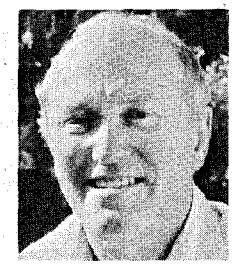
VINTAGE RADIO



By JOHN HILL

A rummage through my junk

Although I have been to many swap meets of various kinds, the last one I attended was special because it was a vintage radio swap meet. It was held in Melbourne and was very well attended. What's more, I had taken a site at the meet for the express purpose of selling some of my junk.

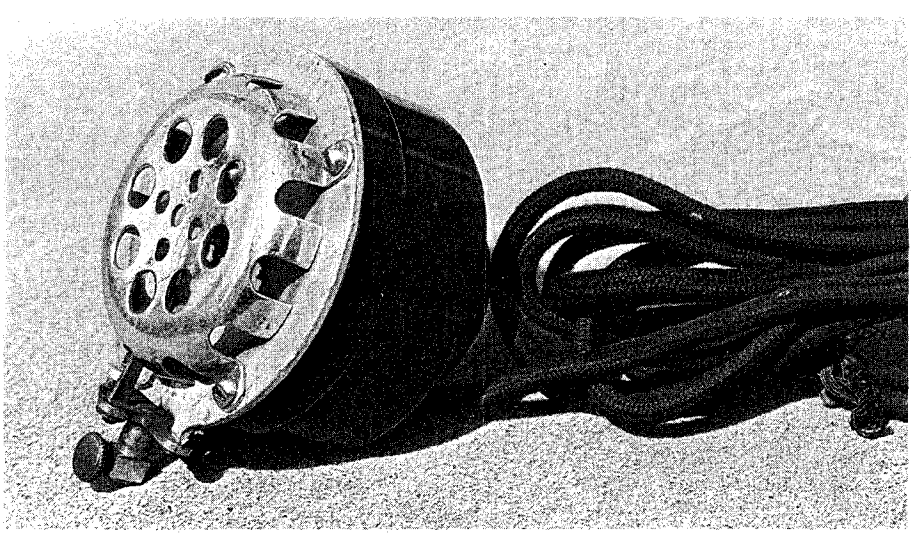
There is one serious problem associated with collecting and that is the slow but steady accumulation of bits and pieces over the years. As most readers would know, some of these bits and pieces are extremely valuable and supply restorers with many otherwise unobtainable spares. But it gets out of hand after a while, so I decided to be ruthless and off-load some of my junk so that I could to take possession of my shed again. The swap meet seemed like an appropriate place for its disposal.

Sifting through the rubble was great fun and all sorts of things were found that had been completely forgotten. When sorting through these treasures, it was initially a case of "no, I shouldn't sell that", or "I must keep those", or "these may come in handy", and so on. So, by the end of the day, hardly a thing had been set aside for the big sale. As a result, the process had to be repeated with a little more resolve.

My scrounging uncovered a few interesting relics. As some which I earmarked to sell are fairly rare and likely be of interest to readers, it seemed like a good opportunity to photograph them and write them up for Vintage Radio. Even though these things are quite collectable, I had no real use for them and the larger items were only taking up valuable space.

The first of these interesting items is a magnetic pick-up head for 78rpm recordings. This particular pick-up was specially made to fit onto the tone arm of an acoustic phonograph, thus allowing records to be played through a radio receiver.

While playing the family phonograph through a radio was common practice in the late 1920s and early 1930s, it was usually done using a complete pick-up with an accompanying volume control. A pick-up head only that fitted on to the phonograph's tone arm would have been a less expensive option. However, its very long, unshielded lead to the receiver may have caused some hum problems.



