



## Hints on restoring old cabinets

It is very rare for early equipment to be found in pristine condition. Most will have suffered from one or more varieties of a long list of mistreatments — ranging from rodent damage, through rust and rot to vandalism and missing parts. This month we discuss remedying exterior damage.

What can or should be done when you find a vintage radio that is in a poor state? Restore it, or merely conserve it? The key words here are restraint and caution. Early receivers can be valuable, both historically and financially. Like most antiques, their values are governed by originality, condition, age, rarity and fashion — and lately they have been appreciating quite markedly. Many enthusiasts lament this new situation, but it is the inevitable result of the growing interest in vintage radios and their increasing scarcity.

The natural temptation with a newly acquired receiver is to fire it up, and see if it still works. Don't do it! Most sets were discarded because they were faulty, and prolonged storage may have caused further deterioration. Chances are that there will only be a disappointing silence; and more seriously, components may be damaged. My recommendation is to restrict initial action to cleaning the equipment for careful evaluation.

There is some debate about restoration. At one extreme there is the example of vintage car restorers, whose aim is perfection — their pride and joy finished to a standard often never achieved in the factory. On the other end of the scale there are museum curators who insist on 'warts and all' originality, accepting the inevitability of deterioration with age and use, and with little concern that the artifact may not be in working order.

A consensus of opinion amongst most experienced vintage radio collectors is that work done on a receiver should be a balance of these extremes. It has been argued that we have a significant responsibility in owning a rare or historic radio, and that we have something of a custodial function, to give it good care and to pass it on to succeeding generations — who will not thank us if we have modified or botched it.

Well meaning but ill-advised efforts

can ruin an artifact. There are stories of coin collections that were devalued because the misguided owner polished the tarnished specimens with Brasso! It is important to realise that a radio in reasonable original condition is more valuable than an immaculate example which shows evidence of restoration. In many cases, however, some judicious work will be warranted.

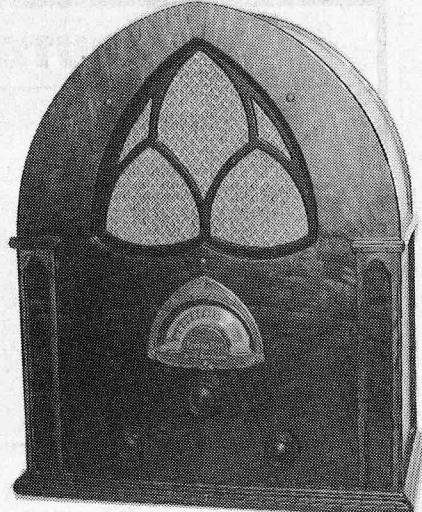
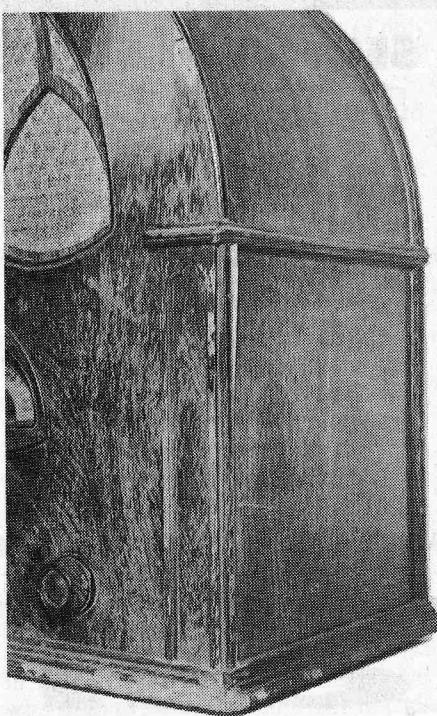
### Seek professional aid

The ideal is that any restoration work should be undetectable. Major skills involved in cabinet restoration are cabinet-making and finishing, but there are others. Occasionally there is even panel beating needed, on corroded and battered metal! Special machinery not often found in the home workshop may also be necessary, at times.

Naturally, to save money, there is a temptation to 'have a go' at cabinet restoration, and in many cases, such as the regluing of a piece of veneer, the job may not be too difficult. At the other end of the scale, to make a new panel or lid with elaborate mouldings involves the use of special cutting knives or routers.

Much depends on your own level of skill, and the available facilities. Expertise comes only with experience, and it is not very wise to practice on a vintage receiver cabinet. Always keep in mind the fact that you may have a potentially valuable item and that some mistakes are not reversible. It does not make sense to ruin several hundred dollars worth of radio for the sake of saving \$50.

Although, with the exception of some very expensive consoles, radio cabinets were not usually made to the same stan-



*Left: The lacquer on this valuable 60-year-old Atwater Kent model 84 'Golden Voice' cabinet had deteriorated to the point where repolishing was the only remedy. Done professionally (above), this has really enhanced the set's value.*

dard as fine furniture, the techniques used were much the same. There is available a wide selection of books dealing with cabinet and furniture restoration and refinishing, and these can be of considerable assistance.

