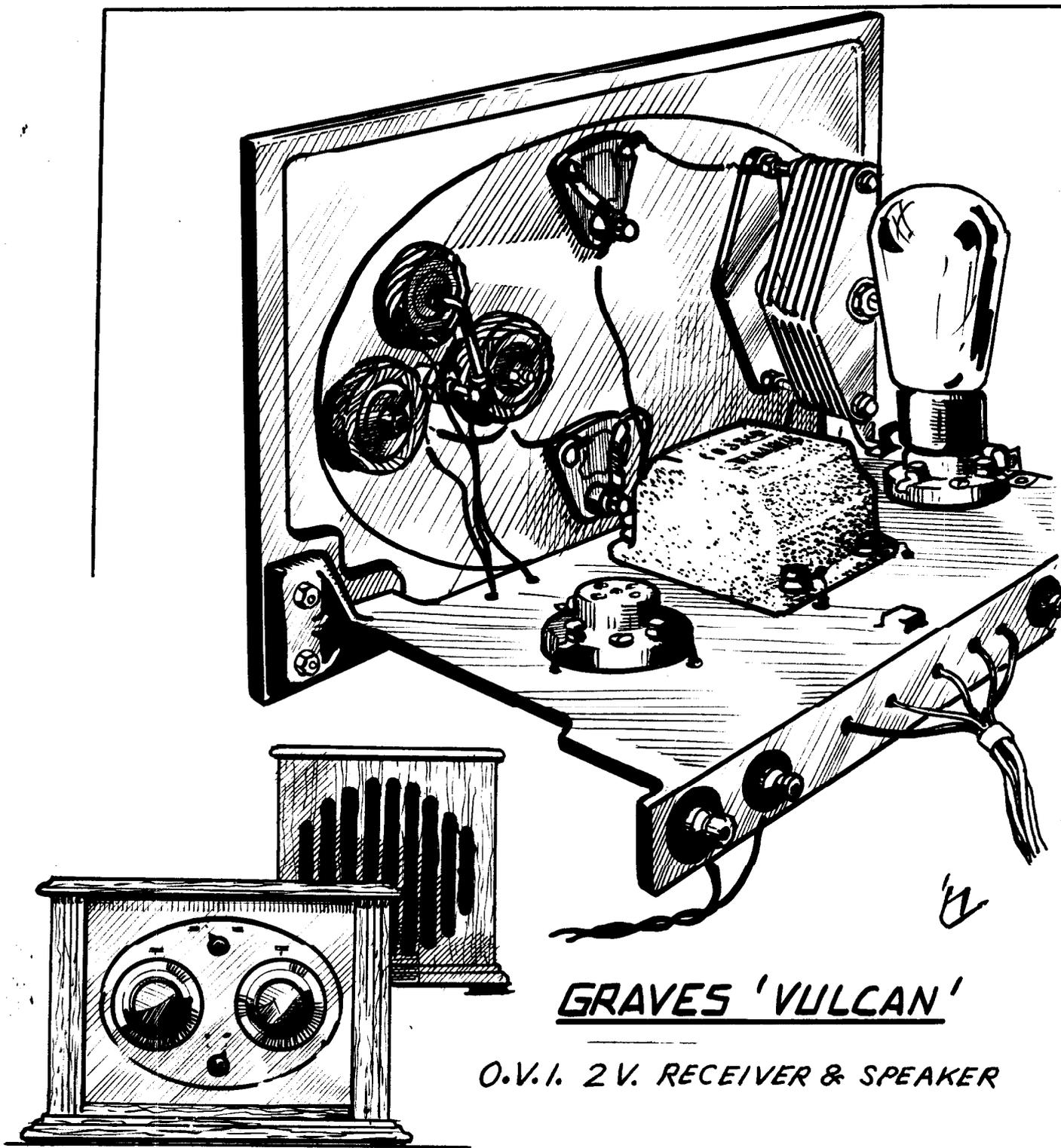


BRITISH

VINTAGE WIRELESS

SOCIETY



GRAVES 'VULCAN'

O.V.I. 2V. RECEIVER & SPEAKER

THE BRITISH VINTAGE WIRELESS SOCIETY

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The B.V.W.S. Committee for 1980/81 is as follows:

David Read	Chairman	
Jonathan Hill.....	Membership Secretary	
Ian Higginbottom.....	Treasurer	Addresses and
Tony Constable	Bulletin Editor	telephone numbers
Norman Jackson	Bulletin Artist	in current address
Roger Rayment	Meeting Convenor	list.
Mike Field	Archivist	
Dave Brodie	North American Rep.	
Ron Austin	New Committee Member	

DEADLINE FOR NEXT ISSUE 15th July This date may seem earlier than usual, but as the editor plans to take some holiday this summer, the earlier your contributions are sent in the better. Work is already under way on Vol.5 No.2.

CONTENTS

Page:

1	.....	Editorial
2	.....	Who Were the Fathers of Radio. by A.E.Hopwood
3	.....	The New Zealand Vintage Radio Soc. <u>Ed's</u> note
4	.....	The Burndept Universal Screened Five. by A.R.Constable
6	.....	Loudspeakers - Part III - Cones by David Read
7	.....	Letters to the Editor
8	.....	Transatlantic Letter from Dave Brodie
9	.....	The Vintage Wireless Register. Mike Field
10	.....	A Vintage Wireless Museum. by A.R.Constable
11	.....	Arzinite and Tellurium. by Desmond Thackeray
12	.....	Illustrated History of Philips Radio Valves. <u>Ed.</u>
13	.....	B.V.W.S. A.G.M. 1980 <u>Ed.</u>
14	.....	Those Awkward-to-Find Bits-and-Peices. Dennis Yates.
15 & 16	.....	Exchange pages.

FRONT COVER ILLUSTRATION

All previous front cover illustrations have been known sufficiently well that it has been a simple matter to compose a few words of description. This time Norman Jackson has drawn for us one of his own receivers ... about which little is known. The set is constructed on a panel and chassis moulded with a black material, probably ebonite..... hence the name 'Vulcan'. The set and speaker go by the name 'Graves' and we hope somebody somewhere can provide us with information about the manufacturers, the date and any possible contemporary advertising references. Please write to Norman Jackson.

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Volume 5 Number 1

BULLETIN

June 1980

EDITORIAL

One of the stated aims of the B.V.W.S. is to encourage the preservation of early equipment. Judging by the large number of superb examples of early wireless sets and associated equipment now known to be in members' collections, this aim is being put into practice with great enthusiasm. Our 'Vintage Wireless Register' attempts to gather together lists of equipment dating from pre-1930 back to the earliest times. Mike Field is the holder of this information and is currently appealing to all members, new or old, to provide him with details of their collections (see page 9). Please send in your list and help him complete what is sure to become a unique record in time.

