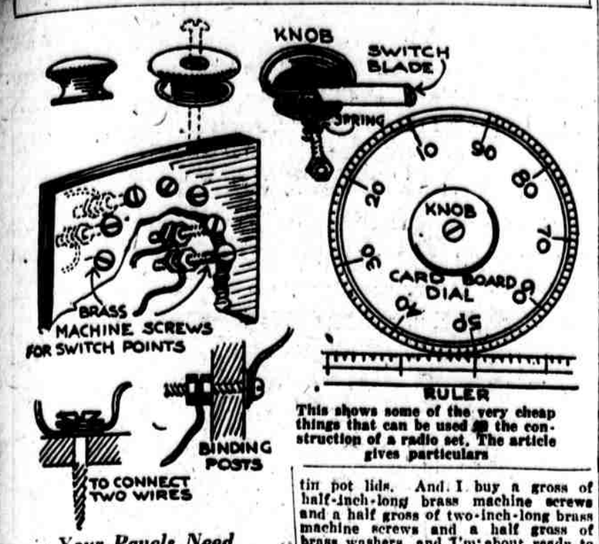
RADIO IN THE HOME

By HENRY M. NEELY



This shows some of the very cheap things that can be used in the construction of a radio set. The article gives particulars

Your Panels Need Not Cost a Fortune

In building panels for mounting radio sets, of course there's nothing to compare with nice smooth shiny black formica or bakelite fronts with brilliant nickel-plated switch posts and blades and binding posts. Electrically, it's the very best combination you can get and it makes such a workman-like job that it's a delight to the eye and something which the maker can be proud of when he displays it to his friends.

But formica and bakelite cost money and nobody is giving away nickel binding posts and switch points. And, if you do the sensible thing and adopt the "unit" system of construction advocated in these articles, the various panels, if built of the best, will total quite a tidy sum of money.

But it isn't really necessary to spend a fortune. It can be done with very little cost. The radio expert will frown with disapproval at the advice I am going to give in this article, and will warn you of "dialectric losses," but, if you've never met a dialectric loss personally and wouldn't recognize one if you saw it on the street, you can leave that fine-sounding term to the expert and go ahead and have all the fun you want with the stuff I am going to describe. I have myself used this a great deal and, while I might have established a criminal record with "dialectric losses" I heard the broadcast concerts and that was what I was after.

Instead of formica or bakelite, you can use any good hardwood for your panel. And, if you can't get hardwood, use just wood. And, if you can't get that, use compo board or heavy cardboard. I made a lot of panels when I found an old desk being thrown away and saved those thin boards that form the partitions in the drawers and between the pigeon holes.

Just so long as these substances are thoroughly dry, you won't know that you are having "dialectric losses," but if you use a sappy wood or a damp piece of cardboard, I won't guarantee results.

For knobs for switches or coupling handles or condenser handles, I pay a cent apiece in a hardware store for those little wooden handles made for tin pot lids. And I buy a gross of half-inch-long brass machine screws and a half gross of two-inch-long brass machine screws and a half gross of brass washers, and I'm about ready to make a dozen panels.

It doesn't matter about the thickness of these machine screws or the kind of thread they have, so long as you can get nuts to fit them.

For switch contact points, I put the half-inch screws through holes, leaving the head of the screws on the front of the panel. On the back, put on your wire and screw the nut on tight and you have a good contact point. If you want to use them as binding posts, shove them through from the back with a washer on the back of the panel, put a nut on the end in front, twist your wire on the back and screw up hard on the nut. Then put on another nut on the front, so that you can screw down on a wire when you want to connect it there.

To make knobs, drill through the pot knob with a drill the size of the two-inch machine screws you bought. Then, with a larger bit, big enough to make a hole that the nuts will turn in, enlarge this hole front and back to a depth to take the nut, pass the machine screw through, put the nut on the other end and screw up hard and fast with a screw-driver, holding the nut with the end of your wire pliers until it is embedded firmly in the wooden knob. The illustration will straighten out this puzzle for you.

For switch blades, use thin brass which has a good, stiff spring to it. If it is soft brass, it will soon cease to make good contacts. If you cannot possibly afford brass, open up an empty tin can and cut your blade out of that with your mother's sewing scissors—but don't let her catch you at it. She'll declare it will ruin her scissors. I've used my wife's for six months, and she doesn't know it yet. It's like those "dialectric losses" we've been talking about. Mostly theory.

For dials I cut a circle of cardboard any diameter I want. Then I roll it slowly edgewise over the edge of a ruler, marking it off in sixteenth inches until I have the whole circumference thus divided. Then I begin at any one mark and lengthen each tenth mark and then lengthen each five in between, only not so long as the tens mark. Then I number by tens from zero all the way around to the zero again.