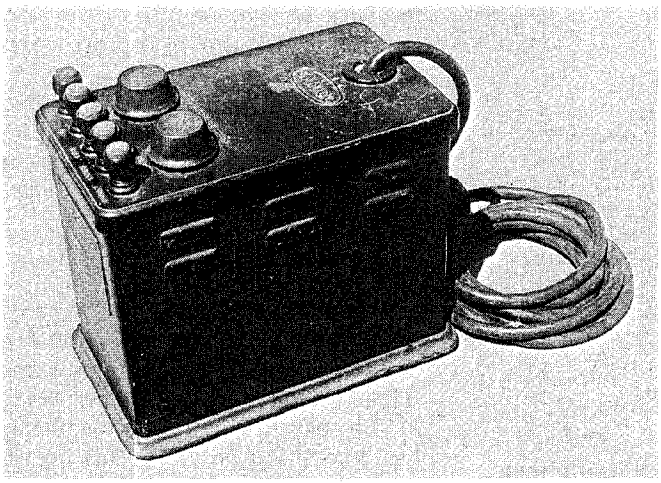
This old magnetic pick-up was made to fit straight onto the sound arm of an acoustic phonograph.

Battery eliminator

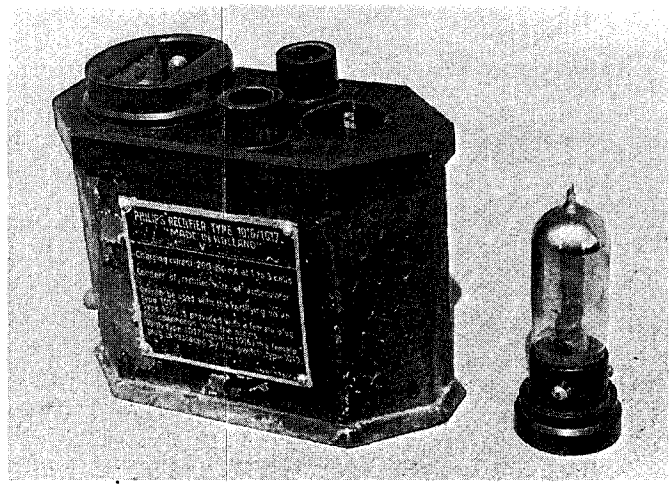
The next item is from 1927 and is a "B" battery eliminator. These units were usually large and heavy and this Australian-made Emmco was no exception. It uses a cold cathode rectifier and supplies a range of "B" voltages only. Some eliminators incorporated "C" voltages as well.

While the "B" battery eliminator solved the expense of frequent "B" battery purchases, the rechargeable lead acid "A" battery was another problem in that it required recharging at regular intervals, which was fairly inconvenient.

Shown in one of the accompanying photographs is a Philips "A" battery trickle charger. Its job was to slowly and continuously recharge the "A" battery – hopefully at a rate which



This photo shows an Emmco "B" battery eliminator. It used a cold cathode rectifier and had three output voltages, two of which could be varied using the large knobs on the top of the unit.



A Philips "A" battery trickle charger. The rectifier valve (right) plugs into the large hole at top right, while the two smaller holes are for the battery leads. Power is applied to the socket on the left.

approximated the discharge rate/period – and eliminate the irksome task of carting the battery off to the nearest garage or battery service centre.

Of course, neither the "B" battery eliminator nor the "A" battery trickle charger were of any use unless 240V AC power was available. Back in the 1920s, only the cities and larger towns had AC electric power and out in the country, beyond these supply systems, receivers still used batteries, just as they had done since radio first began.

Radio had not been with us long when someone reckoned that having one in their car would be a great idea. The vibrator unit was the big breakthrough in battery powered receivers because it allowed a radio to operate on a single battery – usually a 6V or 12V lead acid type. A vibrator, in conjunction with a special transformer and a rectifier valve, was the heart of car radio receivers up until about 1960.

But there were a few car radios before the vibrator came on the scene. These receivers still required a high tension supply and it was obtained from a motor/generator set (a low-voltage electric motor driving a high-voltage generator). These devices produced quite high voltages – up to 180V in the case of the Emerson unit shown in one of the accompanying photographs.

No doubt the engineering involved in manufacturing a motor/generator was considerable and its cost was probably equal to that of the receiver itself.