Collectors are always on the look-out for new (or rather, old) items to add to their collections. And there are some dealers who have discovered unacceptable ways of providing old (or rather, new) items for the unsuspecting (or possibly gullible?) collector. We are all aware that it is possible to buy through the mail certain reproduction bits and pieces ... e.g. brass terminals, recently made crystal detectors, BBC-GPO transfers and Marconi transfers. There are occasions when, during renovation, these transfers can be very welcome indeedhow else can one hope to do a proper refinishing job on one of those crystal set boxes that have had the misfortune of living in a damp basement for 30 years? But now it seems that the two transfers mentioned are being used on recently constructed boxes into which is mounted a thin sheet of black (matt black) perspex (plexiglas) or other 'ebonite' looking material ... and occasionally ebonite itself, a still easily obtainable, though more expensive, material. On this 'ebonite' are then mounted a reproduction crystal, a few terminals and a knob. Inside the box there is sometimes a coil or an old condenser, but often there is nothing at all! To the new collector or to the overseas visitor desperate to get his hands on any bit of 'Marconi' gear, these monstrosities can look very appealing and are bought for about £30 on street markets where it is extremely difficult to trace their origins.Collectors beware! It is neither possible nor desirable to discourage the sale of reproduction parts and transfers ... there are times when we seriously need these things. So what can be done? I suppose the answer is nothing. This sort of practice applies to many other fields clocks, furniture, china, sculpture ... and I forget how many 'Mona Lisa's' there are scattered about the world all claiming to be originals. In vintage wireless, we can be fairly certain that the real original will always stand out from the fakes, no matter how clever they are. The particular fakes referred to above will never be mistaken for the real thing by the knowledgeable collector ... but we all have weaknesses in our knowledge and can be caught napping even with such badly made fakes. If any members have had direct experience of modern fakes, it would help other members to avoid the same experience if a short account were published in the Bulletin. Could you please send letters on this topic to the editor who will publish them (anonymously, if you wish) in future Bulletins.

The Committee again wish to thank Margaret Snelling and Jill Rayment for the good work they did in providing food at Harpenden on June 1st. If any other members (or their spouses or ~~or~~ offspring) wish to participate in this aspect of our meetings please contact our meetings convenor.... Roger Rayment.

WHO WERE THE FATHERS OF RADIO?

By A.E.Hopwood

Keith Geddes' authoritative article on Professor Hughes' role in the origins of radio prompted me to dive into my library to see whether anyone else was involved in those far off days....who might also be a founding father.

Before going any further, it is important that I define my terms of reference. Firstly, there must be evidence of actual communication between two points without intervening wires, and if possible, evidence that such communication was effected by Hertzian waves. My delving throw up two pioneers, both American, and both much earlier than Hughes.

In the 1860's, an American, Dr Mahlon Loomis became obsessed with the problem of 'wire-less' telegraphy. In 1866 he set up a public demonstration of his system between two peaks 18 miles apart in the Blue Ridge Mountains in Virginia. He set up a kite from each peak with a telegraph key and galvanometer coil from each kite to earth. Using synchronised watches to start with, he determined that, when the circuit from one kite was interrupted, a simultaneous impulse occurred at the distant station. The illustrations in his original notes show a surprising similarity to later wireless practice, but if we examine his patent specifications of July 30th 1872, it seems to be rather different, and specifically excludes any form of excitation...."I also dispense with all artificial batteries, but use the free electricity of the atmosphere, cooperating with that of the earth, to supply the electrical dynamic force or current for telegraphing and other useful purposes, such as light, heat and motive power." Dr. Loomis, a Washington dentist, certainly managed to establish wireless communications between aerials on numerous occasions, and convinced several bankers to back him. Unfortunately, a Boston stock market crash in 1869 ruined his backers. By 1871 he had found new backers in Chicago but a great fire destroyed his hopes once again. Undeterred, Dr Loomis appealed for financial help from Congress, and in 1873 the Loomis Aerial Telegraph Bill was passed. Unfortunately, the promised funds were not forthcoming and Loomis died in 1886, broken and penniless.

The question remains whether Loomis succeeded in communicating with radio waves or atmospheric conduction. Whatever the answer, Dr. Loomis was certainly father of the aerial!!

The second contender is also American, and better known for his inventions in other fields - Thomas Alva Edison. Like Hughes, Edison had wide experience of telegraphy and telephony. He pioneered the carbon microphone and was the first to appreciate the importance of matching the low impedance of his carbon microphone to line and receiver circuits using an induction coil. In November 1875, Edison and his team decided to investigate the sparks that could be drawn from metallic objects near an electromagnetic vibrator. The phenomenon was not new to any of them, as they often noticed it near telegraphic relays and other electrical equipment. What was new, was the intuitive way Edison deduced that it might be important. His assistant's notes for the 22nd November 1875 leave us in no doubt that they recognised they were dealing with something that could not be simply explained away..... "A New Force. In experimenting with a vibrator magnet consisting of a bar of Stubb's steel fastened at one end, and made to vibrate by means of a magnet, we noticed a spark coming from the cores of the magnet; this we have noticed often in relays, in stock printers when there were little iron filings between the armature & core & more often in our new electric pen & we have always come to the conclusion that it was caused by strong induction. But when we noticed it on the vibrator, it seemed so strong that it struck us forcibly that it might be something more than induction. We now found that if we touched any metallic part of the vibrator or magnet, the larger the body of iron touched to the vibrator, the larger the spark. We now connected a wire to the end of the vibrating rod & we found we could get a spark from it & one of the most curious phenomena is that if you turn the wire round on itself & let the point of the wire touch any other portion of itself, you get a spark. By connecting it to the gas pipe, we drew sparks from gas pipes in any part of the room, by drawing an iron wire over the brass jet of the cock - this is simply wonderful & a good proof that the cause of the spark is

a true unknown force."

The crucial part of the observation is the duplication of Hertz's resonator of eight years later. Edison was not slow to recognise the possibilities of the idea. In an article in 'The Operator' of January 1876, a journal for all those interested in telegraphy, Edison said of his 'electric' force: " The cumbersome appliances of transmitting ordinary electricity, such as telegraph poles, insulators, cable sheathings and so on, may be left out of the problem of quick and cheap telegraphic transmission, and a great saving of time and labour accomplished."

What happened next?

For some years Edison concentrated on other devices, notably his electric light and power distribution system, but in 1885, the year Hertz announced his experimental verification of Maxwell's theory, Edison patented a system of wireless telegraphy!

The patent (no 465,971) illustrated the concept of transmitting and receiving masts and was sufficiently relevant to later wireless telegraphic practice for the Marconi Company to buy it in 1903!

Having come so close to fathering radio, Edison also came within an ace of inventing the diode valve in 1883 when he reported the 'Edison-Effect' - but the world had to wait another 20 years for this effect to find its place in radio with Dr. Fleming.

References: The Complete Radio Book by R.F.Yates & L.C.Pacent N.Y. 1922
Edison & His Inventions by J.B.McClure Chicago 1879
Menlo Park Reminiscences Vol 1 by F.Jehl Dearborn 1937

.....

Many other inventors, some more scientific than others, had 'prehistoric' glimpses of wire-less telegraphy but, like Hughes, had little understanding and, while justly claim mention in the history books, had little effect on the true historical development of the subject. Where radio is concerned, the lineage is fairly well established. It is not always justified to claim fatherhood on behalf of people who, after the event, found they had been in or near the bedroom!

Like Hughes, many of the pre-Hertzian experimenters can only be seen to have come near the subject by the application of hind-sight and represent examples of those countless occasions when an opportunity is missed.

It is good to be reminded of the early contributions of Loomis and Edison and perhaps other readers might like to contribute material on other contenders (for a place in the bedroom). Editor

THE NEW ZEALAND VINTAGE RADIO SOCIETY

President: Des Wright. Secretary/Treasurer: Eric Kirby. Correspondence address: 617,, Dominion Road, Mt Roskill, Auckland 4, N.Z.

