increasing the capacity of the circuit by means of the variable condenser in shunt to the secondary coil.



Another place where variable condensers may be employed to advantage is in series with the antenna or ground, especially in cases where a comparatively long aerial is used. In some cases where an exceptionally long antenna is used a series condenser is absolutely necessary in order to tune the receiving circuit to resonance with the transmitting station. For example, if the natural wave length of the aerial is 400 meters without inserting any inductance coil in the circuit, it is necessary to insert a variable condenser in the circuit in order to properly tune signals from a station transmitting on 800 meters.

A variable condenser may be employed in shunt to the primary to increase the wave length of the primary circuit beyond the range of the inductance coil alone. It is common practice to employ the same condenser for both shunting the primary and connecting in series with the primary, a switch being used to change the connection from series to parallel.

In circuits employing separate heterodyne principles a variable condenser is usually employed to change the frequency of the generated radio frequency current so that audible beats are produced when the two radio frequencies are combined.

In some types of regenerative receivers such as that shown in the diagram above a variable condenser may be used as a radio frequency by pass across the telephone receivers although a fixed condenser of many experimental receiving systems is often a variable condenser.

Most of the common forms of wave meters employ variable condensers for adjusting the meter to the desired wave length, the plates of the condenser in this case having a special shape so as to give more uniform spacing on the wave length scale.

Some types of variable condensers are constructed so that the condenser in which the condenser is mounted may be filled with insulating fluid such as castor oil, thereby greatly increasing the capacity of the condenser. For most purposes, however, it is better to use condensers having the air dielectric which are available in a great variety of sizes and capacities. (All Rights Reserved by United Feature Syndicate. Reproduction Prohibited.)

RECENT WEDDINGS

Lahey-Hughes.

A quiet wedding took place at the Carmichael street Methodist parsonage on Tuesday evening, when Rev. E. E. Styles united in marriage Frank Lahey and Miss Jane Hughes. The bridegroom is a native of St. John and the bride is of English parentage and was born in Queensland, Australia. Mr. and Mrs. Lahey will make St. John their home for the present.

RECENT DEATHS

Dr. T. W. P. Flinn.

(Canadian Press Despatch.)
Halifax, Nov. 8.—Dr. T. W. P. Flinn, sixty-five, for many years United States immigration medical examiner here, died suddenly tonight while attending an executive meeting of the Halifax council of the Knights of Columbus, of which he was grand knight. While formerly belonging to Halifax, he lived for a while in New York, and was a naturalized American citizen. He was identified with several charitable movements.

Dr. Ernest Holland.

(Canadian Press Despatch.)
Charlottetown, Nov. 8.—Dr. Ernest Holland, of St. Boniface, was fatally burned at that place today when an oil stove overturned and set fire to the

room in which he was sitting in an invalid's chair.

Andrew Kincaid.

The death of Andrew Kincaid occurred at his home, Salmondale, Queens County, on November 1. He was sixty-nine years of age. He is survived by two brothers, David H. of Salmondale, and George, of St. John. Interment was made in the Thornetown burying ground. The funeral service was conducted by Rev. Wellington Jenkins.

Mr. Frances J. Hanford.

Many friends in St. John will be sorry to learn of the death of Mrs. Frances J. Hanford which occurred on November 6 in Medford, Mass., after a lingering illness. She is survived by two sisters, in the United States, and one brother, Dr. F. L. Kenney of West St. John.

Charles Newton Smith.

Many friends and acquaintances in St. John will regret to hear of the death of Charles Newton Smith formerly a resident of this city, which occurred on November 7, at Lynn (Mass.), after a lengthy illness. Mr. Smith removed from St. John some time ago, but is well remembered and will be sincerely mourned. He was a prominent member of the I. O. F. Besides his wife he is survived by three sons, James E.,

LILY BOWLS

Flower Centres and Salad Bowls in English Crown Ducal Ware.
New Designs and Colorings.

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

Amdur's Bargain Bulletin No. 28

A Special lot of

Ladies' Dresses

Will be offered on Friday, with the price reductions prevailing all day.

Ladies' Dresses, Silks and Serges \$ 5.00

Ladies' Blue Serges, trimmed with wool embroidery 6.95

Ladies' Canton Crepe Dresses 12.00

The dresses are in the newest styles.