The dials you buy are usually carefully divided into exactly 100 marks. This isn't necessary. You can use any number you want. The marks are only to let you make a record of the setting at which you heard the best signal or to let you know the position of your coupling or your condenser on the back of the panel.

You can think of a number of money-saving ideas like this as you build your set.

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Today's Programs

Philadelphia Station (WFI)
(Strawbridge & Clothier)

1:16 P. M.—PUBLIC LEDGER radio bulletins.
3:30 to 4:30—Recital by the Strawbridge & Clothier Male Quartet: John Owens, Edmyfed Lewis, Harold Simonds, John Wandersloot, assisted by Mary Comerford, contralto, and Loretta Kerk, pianist.
5:30 to 6—Baseball scores.
6:30—Radio talk by Lewis F. Kendall, Jr.

Philadelphia Station (WOO)
(Wanamaker's)

12:55 to 1 P. M. (daylight-saving time)—Arlington time signal.
4:30 to 5:10—Piano recital.
7:30—Evening concert. Betty Adelman, soprano; Evelyn Steece, soprano; Caroline Wagner Green, soprano; Fannie A. Sharpsin, violin; Henrietta K. Harrison, contralto; Anna Senn Gordon, violin; Miriam K. Allun, piano; Helen James, piano; Joseph G. Sullivan, baritone.

Philadelphia Station (WIP)
(Gimbel Brothers)

1:50 P. M.—Selections by the Gimbel Orchestra.
2:30—Recital by E. M. Cady, violinist.
3:00—Several members on the Conreid reproducing piano.
7:05—Final baseball scores.
7:15—Uncle Wip's bedtime stories.
7:20—Uncle Wip will read the names of children writing to him.

Newark, N. J., Station (WJZ)
(Westinghouse)

6 P. M.—"Business and Industrial conditions in the United States" as observed by the National Industrial Conference Board.
7:05—Stories from St. Nicholas Magazine; courtesy of the Century Company.
7:30—"Crime and Its Cure," by Richard E. Enright, Police Commissioner, City of New York.
8:00—"Eat and Be Healthy," by Mrs. Jenolse B. Short, editor of the Housewives' Forum, Pictorial Review.
9:30—"Legendary Indian Tales," by Princess Wabletka, an Indian psychic.

Pittsburgh Station (KDKA)
(Westinghouse)

6:30 P. M. and at fifteen-minute intervals thereafter—Baseball scores.
7 P. M.—News. Weekly survey of business conditions, by the National Industrial Conference Board. "The Unrest in China and Its Final Remedy," by J. Leighton Stuart, president of the Pekin University, Inc., Pekin, China.
7:45 P. M.—Government market reports and a report of the New York Stock Exchange.
8 P. M.—"Women in Business," by Thyrsa W. Amos, dean of women, University of Pittsburgh. "Pharmacy," by Julius A. Kock, dean Pittsburgh College of Pharmacy, University of Pittsburgh.
8:30 P. M.—Bedtime story for the children.
9 P. M.—Musical program.

RADIO

The Right Goods
AT
The Right Prices
COME SEE
UHR
Electric Supply Co.
19 N. 7th St.
Phones
Bell—Market 2602
Keystone—Main 5959

To every man and woman who wears our heels

NEVER was the need of a heel that gives real protection so great as it is today.

Standing or walking—wherever you are today—there is always an *unnatural* strain. Hard floors and pavements are practically universal. The body must have relief. Half an inch of heel must give it to you.

You generally pay the same for O'Sullivan's Safety Cushion Heels as for ordinary heels, though they cost the repairman more.

Although he makes less profit per pair on them, O'Sullivan's have two big advantages for the repairman: they always make satisfied customers, and satisfied customers mean bigger business.

The ordinary rubber heel is either hard and lifeless or soft and crumbly. O'Sullivan's Safety Cushion Heels combine maximum springiness with the toughness for long, hard wear.

Ask for O'Sullivan's — see that they are attached. The O'Sullivan Heel Company.

MONDAY, MAY 22, 1922. Store Opens at 9 A. M. Closes at 5:30 P. M.

SNELLENBURG'S

ENTIRE BLOCK—MARKET 11TH TO 12TH STREETS

Boys' Extra-Strong Play Suits at 79c Ea.

Just the thing Mother has been looking for!

Sturdy, well made, and of materials which will withstand the most strenuous wear and numerous tub-bings.

Three Models
Blue trimmed with red. Khaki trimmed with red, and blue-and-white Steifel's denim

Sizes 3 to 8 years.

SNELLENBURG'S First Floor

Enormous Purchase of
25,000 Real Hair Nets
A Wonderful Value in Our Notion Department
25c Doz.
Cap and Fringe Shapes

All wanted shades of light, medium and dark brown, blonde, black and auburn. Every net is guaranteed to be full size and perfect, but if upon opening the package you should find any imperfections, kindly return the net immediately and we will give you a new one in exchange.