### Repairing veneers

In some instances, structural repairs will be needed, but the most common problem is lifting and damaged veneer. Regluing and patching can be undertaken in the home workshop, but large areas should be tackled only if you have the correct equipment and experience. Locating and matching of replacement veneers can provide plenty of problems today. Unfortunately, iron-on plastic is the present fashion, and the availability of genuine veneers is limited. Even if veneer of the right species is available, matching of grains can be difficult. Geographic origins and differing sub-species influence grain and colouring. Careful staining may be required to achieve a good match.

Some cabinets featured what appears to be expensive exotic veneers. But they were in fact paper, printed with photographic copies of the real thing! Others had painted patterns to resemble burr graining. Lacquer removal from these surfaces may well end in disaster. The rule is to proceed carefully, if you must strip the surface of a cabinet.

Clearly, there is a limit to the extent of amateur repair work to cabinets. Don't hesitate to seek professional advice. If finance or facilities are not available, it is wiser to leave cabinets 'as is', rather than create further damage by an inexperienced do-it-yourself exercise.

### Grille cloth

Another problem area is that of grille cloth. Fading, physical damage, grease and grime are a common outcome of half a century or more of domestic exposure. Sometimes, original cloth in reasonable condition can be salvaged by softening the glue with hot water and very carefully washing in warm water and detergent. Fraying and shrinkage can however be a real problem.

Even if laundering is successful, fading is almost certain to have left a shadow of the grille on the cloth. One remedy, if this is the case, is to reverse the cloth, although the pattern may then be different.

In many cases, renewal is necessary. But unfortunately grille cloth fabrics were specially made, and suitable substitutes are often not readily available. So as not to be opaque to sound, a cloth should not be dense, and very important



*A skilled panelbeater, a spray painter and an artist all contributed to the restoration of this Claritone speaker. Originally, the flare had a hole in it from being nailed to a beam, and much of the paint was missing. After the metal repairs, the horn was resprayed in black cellulose lacquer and the logo was repainted from a photograph. Not a project for the novice!*

is a degree of elasticity so that it remains taut. Generally if there was a pattern, it was small and geometric, sometimes in two or more shades. If monocoloured, there was usually a pattern in the weave.

Lately there has been sufficient demand for at least one manufacturer to make a range of genuine grille cloths, although naturally it is somewhat expensive. NZ Vintage Radio Society members have been able to order cloth through the Society, and it is also available from the Antique Electronic Supply, PO Box 27468, Tempe, Arizona 85285-7468, USA. This well established and efficient firm publishes a comprehensive catalog, with coloured illustrations of the grille cloths available.

The same firm carries a wide range of vintage radio components, ranging from a huge inventory of valves including European, to decal transfers and books to catswhiskers. They accept credit card orders and delivery is by return airmail.

Care is needed when renewing grille cloths. Originally, most were secured with the traditional gelatine glue which is now hard to find — as are double

boiler glue pots to melt it in. The practical glue to use today is PVA, sold in handy squeeze bottles.

The trick is to hold the cloth under tension and with the pattern lines straight, while the glue sets. Easiest to fit are cloths fastened to wooden or cardboard baffles.

Place the cloth, which should be cut slightly larger than the baffle, front side down on top of a flat surface and stretch it evenly — holding it in position with masking tape, pins or staples. Now LIGHTLY and evenly coat the face of the baffle with glue, lay it on the cloth and after positioning it carefully, put a weight on it for an hour or so. If the glue is too thickly applied, it will bleed through to the cloth. Finally, trim the edges of the cloth back to the baffle.

If there is no baffle, the cloth will be stuck directly to the inside of the cabinet — requiring a lot more care and patience. Again, pins and masking tape can be useful.

### Refinishing: last resort

Complete stripping, restaining and recoating a vintage cabinet should only be undertaken as a last resort. In many cases, the original finish can be rejuvenated adequately, and in so doing the risk of devaluing the cabinet minimised.

Back in December 1988 we described the refinishing of a somewhat beaten up cabinet, dating from the mid 1940's, with polyurethane lacquer. It is generally agreed that this treatment is acceptable for newer cabinets; but prewar sets should, if at all possible, have their original type of polish.

First try and identify the finish. The great majority of cabinets were finished in nitrocellulose lacquer, which is still in use today. Nitrocellulose has the merits of transparency, a high gloss, durability and drying almost instantaneously. Its disadvantages are that it must be sprayed on, and in time it discolours.

There are several methods of restoring nitrocellulose finishes. First and often all that is necessary is a good scrub with a non-abrasive household cleaner. It is amazing how much old furniture polish and general grime can accumulate. If the surface is crazed, there are preparations available that can be used to reliquefy and blend the surface, often with excellent results.

If respraying has been unavoidable, the new finish is likely to have what appears to be an unnaturally high gloss. If this is the case, wait for a few days for the lacquer to fully harden and rub down the surface with a soft cloth and 'Brasso' — which contains sharp particles of

## VINTAGE RADIO

finely ground pumice. This removes the hard glitter but still leaves the surface with a rich shine.