Amdur's, Ltd., No. 1 King Square

LADIES WRIST WATCHES

No finer line of Bracelet Watches, ever was shown than that which we have in our present stock. Practical, dainty styles with dependable movements.

Most Women of the present day would feel lost without a Wrist Watch. They are sensible, useful and extremely ornamental.

See our "Ferguson & Page" Special.

Best Goldfilled Cases and Bracelets . . . \$20.00
10-K Gold Cases and Bracelets . . . \$33.00
14-K Gold Cases and Bracelets . . . \$44.00

FERGUSON & PAGE

The Jewelers 41 King Street

Can You Wear

Size 2 1-2, 3 or 3 1-2?

If So
You can get a lace or button boot of extra fine quality—values up to \$10.00 at a special reduced cash price.

Remember
The sizes are 2½, 3 and 3½ only, and the reduced price is
\$2.75

Have us show you these styles made by the best manufacturers of Canada and the United States.

McROBBIE
Foot St. John 50 King Street

TOLD TO GET DRUNK
SAYS O. T. A. OFFICER
Instructed to do this to enforce law.

Toronto, Nov. 8.—When George C. Wright and Walter Partridge, provincial officers, appeared in police court on charges of drinking liquor in a local hotel, Partridge said they were instructed sometimes to get drunk to try to enforce the O. T. A. The case arose out of a raid at Scarborough on the same night that the officers were charged with having drunk liquor in the hotel. They were discharged.

CHIMPANZEE RAISING.

Brussels, Nov. 9.—Chimpanzee raising has become a new and unexpectedly profitable industry in the Belgian colonies of Africa, where several farms are being prepared upon which to breed them on a large scale for the purpose of securing their glands for grafting. The price of chimpanzees was only a few weeks ago. Poor specimens sell rapidly, so they brought only from 250 to 300 francs today for 3,000 francs. A substantial increase.

Stores open 8.30 a.m., Close 6 p.m., Saturday 10 p.m. Phone Main 2400.

Bright New Fall Merchandise In Special Displays For Week-End Shoppers



A Few Pairs of Plaid Nap Blankets

(Slightly soiled.)

\$6 pr to clear

These have been marked at a very decided price reduction for quick disposal. The quantity is limited. Early shoppers are assured a genuine bargain.

(Housefurnishings, 2nd floor.)



Two Special Groups of Trimmed Dress Hats

\$6.50 and \$8.50 each

A splendid opportunity to select a beautiful and becoming model at a very moderate price. You'll find many specially attractive styles and colors among these. Shapes and trimmings that are altogether new and distinctive.

(Millinery Salon, 2nd floor.)



Christmas Umbrellas

We are now ready with a wonderfully attractive stock of gift umbrellas. Black, navy, purple and green with particularly smart handles.

Chiffon Velvets

These are now in great demand for handsome afternoon and evening dresses. Latest arrivals are showing in fuchsia, old rose, grey, taupe, tan, brown, navy and black.

Flannel Middies

In Balkan and regulation style. Navy or red with trimmings of black, white or red braid.

(Silk room, 2nd floor.)

The Children's Shop Is Bright With New and Attractive Things

Infants' Silk Puffs, in pink or blue \$2.90 to \$5 each
Infants' Silk Kimonos \$3 to \$5 each
Infants' Short Quilted Silk Jackets \$2.50 each
Children's Velour Kimonos, Sizes 2 to 14 years \$3 to \$4.25 each
Child's Hand Made Bed Spreads, prettily appliqued with nursery patterns 25c cake

Infants' Pure Soap 25c box

Infants' Powder 25c box

Infants' Wool Bonnets, in all white or trimmed with pink or blue 95c

Infants' Brushed Wool Bonnets \$1.50

Infants' Pillow Slips 50c, 75c and 95c each

"Arnold Knit" Baby Towels 60c

Children's Flannellette Combinations (waist and drawers) 50c

Children's Bloomers, in grey, brown, navy, pink and white 50c and 75c

Children's Black Tights, ankle length 25c to 75c

(Second Floor.)

Fresh, New Seasonable Underwear For Women

You may choose now from well assorted stocks.