SNELLENBURG'S Notion Department, First Floor

Spring-Time Is Music-Time

Violins, $8.00 to $30.00
Ukuleles, $1.75 to $22.50
Banjo Ukuleles, $3.65 to $9.00
Tenor Banjos $14.50 to $40.00
Guitars, $7.75 to $25.00
Slide Whistles 25c to $1.50
Harmonicas 35c to $3.85

Specially Popular Numbers to Add to Your Library of

SUPREME WORD ROLL 49c

Angel Child
Cairo Moon
Cutie (From the Blue Kitten)
Dee Dah Blues
Lo-La-Lo Marie
On the 'Gin, 'Gin, 'Ginny Shore
Southern Moonlight
Three o'Clock in the Morning
When Buddha Smiles
Georgia California
Mister Gallagher and Mr. Shean

SNELLENBURG'S Fifth Floor

The Handsomest
$30 to $49.50 Wraps and Capes
For Larger Women
In Our Stylish-Stout Shop
at
$19.75 $25.00 $29.75 and $32.50

Stunning models, specially designed to add length and grace of line to the full figure, developed in beautiful materials and the most fashionable sports and dress styles.

Reversible capes of smart double-faced material.
Silk capes finished with soft fur collar.
Good looking, serviceable styles in serge and tricotine.

Just the kind of wrap one needs for cool days and evenings at the shore—in the mountains—in the country—or at home. Sizes 42½ to 54½. One shown.

$7.50 Stylish Stout Dresses of Imported Cottons
$5.00 Each

Made of imported woven fabric, with collar and cuffs of organdie, edged with a tiny frill.

Crisp—becoming—dainty—and they will tub so nicely! Sizes 42½ to 50½.

SNELLENBURG'S Second Floor

Big Before-Decoration-Day Sale of
Men's Fine Shirts and Other Furnishings
At Decidedly Worth-While Savings

Men's $3 Silk Striped Shirts at $1.97 ea.

We bought these shirtings for cash and had the shirts made up to our own order. Consequently, we can vouch for their excellence—their good style, good workmanship and correct finish. All neat, new selected patterns.

Made in Centre-Pleat Style With Ocean Pearl Buttons and Bead-Edge Neckbands. Sizes 14 to 17.

Men's $2 Pajamas at... $1.59
White checked nainsook, white cambric and striped percale pajamas with white or colored frogs.

Men's $1 Neckwear at..... 55c
David Evan's English foulards in a large assortment of attractive colors.

Men's $5.00 Shirts..... $2.85
Silk and cotton mixtures, sometimes called American broadcloth. Heavy ribbed fiber silk shirts in good-looking patterns.

Men's $2.50 White and Tan Neglige Shirts at..... $1.79
A special purchase including white woven madras shirts in neckband style, and white pongees in neckband and collar attached effects. Exceptional qualities.

Men's $1.50 Night Shirts at $1.10
Made of good quality white cambric and trimmed with white or colored braid. Sizes 15 to 19.

Men's $5.00 Beach Robes at..... $3.45

Men's $1.75 to $2.00 Shirts at. Each..... $1.24
Neat striped patterns in Harmony percale and woven madras. Also plain whites and tans. Neckband styles. Sizes 14 to 17½.

Men's $25.00 Silk Robes at..... $16.50

Men's Soiesette Shirts at $1.97
White and tan soiesette shirts—every one marked with the genuine Soiesette label. All sizes. Neckband styles.

SNELLENBURG'S First Floor

A New Low Price on
Women's and Misses' Smart 3-Piece Knicker Suits of Lightweight Tweed

Consisting of Skirt, Knickers, and Sports Suit Coat
$12.95 and $15.00

More and more in favor among women for sports and vacation wear—for golf, horse back riding, walking—for seashore, country and mountains.

Thoroughly tailored, full-cut, well styled suits of excellent quality tweed and heather mixtures.

At less than one would expect to pay for the suit alone, without the knickers! Sketched.

SNELLENBURG'S Second Floor, South Building, Bridge

The Smartest of
New Silk Sports Skirts
Crepes—and Some Baronet Satins and Georgette Stripes—In a Special Sale
at $5.00 Each

Choice of all the popular colorings—white, flesh, henna, navy, light blue, violet and black—in self or contrasting stripes.

Designed in the smart model pictured—shirred at the waistband, and finished with the new narrow belt—some with novelty pockets, trimmed with pearl buttons.

Skirts for summer sports and general wear. Practical and decidedly smart.
Band sizes 26 to 32 inches.

SNELLENBURG'S Second Floor

The Famous Snellenburg Special Corsets
Less Than ½ Price in Our May Sale Tomorrow

Girdle top, low and medium bust models, with long or short hip lines. Some elastic girdles included.