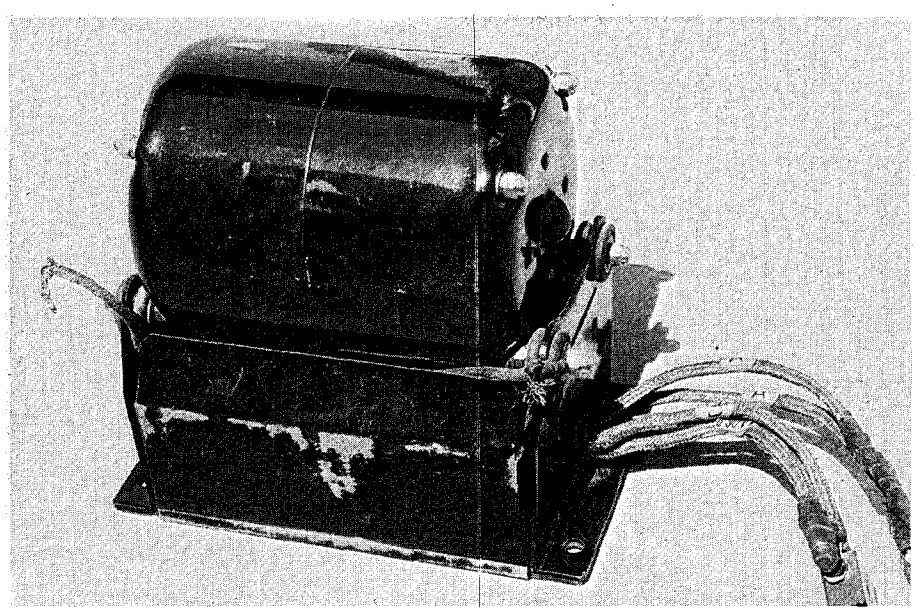
It is amazing how many ingenious and well designed products appeared in the early days of radio, only to be rendered totally obsolete in a very short time. The car radio motor/generator unit would be a classic example of instant obsolescence once the vibrator arrived on the scene.

(Editorial comment: although the motor generator had only a short life in car radio applications, larger versions were used extensively by the armed forces during World War II and beyond – until the end of the valve era, in fact. They were woefully inefficient devices. One of the top brands, the "Genemotor", could boast an efficiency of only 30% but this was not regarded as a serious problem for military applications).

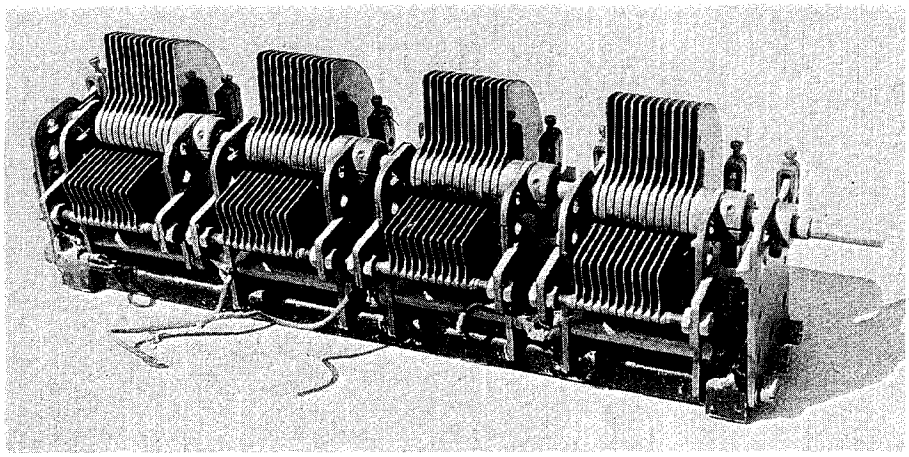
4-gang capacitor

Shown in one of the photographs is a 4-gang tuning capacitor from an ancient TRF receiver. After the superhet became established, tuning capacitors were mainly two and 3-gang types but some of the old TRF capacitors were four and 5-gang units.

This old 4-gang capacitor is quite large, as was the norm back then, and is made entirely of brass. Finding a practical use for such a monstrosity is fairly unlikely but it is an interesting



This elaborate device was used to power early car radios. Made by Emerson, it consists of a low voltage DC electric motor driving a high voltage DC generator. It was capable of producing 180V at 80mA. The advent of the vibrator rendered these monstrous things obsolete for car radios.



A 4-gang tuning capacitor from an ancient TRF receiver. It is made entirely of brass and the main control shaft rotates on plain bearings.

relic and would make a good display item.