This Society now has a Bulletin which is edited by John W. Stokes who is also a B.V.W.S. member of long standing. Congratulations John on having taken on the task of editing your Society Bulletin I wish you the very best of luck. If your experience goes anything like mine, there will be no shortage of material and it is just possible that you may have more than you can use. Our own Bulletin has been going for over four years now but I do not propose trying to give you any smug advice it is hard work and I am sure you are prepared for that.

The N.Z.V.R.S. Bulletin Vol. 1 No. 1 has a 1921 De Forest model O-T3 Radiophone illustrated on the front cover (half tone photograph). Inside, there is a short editorial appealing for contributions for future issues, a presidential address discussing aims and interests of the Society, an unsigned article on 'The Story of Ultimate Radio', a wanted & disposing section, a short item describing the characteristics of the 1.16mfd condenser at the Clifden transmitter (1906) and finally an unsigned book review on 'Edison, the man who turned darkness into light.'

Keep up the good work.

Editor

THE BURNDIPT UNIVERSAL SCREENED FIVE

By A.R.Constable

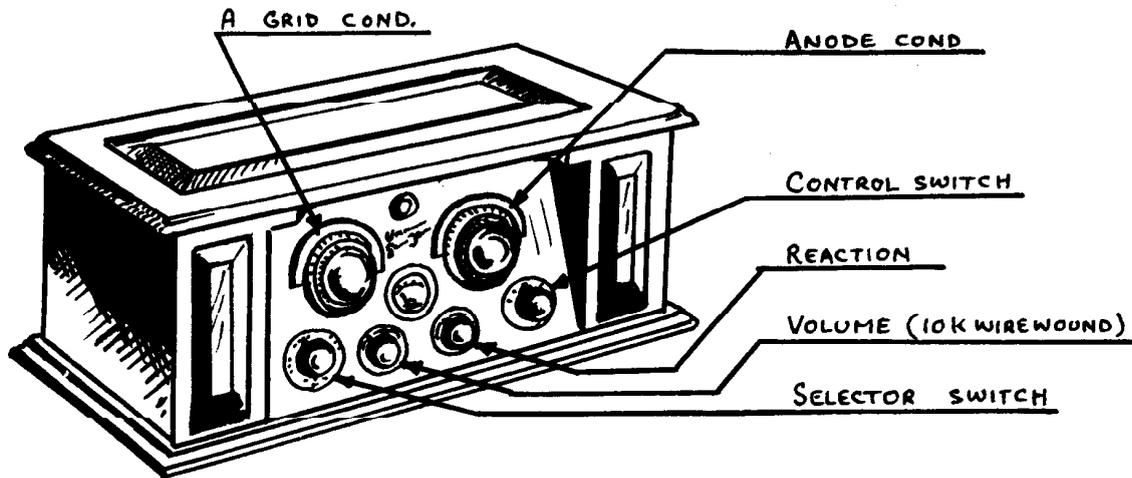
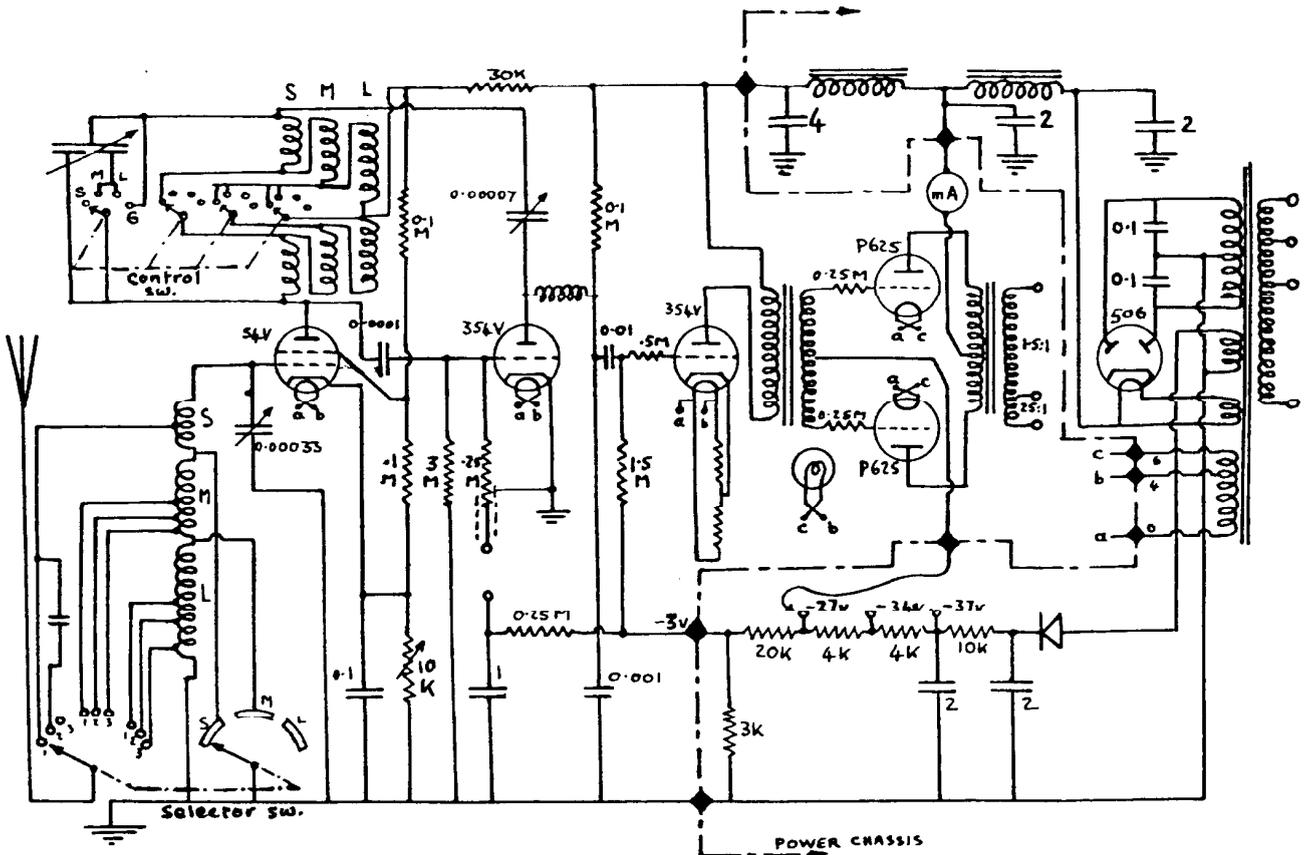
Readers of the Bulletin will be aware from articles in previous issues that the Burndept Company made a good range of high quality receivers during the 1920's. The 'Universal Screened Five' was produced in 1929 and appeared on the market either late 1929 or early 1930. An article in the Wireless World described the set in some detail on June 18th 1930. No circuit diagram appeared in the W.W. article and the circuit here was traced from my own recently acquired model. This set is an extremely worth while acquisition for the collector who likes to have something quite special. By the end of the 1920's the tetrode was in fairly widespread use and mains operated sets were not at all uncommon. Many sets were available with switchable dual wave bands some manufacturers called them long and short and others called them long and medium but they were all what we would call long and medium. The Universal Screened Five, however, had three switchable wave bands: Short, 16-38 metres; medium, 220-560 metres and long, 900-2100 metres. There are two wave-change switches, one for the aerial coil and the other for the S.G. anode coils. The former also incorporates an adjustable aerial tapping for each wave-band....each wave-band position has three positions. On the first one the tuning is very broad, on the second it is somewhat finer and on the third it is quite sharp. This allows one to do initial station finding with the anode tuning condenser with only rough tracking with the grid condenser with aerial tapping at position 1 on whatever chosen wave-band is being used. It is a neat way of doing things and works well on all wave-bands. You will note that, on the short wave-band, position 3 disconnects the aerial. In fact this device utilises the very small switch capacitance to give fine tuning on this range.