"Niagara Maid" Silk Vests, in flesh and white \$3.85 each

Silk Union Suits in flesh or white \$8 and \$6.25 suit

Union Suits with lisle bodies and silk tops \$3.90 suit

Heavy Weight Union Suits in all sizes \$1.70 suit and up

Knickers in wool, saten, silk, satin and fleece lined; all wanted colors 45c to \$6 pr

Flannellette Gowns in high and low neck styles 95c to \$3.25 each

Flannellette Undershirts 85c each

Our Special Girdle Corset, with elastic top and four suspenders 90c

Low Bust Corsets, with four suspenders and elastic inserts at sides \$1.45

(Whitewear Dept., 2nd floor.)

The Linen Room Offers Plain Hemstitched Covers at Remarkably Low Prices

Tray Cloths; size 18x27 in. 50c each

Chiffonier Covers; sizes 18x36 in. 75c each

Bureau Scarfs; size 18x45 in. \$1 each

Buffet Covers; size 18x54 in. \$1 each

Five O'Clock Tea Cloths; size 36x36 in. \$1.25 each

One Piece Shams; size 30x36 in. \$1.50 each

Ramnants of Table Damask, cream and bleached, in a number of useful lengths.

(Ground floor.)



Special Attractions on the Main Floor

Odd Pairs of Women's Gloves, in suede, kid and chamois.

While they last—\$1 pr

"Nappa" Gauntlet Gloves with strap wrists \$2.10 pr

Wool Gauntlet Gloves 90c pr and up

Misses' Gauntlet Gloves in fashionable styles 90c to \$1.60 pr

Women's Linen Handkerchiefs with embroidered corners 3 for 95c

Women's Cashmere Hose in heather and costing shades. Plain or clocked \$1.50 pr

Eyelet Vests and Collars; also Eyelet Collar and Cuff Sets 85c each

Possies for dresses and furs; very attractive kinds 25c to \$1.10 each

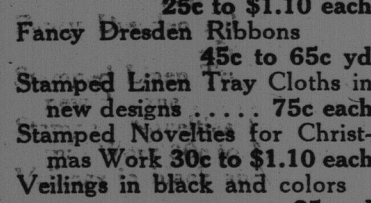
Fancy Dresden Ribbons 45c to 65c yd

Stamped Linen Tray Cloths in new designs 75c each

Stamped Novelties for Christmas Work 30c to \$1.10 each

Veilings in black and colors 25c yd

(Costume Dept., 2nd floor.)



November Clearance of Women's Heavy Winter Coats Now Going On

These are samples and odd lines and include Heavy Vanish Coats made from plaid backed cloths; also plain velours self or fur trimmed.

Clearance Prices—

\$13.75, \$16.75,

\$17.75, \$19.75

(Costume Dept., 2nd floor.)

ODD LOTS SALE

Women's Shoes

Beginning FRIDAY MORNING we are offering about 800 pairs of Ladies' Boots and Low Shoes at the REMARKABLY LOW PRICES quoted below. They are being SHOWN AT ALL OF OUR THREE STORES

437 Pairs of
\$3.95 BOOTS \$3.95

ALL STYLES—ALL LEATHERS

ALL ONE PRICE

BOOTS ARE NOW BECOMING MORE POPULAR

368 Pairs of
\$2.95 OXFORDS and PUMPS \$2.95

ALL GOOD STYLES—ALL LEATHERS

ALL ONE PRICE

Colonials are Considered the Last Thing in Pumps

These shoes, in the very same quality, were selling two years ago at \$5 to \$12. THE GREATEST VALUE IN FOOTWEAR EVER OFFERED THE LADIES OF ST. JOHN. MAKE YOUR SELECTIONS EARLY!

SOLD FOR CASH ONLY. NOT SENT ON APPROVAL.

RELIABLE FOOTWEAR AT FAIR PRICES.

WATERBURY & RISING, LIMITED

BRITISH DOMINIONS

Underwriters Agency

A British Fire Office with assets of ONE HUNDRED MILLION DOLLARS

C. E. L. JARVIS & SON

Provincial Agents

H. H. McLELLAN, LTD.,

City Agent.

See Special Advertisement ON PAGE 9

\$20,000 November Drive

Dry Goods, Women's and Children's Wearing Apparel and all Seasonable Accessories

SEE PAGE 9

LONDON HOUSE

F. W. DANIEL & CO.

Head of King St.