

# Stains and Finishes for Radio Cabinets

Practical Notes from a Practical Writer

Contributed by G.H. (Otahuhu).

IN building radio cabinets suitable for a fine finish, the grain should be well laid. This is done before the work is put together, by rapidly wetting the surface of the dressed timber. On drying, it will be observed that the surface has roughened, due to the raising of the grain. It is then smoothed down again by means of the scraper and No. 00 sandpaper. No. 1 sandpaper, finishing with No. 00, will do if the amateur cannot use the scraper properly. This operation may be repeated with advantage.

## Stains.

(a) Raw linseed oil, together with a little drying oil, such as Japan oil or Terebine.

(b) Bichromate of Potash (not permanganate), about 1 to 2oz. dissolved in a pint of boiling water. This stain burns the surface, and produces a darker and more "mellow" effect than "oiled" Rimu.

(c) Browns: Vandyke Crystals. About 2oz. to 1 pint of water. This is brought to the boil and allowed to simmer for 15 to 30 minutes. Stir well or will rise in a similar manner as milk. This stain produces a beautiful rich brown.

(d) Japan black, diluted with genuine turpentine. This is a colder shade than "C."

(e) Black: Nigrosine dissolved in methylated spirits. One ounce may be purchased, and is sufficient for most needs.

(f) Rosewood: Naylor's Rosewood Crystals, dissolved in methylated spirits. One ounce may be purchased, and will probably be sufficient. This is a beautiful rich rosewood, and unless the colour clashes with its environments, the writer considers this the best for wireless cabinets.

All these stains may be obtained from any oil and colourman, with the exception of F. This may be obtained from Messrs. Guthrie Bowron, Auckland and Wellington.

The quantities in the above directions are only approximate; the desired intensity is obtained by testing on the back of the woodwork.

THE stains should be applied with a brush and lightly wiped over with a rag. This removes superfluous pigment and brush marks, and exposes the grain of the timber. The colour of the wet stain (with the exception of B) will give a good indication of the finished colour. If too light at this stage, apply another coat; if too deep, wipe with a rag moistened with the solvent (water or spirits, as the case might be). When quite dry, apply two coats of knotting (3 or 4oz. shellac dissolved in methylated spirits). These two coats must be very thin, in order to "flow" evenly. Lightly sandpaper

between and after them, and the work is then ready for the "finish."

FRENCH polish is, undoubtedly the king of "finishes," but as this is only successful in the hands of an expert, I omit it in favour of methods applicable to the ordinary handy-man.

The secret of good varnishing is absolute cleanliness in the matter of pot, brush and varnish, keeping the work dustproof until dry, and the use of plenty of No. 00 sandpaper between the coats (always rubbing with the grain of each piece of timber).

For a rich high gloss, which will be better than French polish poorly done, apply three coats of the best "pale carriage varnish" at intervals of not less than four days, rubbing down between each coat until every trace of gloss disappears. For a dull finish, use eggshell varnish, as above, sandpapering lightly between coats.

Should this finish be too dull for the worker's taste, any degree of brilliancy may be imparted by adding carriage varnish to the eggshell varnish, and some beautiful soft polish effects may be obtained by this method.

In New Zealand, our cabinets are usually made of rimu, kauri, or oak, and their most suitable stains are: Rimu—Any of the above. Kauri—For C, D, E and F, and is the best timber for B and F. Oak—A, C, D and E. Generally speaking, oak should be finished in eggshell varnish with very little carriage varnish.

MANY attempts have been made to obviate the sordidness usually associated with wireless panels. The metal panels in shielded sets demand some treatment, and here is an opportunity to tread new paths with profit. The following colours were used with delightful effects on the panel of a rosewood polished console with black dials. First of all, the panel was painted a very pale green and "granited" with green, brown and white. To do this, the colours are mixed up thinly with turps and a little terebine. A little of the green (a deeper shade than the panel) is poured on a board or palette, a small cheap sponge with a flattened surface is worked in the colour and then lightly but firmly daubed all over the panel, turning the sponge round a little each succeeding daub to avoid a marked "pattern." The sponge is cleaned out with turps or kerosene, and when the work is dry or nearly so, the process is repeated with the brown, and then with the white. None of the colours should be too prominent. If they should be so, "soften out" by lightly daubing over with the colour or colours necessary (the ground colour may help). The colours should be thin enough to be semi-transparent when daubed on the panel.

# RADIO DIRECTORY

What to Buy and Where

## CITIES

- AERIAL MASTS** ..... Domestic Radio Co., Ltd.,  
300 Queen Street, Auckland.
- ALTONA & HAMMARLUND-ROBERTS SETS.** Johns, Ltd.  
Chancery Street, Auckland.
- AMPLION LOUDSPEAKERS** . All Radio Dealers.
- BURGESS RADIO BATTERIES,** All Radio Dealers.
- CROSLEY RADIO** Abel, Smeeton, Ltd.,  
27-29 Customs St. E. Auckland.
- CROSLEY RADIO RECEIVERS** G. G. Macquarrie, Ltd.,  
120 Willis Street, Wellington.
- CROSLEY RADIO** ..... Abel, Smeeton, Ltd. Rep.: G. MOSES,  
James Street, Mangarei.
- DAYTON All-Electric Radio** ... Superadio, Ltd.,  
147 Queen Street, Auckland.
- EMMCO RADIO PRODUCTS** Johns, Ltd.,  
Chancery St., Auckland.
- EMMCO RADIO PRODUCTS** Thos. Ballinger & Co., Ltd.,  
Victoria St., Wellington.
- EMMCO RADIO PRODUCTS** L. B. Scott, Ltd.,  
Worcester St., Christchurch.
- KING RADIO RECEIVERS** ... F. J. W. Fear & Co.,  
63 Willis Street, Wellington.
- LISSEN RADIO PARTS AND KITS** ..... All Radio Dealers.
- LOUDSPEAKER AND TRANSFORMER REPAIRS** ..... A. E. Strange,  
404 Worcester Street, Christchurch.
- MAJESTIC RADIO RECEIVERS** Kirkcaldie & Stains,  
Chief Wellington Agents, Lambton Quay.
- MULLARD VALVES** ..... All Radio Dealers.
- PILOT 1930 PARTS AND KITS, ETC.** ..... Abel, Smeeton, Ltd.,  
27-29 Customs Street East, Auckland.
- PILOT 1930 PARTS—PILOT SUPER WASP KITS, GILFILLAN, KELLOGG and ATWATER KENT SETS** ..... Harrington's, N.Z., Ltd.,  
138-140 Queen St., Auckland.  
40-42 Willis St., Wellington.
- RADIOLA RECEIVERS and Expert Radiola Service.** Farmers' Trading Co., Ltd.,  
Hobson Street Auckland.
- RADIO REPAIRS AND SERVICE** ..... E. G. Shipley,  
135 Manchester Street, Christchurch.

## COUNTRY TOWNS

- CROSLEY RADIO** ..... J. C. Davidson,  
Main Street, Pahiatua.
- CROSLEY SETS** ..... Abel, Smeeton, Ltd. Rep.: C. Ruscoe,  
409 Devon Street, New Plymouth.
- CROSLEY RADIO** ..... D. A. Morrison & Co.,  
Victoria Avenue, Wanganui.
- MAJESTIC ELECTRIC RADIO** Berryman's, The Home of Music,  
Palmerston North.
- MAJESTIC, ATWATER-KENT AND RADIOLA ELECTRIC SETS** Radio House, Hamilton.  
G. S. Anchor, Manager.
- PHILIPS VALVES AND APPARATUS** All Good Radio Dealers