The other front panel controls include a volume control (a 10k pot in the cathode/s.g. line of V1) and a reaction control. The designers completely forgot to put a mains on/off switch on the front panel though they did think of putting a red pilot light at the top centre. You will notice from the diagram that this pilot light is not connected to either the 4v or the 6v L.T. transformer windings. It is connected to the 2v difference. The manufacturers used a 3.5volt bulb for the pilot light and claimed it would have an indefinite life connected like this. As far as I can judge, the one in my set is the original one supplied. The mains power chassis is separate from the main chassis and supplies H.T. with a Philips 506 and a separate G.B. with a Westinghouse metal rectifier. The power from this unit comes to 8 solder tags to which 8 wires from the main chassis have to be connected. The smoothing condensers are all housed in a single T.C.C. can which is quite easy to strip out for replacing the contents with modern reliable non-electrolytic capacitors. The G.B. dropping chain consists of specially made wire-wound bobbin resistors all of which were in perfect condition in this set.

The push-pull output stage uses two P625's and is capable of driving a good moving coil speaker. Burndepts recommended the 6v energised Rice Kellog/B.T.H. A milliammeter (0-100mA) is placed in the output stage and is mounted in a prominent position on the front of the panel - giving the set an overall appearance of quality. The output transformer has two secondary windings for high and low impedance speakers so you could use one of your old 2000 ohm horns if you wished.

Generally speaking, when an old set has been brought back to life again, that is the end of the story - because they always perform reasonably well on the medium wave band. But this Screened Five is a pleasure to use - particularly on the short wave-band where the performance is remarkably good and one can literally spend hours 'playing' with this set. The Wireless World reviewer of 1930 could be excused for referring to this versatile receiver as a "Sports Model" among radio receivers. In 1930, the price was 39 guineas.... without speaker.

When restoring old radio receivers one is constantly faced with the problem of having to replace wire because of deterioration in the insulation. This particularly applies when rubber insulation was used. In time the rubber becomes hard and brittle and falls to pieces when touched. The Burndept Screened Five was wired up with rubber insulated wire which has remained in a perfectly good flexible condition to the present time. Another owner of a Screened Five has passed the same comment and we might conclude that the wire used was really something special as Burndepts claimed it was. I also have a box of Burndept 'Ethowire' (tinned copper wire insulated with paper and rubber - cat. no. 998) which is also completely flexible and shows no other signs of deterioration. I wonder if any BVWS member is sufficiently knowledgeable in rubber technology to offer an explanation for this long lasting flexibility in Burndept rubber ??



LOUDSPEAKERS - PART III, CONES

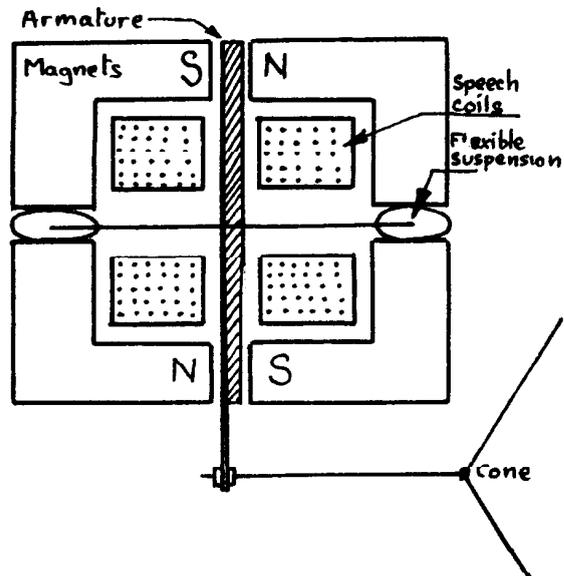
By David Read

When Sterling introduced the Primax in 1924, following its introduction in France in 1923 by Gaumont, there was no other hornless loudspeaker on the market. By the end of 1925 at least three other companies had introduced simpler hornless speakers consisting of a lightweight folded paper cone driven by a reed and connecting rod. At this point it became impossible for the Primax with its complex Lumiere diaphragm and royalty cost to compete in price, and Sterling introduced their Mellovox for the 'popular' end of the market. It was first shown at the 1925 Radio Show at the Albert Hall alongside the Primax which was continued for the more discerning and quality conscious customer. Alas, there can't have been enough of them and by 1926 it was discontinued.

The Mellovox was typical of cone speakers of its type, comprising a simple cone, double skinned for strength, prettily decorated with floral design, and mounted on a turned and lacquered wooden leg and base. Competing hornless speakers were offered by BTH, Celestion and Beco; and by 1926 the Western Electric Kone and speakers from Brandes, Edison Bell and S.G. Brown were available on the market.

For the majority of cone speakers the drive chosen was of the simple reed telephone type, but where quality was put before price, manufacturers employed the balanced armature system. The Western Electric Kone was the earliest of this type and contemporary literature indicates that it was the best reproducer available at the time. The same product was sold under licence by BSA as the BSA Kone and by Western Electric's subsidiary, STC, as the Standard Kone. In the interest of fidelity it was wound to a relatively low impedance (DC resistance less than 1000 ohms) and was intended to be used in conjunction with the Western Electric Amplifier type 'Weconomy' PMC registration number 3423, or the Kone Amplifier type 44004. The electro-mechanical arrangement of the balanced armature system is shown in the diagram.

The search for quality, as with horns, was made difficult by the compromise between the conflicting requirements of power handling capability and sensitivity. Generally, in the middle 1920's, the speech coil of a horn or cone formed the anode load of the last valve and so carried part of the IFT current. To achieve matching and sensitivity therefore required high impedance and a large number of ampere turns resulting in a DC resistance usually greater than 1000 ohms. This unfortunately defines a low current, low power system, and the horn capable of greater volume for a given speech current continued alongside the cone throughout the middle and late 1920's.



With the development of power valves of low impedance, speech coils of DC resistance in the range 300 to 600 ohms became common around 1928. The best results in speakers of this type were achieved by using a moulded (as opposed to folded) cone of light texture, but stiff enough to keep its shape, and having its edge fixed to a wooden support by a thinner and more flexible material. Boxed speakers of this type continued well into the 1930's with some superb examples produced by Celestion.

But power problems remained. Cone speakers are essentially moving iron in principle, and large swings in speech current would cause armature chatter on the magnetic pole pieces. The position was crying out for a low impedance, high current system without serious limitation to cone, armature or diaphragm travel; in short, the moving coil. Such a system already existed but was not much used for a variety of reasons. Its development into the standard moving coil speaker which dominated designs to the present day will be discussed later in the series.