Another piece of equipment that had been collecting dust for a few years is a 1930s Pilot valve tester. It was bought with the intention of restoring it and although it is in working condition, the old Pilot has few problems.

First, there are no operating instructions, which is usually the case with old valve testers. Second, being a 1930s model, there is no provision for testing post-war 7-pin and 9-pin miniature valves, unless one makes up a few adaptors. And finally, because the tester is of American manufacture, it works on 110V and so requires a step-down transformer for its operation.

While there would be few problems cleaning up the sockets and switches, I already have other valve testers, with operating instructions, and there seemed little point in keeping this one. Although the Pilot is usable on early valves up to octal, perhaps it too would be better used as display item than as a working valve tester.

The big swap meet bargain of bargains was a selection of unique valves. These valves are so unique that one can only wonder what their intended use was! The type numbers are absent from any of the common valve catalogs.

Even the bargain price of $1 each, or $20 a box full, was initially too high to tempt much interest. But at the end of the day someone realised their true worth and took the lot.

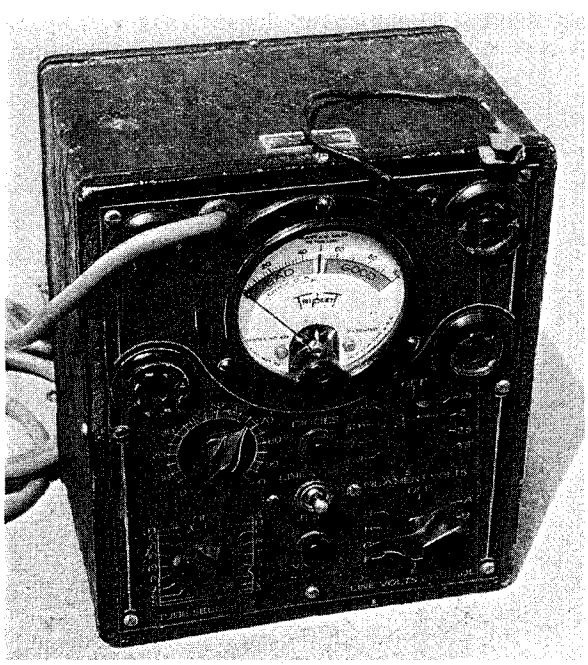
Why sell?

Anyone attending a radio swap meet must wonder why other collectors want to unload so much of their wares! If it is so good, why don't they keep it?

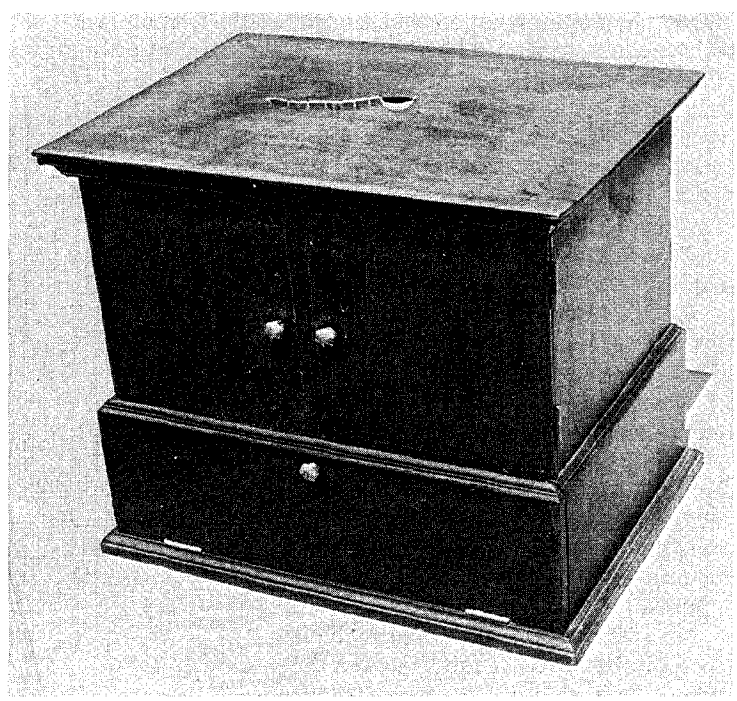
The answer is simple. If a collector has something he really has no use for, or he has duplicates of a particular item, then the answer is to swap, trade or sell. That way, other things can be acquired without having to spend money. It also prevents the accumulation of unwanted junk.