A few expensive and custom made cabinets were French polished. This can be identified by the rich colouring of the wood and the ease with which methylated spirit will soften the polish. Water can mark French polish, leaving a white discolouration.

French polish has the advantage of being readily retouched, but requires some skill and experience to handle. Varnish, waxing and oiling, which are softer and duller than lacquer, were rarely used on early radio cabinets.

### About stains

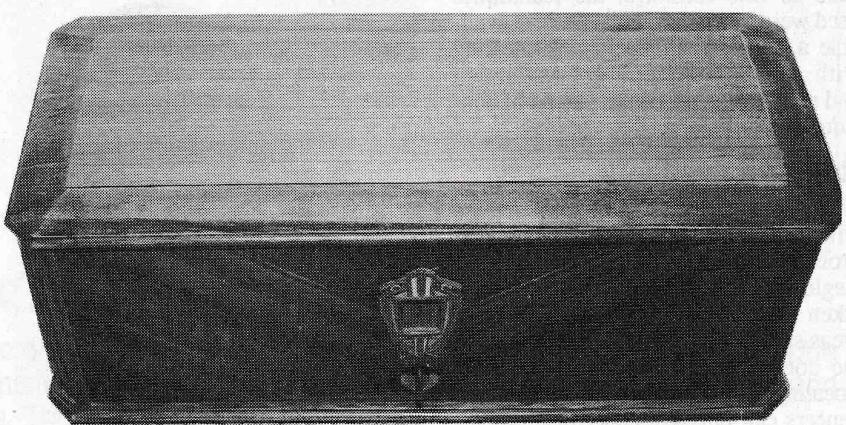
Most cabinets had at least some staining, which will be ruined by any stripping and should be restained after sanding — but before any lacquer or polish is applied. There are two main kinds with quite different characteristics.

Oil-based stain is more of a thin paint which is rubbed into the wood to provide a seal and hides grain. This was used especially for bases and plinths.

Water- and spirit-based stains modify the wood colouring, but do not conceal the grain. Spirit stain dries almost immediately and unlike water-based, does not raise the grain of sanded wood. Some authorities maintain that water-based stains have the best colour stability.

Sanding of old cabinets should be by hand only. Veneers are very thin, and power sanding can cut through to the base wood in a few moments.

Do not rely on memory for restaining,



*Although at first glance this 1929 RCA model 44 looks to be in reasonable condition, there are serious problems. The veneer on the lid has been replaced with Formica laminate, which will be very difficult to remove, and the wood has warped. A new lid will probably be necessary. The original nitrocellulose finish has also been coated with polyurethane lacquer, and will have to be removed.*

but take a photograph before any stripping of the cabinet. Be warned: it is very easy to overdo staining, which once applied is hard to reverse. Some unfinished woods can be deceptive, as polish or liquid will alter their colour considerably. Walnut is especially so. The raw timber is a greyish brown, but finishing will turn the darker portions of the grain almost black.

Vintage receivers can present the unwary with some nasty traps.

Often dial scales were made of translucent plastic, illuminated from the rear. Dial lamps can cause scorching and discolouration, but the major problem occurs when attempts are made to clean the dial — because in many cases the markings were made with water soluble ink!

Even a damp cloth will smudge them. Why on earth soluble ink was used is one of radio's minor mysteries...

Finally, some cabinets featured fancy carvings or mouldings. They were mouldings — literally — made of wood dust and a matrix that is not resistant to paint stripper, lacquer solvent or alcohol. About the best way to spruce them up is a gentle scrubbing with a nail brush and soapy water.

To sum up then, be very careful what you do to an old cabinet. Unless you know exactly what you are doing, give serious consideration to seeking professional help.

Needless to say, a valuable cabinet should never be the object of your first effort at restoration. ♦

## Valve Electronics

*Sales Repairs Restoration and Overhaul of:  
valve radios — audio gear — instrumentation.*

*Twelve month written warranty on all work.*

*We also sell, buy, swap, and trade parts and/or complete sets.*

## VINTAGE WIRELESS RADIO CO.

**60 Australia St  
Camperdown NSW 2050  
Australia 02 557 2212**

READER INFO NO. 21

### New Feature:

## Collector's Corner

As a result of the very warm response to Peter Lankshear's monthly Vintage Radio column, and his book *Discovering Vintage Radio*, we've decided to try out a new feature: Collector's Corner. The idea of this is to provide an opportunity for readers to display prized items from their collections of radios and other equipment — or to seek help from other collectors in obtaining information on rare models, or hard to get parts.

So if you're a collector of vintage gear, with a piece of equipment that you'd like to brag about, or you'd like help in either identifying or restoring a set, how about writing in and sending us whatever information you can — including a photo, if possible. We'll try to publish as many as we can. Send them in to Collector's Corner, c/- EA, PO Box 199, Alexandria 2015.