LETTERS TO THE EDITOR

Dear Sir, Following my first visit to a B.V.W.S. meeting at Harpenden Public Hall, may I thank the Committee for organising the venue - a most enjoyable day out. May I suggest that the Society try the following revenue raiser and interest stimulator: A choice item is purchased from one of the stalls up to a value of, say, £50. A draw is then held for which tickets can be purchased at £1 each. By this means, the stall holder is properly paid and the lucky winner acquires a choice item for the one or two pounds he spent on tickets. The idea could be extended to a postal draw. J.C.Horne

Dear Sir, The Burndept story in the March Bulletin was most interesting and the last line that "they ceased to be manufacturers of radios with a Rolls Royce look" triggered a thought that has really nothing to do with Burndept but may be of interest.

In the late 1930's (or thereabouts) a company named Rialton Radio (RR) produced a rather expensive portable which was advertised as "The Rolls Royce of Radio". If I remember correctly the intertwined letters RR were used and the advertisements made acknowledgements to Rolls Royce Ltd.

In the Burndept article you enquire about the name Vidor. I can only say that Vidor Ltd. was started by Mr T.N.Cole (no relation to E.K.Cole as far as I am aware) after he had sold the Lissen business to Ever Ready. I have no idea as to the origin of the name but possibly Tommy Cole had daughters named Violet and Dorothy. This is sheer guesswork but if you think it unlikely remember that the well known Cyldon trade mark of S.S.Bird & Sons was derived from the names of Sydney Bird's two sons Cyril and Donald. Frank Brittain

I have also heard this story about the origin of the name Vidor, but the two ladies involved were Violet and Doreen. Can any other BVWS member verify this story?.....Editor.

Dear Sir, I would like to add to David Read's excellent article on loudspeakers (See part II, March Bulletin, 1980) that a Sterling Primax (Lumiere) table model mounted on an aluminium stand was shown at the first Radio Exhibition to be held at Olympia in 1926. The price was seven guineas (£7.35).

Incidentally, the Primax speaker was advertised as 'the very soul of music'. In 1928, after the demise of the Sterling Telephone & Electric Company, exactly the same slogan was adopted by Celestion who continued to use it for many years.

Although David quoted an exhibition at Olympia in 1924, I think he has been misinformed and for the record it may be of interest to publish a list of the early wireless exhibitions. In the 1928 BBC Handbook (published late 1927), Mr F.H.Robinson, for many years the editor of a well known trade journal 'The Broadcaster', gives the following information about shows held in London:

1922	Sept. 2-8	International Radio Exhibition & Convention, Central Hall Westminster.
1922	Sept. 30-Oct 7	First All British Wireless Exhibition & Convention, Horticultural Hall, Westminster.
1923	November	All British Wireless Exhibition & Convention and the National Association of Radio Manufacturers (NARM). White City.
1924	Sept/Oct	NARM Albert Hall and later at White City.
1925	September	NARMAT (AT = and Traders). Albert Hall
1925	October	NARMAT. Horticultural Hall, Westminster.
1926	Sept 4-18	First National Radio Exhibition, New Hall, Olympia

My copy of the 1926 Exhibition Catalogue confirms this as the first Olympia Show. Exhibitions which grew bigger every year and eventually became known as Radiolympia continued until the sudden close down just prior to the outbreak of war in 1939. Frank Brittain.

Frank discussed this matter with David Read when they met at Harpenden and David promptly went back to his source material to check and re-check dates and venues

of wireless shows in the 1920's. He now realises that the 1924 show he referred to in the March Bulletin was held at the Albert Hall not at Olympia. He apologises for this mistake and thanks Frank Brittain for spotting the error. Ed.

Dear Sir, Just a note of appreciation to B.V.W.S. When visiting London last November, I had the good fortune of being there at the time of your meeting at Harpenden. Since I am an antique radio collector here in the U.S., this was quite a treat for me. While at the meeting, I purchased a few crystal sets some of which did not have labels in their lids. I wonder if the members concerned could help me in obtaining either copies or original labels for these sets ... to purchase, of course. Robert T. Zelenack, 985, West Third Ave., Escondido, Ca 92025, U.S.A.

TRANS-ATLANTIC LETTER

From Dave Brodie

I delayed writing this letter to the Editor until we had held our Annual Regional Meeting of the Antique Wireless Association (AWA) and the co-sponsoring California Historical Radio Society. The meeting was held on May 3rd at the Foothill Electronics Museum located on the campus of Foothill College, about 40 miles south of San Francisco. Attendance numbered about 175 of which 30 to 35 were sellers. Although the swapmeet was scheduled to start at 8.00 a.m. our avid collectors rose with the dawn and many were on hand an hour earlier.

The ever-popular equipment contest attracted 40 entries in eight classifications, namely: crystal sets, AC sets, homebrew-old, regenerative sets, homebrew-new (modern replicas), TRF sets, wireless gear, transmitters. Strangely, no entries were submitted in the superhet category. We also noted that more AC sets appeared on the scene which may indicate a trend, but battery operated regen. sets predominated together with the ever-popular crystal sets.

Unlike last year, we had ideal summer weather. After the morning swap session and luncheon at the college cafeteria we assembled in an auditorium for the afternoon program which consisted of a new AWA slide/audio show entitled 'The Early Years' which graphically told the story of the development of radio from the days of the coherer to the application of valves in the transmitters of later years. The show is narrated by Clarence Tuska, an early radio pioneer and co-founder of the American Radio Relay League. Early commercial broadcasting was then brought to the attention of the audience by two well-known professionals who had participated in the production and broadcasting of nationally known early radio shows. This presentation was also well received and afforded a change of pace from the usual technical subjects.

The meeting closed with the granting of awards to the contest winners. I can't resist a personal note at this point: My Kenmac 'Listener' by E.R.Fone won the hearts of the judges by also being awarded 'Most unusual set of the show'. I just thought you would like to know!!!!

Similar meetings are being held throughout the country during this season of the year. By the time you read this letter we will have held meetings in South Carolina, Indiana, Minnesota and New York. These are all AWA co-sponsored meetings in addition to which other Societies will continue to hold their regular meetings throughout the year. In addition, the rapidly growing Antique Radio Club of America held an annual conference in Connecticut during the three days ended 31st May. This organisation now has in excess of 460 members throughout the country and in foreign lands. Both AWA and ARCA publish quarterly Bulletins and I can supply membership application forms if you are interested.

I have accumulated data concerning the more popular AC sets of the early 1930's which I will provide in future issues. I will also continue my digest of radio museums. However, in view of time constraints due to failure of our post office (or your G.P.O.) in making deliveries these days, I thought it better to be brief this issue.

It is gratifying to me to receive a number of enquiries for schematics etc of U.S. equipment. Apparently some of our gear is finding its way across the 'pond'. Keep your enquiries coming.... I'll do my best to help.

THE VINTAGE WIRELESS REGISTER

The Vintage Wireless Register was established at the first BVWS Annual General Meeting at the Writtle Hut in Chelmsford on May 29th 1977. It was decided at that time that the register would serve members of the Society when trying to track down specific items of equipment - for restoration information, historical research etc etc. It was also felt that, in time, all BVWS members would submit lists of their equipment for inclusion in the register knowing that maximum usefulness only comes about with full co-operation. The register contents would also be treated with confidence and only accessed through the 'keeper' or 'archivist' and information divulged only with consent of owners. The present archivist is Mike Field and he tells us that, believe it or not, there are still some members (quite prominent ones at that!) who have not provided information for his card index. He sends the following open letter

Dear member, When I was asked to be the Society Arch-Ivist, I thought splendid; none of your common or garden Ivist, but an Arch one! However, recourse to the Oxford dictionary reveals that an Ivist is not listed - there is not an occupation, activity or disease which brings home the relevance of the term - being the Arch-Ivist is not much of an activity either.