One interesting aspect of a swap meet is to see what people pay for the things they want. Most members of the community would take these items to the tip and consider them to be rubbish. Who knows – maybe they're right!

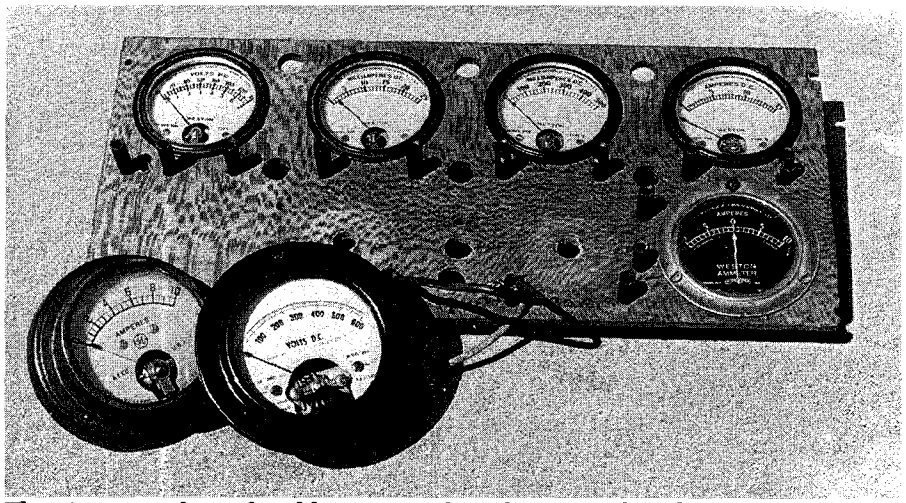
To be perfectly honest, after collecting for more than 10 years, I'm starting to look on some quite collectable receivers as just old radio sets. There is no reason why I should collect every make and model, nor is there any rea-



This valve tester was one of a trio of test instruments. Presumably the other units were a radio frequency generator and a volt/ohms/amp meter. Lack of instructions and 110V operation makes it fairly unattractive for use as a valve tester.



While this neat little 1920s receiver looks OK on the outside, there was quite a lot missing on the inside. It now has a new owner.



There's not much use for old meters such as these now that cheap multimeters are so readily available. In the distant past, this panel had been used as a volts/amp test rig.

son to have the best of everything.

There is every possibility that over the next 10 years I will gradually scale down my collecting activities and reduce the size of my collection, keeping only the more interesting items. I can't take it all with me when I go, can I?

Other throw-outs

I'm getting a bit off the track here. Let's get back to clearing out my shed.

One of my other throw-outs was a 1920s 3-valve regenerative receiver in a neat little cabinet with double doors at the front, covering the control panel. I was told it is a Radiola 4 cabinet into which someone had built the 3-valve set. Whether that was the case or not it sold quickly and now has a new owner.

Naturally it had been my intention to restore the little 3-valver but, as there are better and more interesting old regenerative sets in the shed, I decided to let this one go.

Accompanying the 3-valve receiver was a 1926 Brown horn speaker. Horn speakers are very collectable and although this particular example was a bit battle scarred it, too, sold quickly. There are two others in the shed and, when all is said and done, how many Brown horns does a bloke need?

Now some of my junk was not really junk at all but quite nicely restored radio receivers and about half a dozen mantel radios from the 1940s and 1950s. Once again, some were duplicates and I see no need to collect radios in twos or threes unless one is into collecting a complete colour range of a particular model.

This Brown horn speaker is one of the better types in that it has an aluminium cone instead of the usual soft iron diaphragm. Its tonal qualities and sensitivity were better than most.

The restored radios sold very well, as they were considerably cheaper than those at some of the other sites. Anything at a fair price will sell. Inflate the price beyond the item's true worth and not many buyers will be forthcoming. I went to the swap meet to sell, not to bring it all back home again at the end of the day.

So all things considered, taking a site at the vintage radio swap meet proved to be a worthwhile move for several reasons. It was not only a good day out whereby I off-loaded some unwanted equipment but I also met other collectors whom I would not have otherwise met. **SC**