$4.50 and $5.00 Corsets..... $1.98
$5.00 and $5.50 Corsets..... $2.39

85c to $2.00 Bandeaux at 49c, 59c and 98c
Models for slight and heavy figures in pretty fancy materials.

SNELLENBURG'S Second Floor

Splendid Assortments of
Fresh, Dainty Blouses

For the Decoration Day Week-End Trip
$2.00 Each

Charming models, trimmed in a delightful variety of smart, new effects—tailored or crisply frilled. Two pictured.

The Striped Dimity Blouse *In the Sketch at* **$2.00**
Is a clever Peter Pan collar model, stitched on collar and in front in pink or blue, and finished with bow and dainty pearl buttons. A short sleeve blouse, with turn-back cuffs.

The Dotted Swiss Model *Shown, Also* **$2.00**
Has tuxedo collar of fine organdie and features edgings of fine pleating, around the collar, down the front and around the turn-back cuffs. In long-sleeve style.

Other Pretty Models at..... $2.00
In Voile, Batiste, Dimity and Novelty Voile
Dainty vestee and frilled models, variously lace trimmed, tucked, trimmed with fine pleatings, touches of swiss and gingham. Splendid choosing!

SNELLENBURG'S Second Floor

1000 Yards of Extra Fine
$4.50 Pure Irish Linen Table Damask at $3.00 Yard

Snowy table linen, of very heavy quality and unusually fine weave, with a rich dew bleach luster. Full two yards wide, in beautiful stripe and floral patterns.

Pure Linen Napkins

Snowy bleached pure Irish linen satin damask napkins in almost 50 different patterns and all desirable sizes. Beautiful satin luster finish.

$3.25 17x17-Inch Napkins, Dozen..... $2.00
$4.50 18x18-Inch Napkins, Dozen..... $3.00
$7.50 22x22-Inch Napkins, Dozen..... $5.00
$8.50 22x22-Inch Napkins, Dozen..... $6.50
$11.00 24x24-Inch Napkins, Dozen..... $7.00

$1.00 Mercerized Table Damask, Yd. 69c
Snowy bleach, splendid heavy quality, 72 inches wide. In handsome stripe and floral patterns, every yard guaranteed to give splendid service.

50c Turkish Towels, Each..... 24c
Woven from fine two-ply terry yarns, all-white in large size. Thick and spongy, with hemmed ends.

SNELLENBURG'S First Floor

Timely
Upholstery Specials
At Big Savings

Advance Sale of $1.98 Ready-to-Hang Window Awnings
Made of 8-oz. Tan Striped or Khaki
$2.98

All sizes—30, 36, 42, 48. They are 3 feet 6 inches to frame, with 12-inch skirt. This is 3 inches longer than the average stock awning sold today. They are scalloped and bound with white braid. Complete with fixtures ready to hang. Made to match porch awnings.

75c Cretonne-Covered Chair Backs at..... 29c

$1.75 Cretonne-Covered Chair Seats at..... 65c
Complete Seat and Back, Set.. 94c
Covered with excellent grade cretonne, both seat and back are tufted. Seats have eight buttons and are the large size, measuring 19x20 in. The pad for the back is half-moon shape and matches the chair seat. Limited quantity.

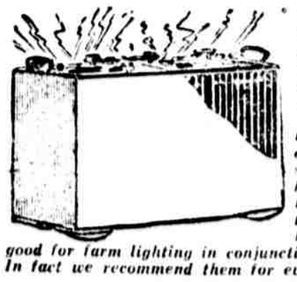
Imported and Domestic Cretonnes
At Greatly Reduced Prices

Never before such prices, colors or patterns, and the quality is excellent. Many just arrived from abroad. A rare opportunity. Ideal for slip covers, summer draperies.

59c Domestic Cretonnes, Yard 25c
69c Domestic Cretonnes, Yard 39c
$1.25 Imported Cretonnes, Yard 79c
$1.48 Imported Cretonnes, Yard..... 98c
$1.98 Imported Cretonnes, Yard..... $1.19
$2.98 and $3.98 Imported Cretonnes, Yard..... $1.85

SNELLENBURG'S Fourth Floor

Sale of Extra Heavy Duty
3-Cell, 6-Volt and 4-Cell 8-Volt Batteries
Which Cost the Government $58.26 Each
at $9.75 each



Lot comprises Willard, Exide and Diamond Grid Batteries — all tested by the Government and in A-1 condition.

For wireless operators, lighting systems, electric call systems, store window displays, house and lawn illumination electrical toys and trains, motor-boats and especially good for farm lighting in conjunction with Delco System. In fact we recommend them for every electrical purpose.

None Sent C. O. D.

SNELLENBURG'S Auto Department, Third Floor

N. SNELLENBURG & CO. N. SNELLENBURG & CO.