A quick reference to the membership list shows the number stands at well over 175 all with a keen interest in things wireless and presumably owning lots of highly desirable equipment. Now the number of members who have contributed to the equipment register is 18, so out there somewhere are well over 150 members who either own nothing (ah, shame) or whose equipment numbers range from one to dozens of which the register is woefully ignorant.

In case you had headphones on or eyes closed whenever the register has been mentioned before, let me recap. The idea is simple; every member sends in a list of all the pre-1930 equipment he possesses giving, as a minimum, details of the manufacturer, model number if known, GPO number if any and a basic description i.e. 3v cabinet model c 1927. The information is transferred to a card index system. When a query is raised I consult the index and contact the owner of the equipment in question and ask if he can or is prepared to supply the information requested. An unaddressed stamped envelope will be included when the owner is contacted by me. If the answer is no for any reason (no argument, reproaches, nothing) send that answer to me and I'll look elsewhere. If you can help, send the information direct to the originator using the stamped envelope. This procedure ensures your privacy; if you don't want anyone to know the extent of your collection no one will know - except, of course, this Ivist bloke and he doesn't count.

Now I think this is a worthwhile activity and several cries de coeur have been received literally from all over the world, but not all can be answered. I would like to build up a library of photographs, specifications, circuits and advertising material for all pre 1930 equipment. This data, coupled with a comprehensive list of members owning the equipment would provide a splendid reference system which would be of incalculable benefit to all restorers.

But an archivist is a keeper of records, not a generator. It is your Society - only you can make it work. To the minority who have contributed, thanks very much. To those who have yet to do so, get off your assets straightaway. (After all you may need information yourself one day). Help me take the hyphen out of Arch-Ivist and make it a real activity.

Yours etc., Mike Field
BVWS Register,
116, Tanhouse Lane,
MALVERN, WORCS, WR14 1LG

Members might also consider that, for insurance purposes, it is no bad thing to have a comprehensive list of your valuable pre-1930 wireless equipment registered in this way.

A VINTAGE WIRELESS MUSEUM

By A.R.Constable

While a visit to one of our great museums is always a fascinating and informative experience, I invariably feel a constant sense of frustration at not being able to handle the objects that are visually so pleasing. If you also feel like this and would appreciate the opportunity of visiting a museum where there are no glass cases or watchful attendants, you can find just such a place in West Dulwich, London SE21. Furthermore, at this Vintage Wireless Museum you will find the director, Gerald Wells, unlike most museum directors, very accessible and ready to share endless pots of tea with you as you handle just about what you please.

Gerald Wells is a long standing BVWS member and runs the well known 'Vintage Wireless Company' from which it is possible to acquire just about any component or valve required. Gerald's company and museum operate from a large Victorian house with a well kept back garden and several additional buildings housing workshops, stock rooms and museum. This Vintage Wireless Company is no ordinary retailing company operating like a shop. Here, when you buy even the humblest component, you are also supplied with helpful assistance, information, conversation and at least one cup of tea. Customers who cannot get to Dulwich to see the museum can still get the full range of this service by telephone and post - but they have to forgo the cup of tea!

There are over 700 vintage wireless sets to look at (and handle) from the 1920's and 30's as well as many representative items from the 1940's and 50's. There are components of all sorts to look at or to buy and there is a good display of American receivers. There are books, service manuals, circuits, valve lists to search through and there is an unbelievably large collection of valves from which you can almost certainly select replacements for any post-1930 set and have a good chance of finding something suitable for earlier receivers.

Apart from the usual items you would expect to find at a company supplying the vintage wireless enthusiast, this company extends its interests into every corner of the business of renovation. The restorer of vintage wireless sets has to make use of appropriate materials and this is where Gerald offers a unique service in being able to supply from a huge stock of traditional woods - the likes of which the ordinary wood supplier has not seen for a generation. Mahogany, walnut and teak are available and, when it comes to replenishing his supplies, Gerald, as many of us know, is one of the world's great opportunists when old mahogany shelves etc are just about to go to a bon-fire almost anywhere, a mysterious figure in an off-white coat comes to the rescue Gerald strikes again! His stock of vintage materials includes terminals, ebonite, metals, fabrics, wire etc. He also provides a good service in 'recipes'. Do you want to restore block electrolytics? Write to Gerald - he will send a recipe. Before a vintage wireless enthusiast begins to wreck a beautiful old receiver cabinet for all time by re-varnishing it, he should consider simply giving the cabinet a really good clean up. A re-varnished cabinet may not fetch a flicker of interest among fellow collectors when it comes up for re-sale. But the same set well cleaned could have caused much enthusiastic bidding. How do you clean an old varnished or lacquered cabinet? Gerald has a good recipe which he acquired from an elderly piano renovator:

Into a clean bottle with a well sealing lid add 1 part pure linseed oil, 1 part pure turpentine and 1 part good quality vinegar. Add about 1 spoonful of sugar per pint of mix. Shake well before using. Paint and rub well into all surfaces and allow to stand for about 1 hour. Then remove as much as you can with a clean dry cloth. You will be surprised how much muck it brings off and how much 'livelier' the cabinet looks after this 'shampoo' ... it also smells rather good.

The 'Vintage Wireless Museum' is also a place of work where old sets are restored under Gerald's watchful eye by anyone who cares to assist him. Not only can one see men who were brought up in the 'valve-age' restoring old sets ... younger men (mere lads!) and even teen-age girls are among Gerald's work force. You

may be right in thinking that most teen-age girls would not know a tetrode from a six-B.A. nut but, down Dulwich way you can be in for some surprises!

The Vintage Wireless Company and the Vintage Wireless Museum are entirely Gerald's creations and, while the company itself operates on a commercial basis, an afternoon or evening's visit leaves one with the impression of having seen a most remarkable social establishment in operation. Here work, enjoyment and enthusiasm take precedence over the more usual commercial occupations of a viable company.

Looking at our last Bulletin (March 1980) I see a contribution about museums and exhibitions on page 63. Gerald Wells' Museum was not included in the list and I can offer no good reason for this oversight. Collectors, and particularly those interested in 1930's equipment, could justly claim that the Dulwich establishment is one of the most important museums in the country. If you plan to make a visit do make an appointment first (Gerald sometimes has to rush off to rescue a heap of wood from a bon-fire .. and can be gone for hours) write to him or telephone 01-670-3667 (address in address list and accompanying ad.).

ARZINITE AND TELLURIUM

By Desmond Thackeray

"If it be a natural thing, where did it come from, and where did it go?"

Ghostly railway trains are hardly less 'natural' than real ones, if one thinks about it, and so I have not headed this article 'Great Wireless Mysteries' lest it make wireless seem in any way an intelligible, down to earth (sorry), natural affair. It was obviously a considerable puzzle to nearly all the participants, and so the hard, purely technological facts are often encumbered in the literature by much that is conjectural. So I plough through quite a lot of reading in order to find the odd nugget of truth; hardly ever as much as a vein of paydirt. A mystery of some standing now, is that of 'Arzinite', the synthetic honey-coloured glassy oxide of zinc. Albert Ballhatchet tells us that much in his 1925 booklet 'Crystals & Crystal Detectors', but alas leaves it there. I recently verified that the remaining tiny crumb at one end of my 'red diamond' two crystal detector is indeed zinc oxide, as it should be for the Perikon detector, and the yellow kind rather than the 'blood red' kind that nature provides. It was in Eugen Nesper's 'Der Radio-Amateur Broadcasting' of 1923 that I found the rather cryptic ...'zinc oxide in the open electric arc won'.... indication of the manufacturing process, but again, most tantalisingly, that is all. One might almost think that this was a fleeting artefact of the mid-twenties, despite the very considerable sales of such detectors, if it wasn't fairly certain that the stuff was available a couple of decades previously. For I looked in Greenleaf Pickard's two American patents on his zinc oxide detectors, and it is in the first of these dated 1907/08 that he uses synthetic fused zincite. Not until about a year later does he cover the use of natural zincite in a second patent. And that is all I have so far managed to discover about Arz nite. Can any reader tell me who made it, where it was made, who sold it, whether the trade mark was registered and if so who registered it and what the number and date was? Whether it is still an article of commerce somewhere, or whether there is any known stock, and what other uses it may have had in 1907 or 1927, and how do you actually melt it in an arc, are all questions I need to find answers to.

By way of contrast, in the case of elemental tellurium, we do know where it came from. The puzzle is much more, where did it go? If G.G.Blake is correct in his 'History of Radio Telegraphy and Telephony' of 1926, then L.W.Austin submitted a patent application for a tellurium detector on 21st February 1906. This would have placed him between Ferdinand Braun (psilomelan) and General Dunwoody (carboreundum) in the first three crystal detector patents ever. Austin subsequently made an alloyed junction with tellurium and aluminium, wrote about his detectors, and even as late as 1913 used a tellurium detector shunted across the receiving aerial as an 'X' (static) suppressor. But there seems to have been no frenetic stampede to use tellurium in wireless detectors. Austin certainly assigned one of his tellurium patents to the National Signalling Co. (reported by Fessenden), and they might have been expected to find an efficient crystal detector far more convenient than

Fessenden's electrolytic 'barretter'. Rather curiously, tellurium was used also as a constituent of early compositions of 'Hertzite', that well tried synthetic detector crystal. W.J.Fry made it this way for Russell & Shaw in 1913, according to his article 10 years later in 'Wireless World'. One might guess its function was as a replacement for part of the sulphur content, and Fry was able to dispense with this rather expensive complication later. On the face of it, tellurium seems quite a good choice for a detector material, with an energy gap very similar to galena and reasonable mechanical properties. So why did the world opt for galena, silicon, carborundum, pyrites etc etc instead? Or have I perhaps missed out some important area of tellurium literature in my reading? Just one slender clue. I took a fragment of spectroscopically pure tellurium (not semiconductor purity, but way ahead of reagent quality I hoped) and tried a few electrical tests. It proved to be of very low resistivity, and failed to make even a slightly rectifying contact with it. Could it be that Austin was just lucky enough to find a sample with just the right impurity levels as a maverick in the chemical stores, impossible to repeat? Well, Fred Canning also seems to have been lucky, for he writes from Australia: "I only once had a bit of this for trial (or at any rate it was represented to me as being tellurium ... few people could be sure of what they were being sold in those days) and I found it moderately effective but nothing wonderful; in the carborundum class. I remember being puzzled by its appearance, because it came in the form of a small cylindrical stick very like the cerium 'flints' sold for cigarette lighters. Colour was faintly yellow."

Thank you Fred. Has anybody else seen tellurium 'flints', perhaps even come across some and wondered what they were? Or for that matter seen a detector with tellurium in it, or a picture of one somewhere? Where DID tellurium go?

.....

Zincite The whole supply of natural zincite came from mines in New Jersey, U.S.A. The genuine material was not very streaked and had the appearance of dark ruby-coloured glass. The colouring was due to the presence of manganese impurities. Synthetic zincite came in the form of hard yellow lumps and was marketed under the names: 'synthetic yellow oxide', 'Cilvium', and 'Azinite' (or was it Arzinite?). This material was made by heating ordinary zinc oxide (the 'zinc white' from paint shops), with or without the addition of very small traces of manganese dioxide, to a temperature of something like 1200 °C. At this temperature the material is cherry red and, when allowed to cool slowly, a yellow looking glassy mass will be produced. When broken up much of it will be found to have good rectifying properties. This information was taken from J.F.Corrigan's 'Crystal Experimenter's Handbook' issued with Popular Wireless for the week ending October 3rd 1925. Editor

ILLUSTRATED HISTORY OF PHILIPS RADIO VALVES

This 31 page booklet tells the story of the Philips valve starting at the very beginning with a short account of the 1DZ (1 Deezet) (see also BVWS Bulletin, Vol. 1 No. 4 page 11 and Vol. 2 No. 2 page 21 and Vol. 3 No. 1 page 5) and then continues to trace all known developments up to 1935. This is a well illustrated book and provides good source material for collectors interested in valves ... and Philips valves in particular. The illustrations should help collectors identify some of their unmarked 'Dutch' valves and should also provide assistance when trying to distinguish, for example, the Philips 'R' type (called 'E type') from 'R' valves made in this country. There is a lot of information about the identification codes used by Philips extremely useful to those of us who like to know before hand what current the filament should take! This book has been produced by Fin Stewart of the Ferrowatt Electrical Museum at Falcon Bridge, N.S.W., Australia and printed by Philips Industries of Sydney, Australia. Help in compiling the book has been provided by Philips of Eindhoven, Holland, by John Whitley Stoles of New Zealand (editor of the NZVRS bulletin ... see page 3) and the late Ron W. Tremlett. Copies can be ordered from Philip Taylor, 14, Willow Walk, Canewdon, Rochford, Essex, SS4 3QH Tel: 03706-598. The cost will depend on the number of people ordering ... the more ordered, the cheaper they'll be but it will be approximately £3.50 plus 26p postage (U.K.).

B.V.W.S. ANNUAL GENERAL MEETING

1980

Once again BVWS members came to Harpenden from all corners of the country to exchange equipment and gossip. The usual trading tables were centres of activity throughout the day and several members contributed to our central display of 'Wireless Beauties'. This display included a magnificent A.J.S. set owned by Sean Journeaux (Bill's son), a splendid Japanese lacquered Sterling set owned by Ian Higginbottom and my own Japanese lacquered Ediswan ensemble. This item unfortunately lacks its interior but still has a certain splendour about it - a lacquered table with a lacquered cabinet standing on it and a lacquered Ediswan horn speaker standing on top of that. But the prize for sheer effrontery must go to Albert Noble. He exhibited his range of modern wireless novelties (see his article in the last Bulletin Vol 4 No. 4 page 52) which certainly showed some clever ideas and his flimsily clad nude doll brazenly claimed to be a wireless beauty.

The Brookmans Park transmitter finally came into the hands of members with the draw that had been previously announced and for which members had purchased tickets earlier in the year. 72 tickets were drawn from an elegant top hat by Jill Rayment and the parts were accordingly allotted as they came. Each member taking away a part (or parts) were given a brass label to use as they please. This label (see diagram) can be either stuck on a suitable part of the component or it can be screwed on by drilling four small holes in the corners. Those members who have one of the smaller components may prefer to attach the label to a block of wood and then mount the component on it. At future Society meetings, we will probably see some of these items being displayed in very imaginative ways. Phil Taylor won the largest item - a huge coil



mounted on four large porcelain insulators. One member suggested that, with head and tail added, it could appear in a re-run of Star Wars! Most people seemed to be pleased with the items they received and I think this whole exercise will prove to have been a most fitting way of preserving one of this country's great historic transmitters. Alan Carter has lots of information about the transmitter and would be quite happy to discuss with members the parts of the circuit from which these components came. While organising the 'purchase' (£5.00 plus V.A.T.) of the transmitter from the B.B.C. involved myself and Alan Carter in a certain amount of work, this was fairly light compared with the heavy task of moving, storing and removing the equipment between Brookmans Park, Oxford, Luton and Harpenden. This gallant effort was undertaken by David Derrick, Denis Chalcross and Mike Lewis. I am sure the whole membership would like to join me in thanking these three gentlemen for the hard work they did in making this draw such a success. Several participants in the draw were not present at Harpenden and while parts have already been taken by other members living nearby, there are still some outstanding components which have been taken once again by Dave Derrick to Wantage. A list of the remaining items is appended to this article ... will the people concerned please contact Dave (Tel: 02357 3466). He will suggest the best means for getting hold of your transmitter component. He also tells me that he has several sundry bits and pieces so anyone who has an incomplete component just might be able to find the appropriate terminal or what-have-you write or telephone details to Dave.

The A.G.M. is, of course, the occasion for electing new officers ... but once again there was no great rush of nominations. All officers have been re-elected plus one additional one - Ron Austin from Northampton. The Committee grows slowly but surely! The complete list of Committee members can be seen on the inside front cover of this issue.

Two items went 'missing' ... a V1 coil belonging to Gordon Bussey and a small china horn ornament belonging to Bob Hawes. Information is sought. It would be a great shame to have to conclude that these items were stolen. Editor

Brockmans Park Transmitter parts remaining to be collected:

Item No.	Ticket No.	Name	Item No.	Ticket No.	Name
5	69	J. Varley	44	35	C.J.Roe
8	65	G.Green	45	56	D.K.McCrossan
11	61	A.C.Skinner	47	54	J.J.Hopkinson
13	62	J.S.Ridge	50	53	A.R.Mitchell
16	50	H.Abbott	51	60	K. Lancaster
19	72	J.F.Burton	56	55	F. Hay
20	46	T.Howells	There may be others: Please contact Dave Derrick or Bulletin Editor if you have any problems.		
24	19	S.Sidaway			
32	43	R.A.Stevenson			
38	25	A.E.Hopwood			

THOSE AWKWARD-TO-FIND BITS-AND-PIECES

By Dennis Yates

How many times have B.V.W.S. members been frustrated in their search for that elusive '9 B.A. cheesehead screw' or 'the countersunk nickle plated version' or '6 inches of nickle plated square section brass bar with a 3 B.A. thread on both ends' ? How often the solution has to be either trying to make it oneself or (even costlier) having it specially made at the going commercial rate?

I'm sure all of us at some time must have despaired of ever finding a modern shop that didn't either treat you with undisguised sympathy for being so old fashioned as to even remember when the Third Programme reigned supreme or look at you with a vacant stare on their faces as if you were taking a short break from the local 'funny farm'.

Getting weary in my quest for some '40 holes per square inch brass gauze' and fed up with being told, "No, sorry sir, we used to sell it, but after the first world war we didn't get asked for it till you came in", I followed up a rumour that there was a man in Nottingham who sold nuts and bolts other than in metric and in tens. Nobody seemed quite sure just where this elusive person tradedbecause, for one thing, the metrication board were anxious to clap him in irons. So it seemed he was keeping a very low profile. After numerous attempts at unearthing him, I began to think he was the figment of everybody's imagination when I happened to fall into conversation with an old-timer who remembered working for the local relay station (5NG) way back in 1927. Yes, he could remember, only fifteen years ago, buying 3 ZBA nuts and washers to repair his multiple tuner. Just where he'd bought them from or what he'd done with his multiple tuner I never did find out. Why? Ah well, that's another story!

Undaunted, I finally managed to get the name of a friend of this old-timer who, I was assured would take me right to the doorstep of what to me was beginning to sound like Shangri La with his talks of 'off-cuts of ebonite ten feet long' and 'the rolls of green cotton covered soft iron wire' used for repairing his magnetic detector. This man, fortunately, could remember where this unheard of source of wealth lay. I wrote down the careful instruction he gave me with a trembling hand ... and made off with indecent haste in the general direction of Aladin's Cave. Imagine my feelings when I turned the corner expecting to encounter my utopia and to be faced with a multi-story car park. "Oh, yes," the attendant assured me, "there used to be a funny man had a shop about here a long while ago Did he know where he had been compulsorily purchased to? "Yes," somewhere over the other side of town, in the basement of a factory." Well, I thought, there can't be too many basements in Nottingham with ten-foot off-cuts of ebonite in them. So, how to find him? Then a stroke of luck. I happened to overhear one of my customers mention how he'd needed some left-hand threaded widgets and how, as usual, Bill Carr was the only person in town he'd been able to get them from. Could this be it? I could hardly contain myself with excitement. Surely there couldn't be more than one stockist of such out-of-date useless-to-the-average-person-junk intown? With bated breath I asked, "Where can I locate this store of untold wealth." He told me. The answer, unfortunately, is unprintable. But if you need any of those awkward-to-find bits-and-pieces, let me know.

EXCHANGE

SEARCHING Intervalve transformer for Philips 372B, push-pull type for connecting PM2DX to two PM2B's in push-pull. Roger Shivas, 36, Kirkbank Rd., Burntisland Fife, KY3 9HX Tel: 0592-872478.

Information on German, Dutch, French pre-1940 receivers having R.F. pre-amp stage Especially: Philips Aachen Super D.57-AU (German). Also wanted an RF staged mono-knob Philips and 1950's Saba, Nordmende or Loewe-Opta (etc) - with RF stage, S.W., Bass and treble control, white piano-key press button wave-changing. Barry Moss, 16, Burke Ave., Berala, Sydney, N.S.W., 2141, Australia.

Any German make before 1930. Particularly Telefunken and Siemens "Telefunken" and Rfe 1 (nickname "D-train") sets of 1923/24. Also Volksempfänger VE301 B1 and B2 battery version (wooden case, k-tubes). Old tubes (working), fancy loud-speakers, crystal sets - any country. Also required: various sets from 1930's, including Gross-Super (push-button etc.), Volksempfänger, DKE's, tube tester. Dieter Zimpel, Bluetenstr. 21, D8000, Munich 40, Germany. Tel: (089) 28 2801

Brownie wireless crystal receiver - early 1920's V.G.C. or Mint. Also: Ecko A22 (unrestored in VGC preferred). Roland Clark, P.O.Box 42, Panguna, Bougainville, Papua, New Guinea. Tel: 958128.

Ecko speaker type LS1 or LS2. Ronald Jones, 2, Rose Ave., Alvechurch Worc. B48 7FG. Tel: 021-445-3204

Two medium wave plug-in coils for 1928 Cossor Melody Maker. (Metal cabinet model as per BVWS/V&A chart) Will trade or buy. L.Coakley, Woodleigh, 11 Peartree Lane, Dunnington, York. YO150G. Tel: 489420

Steel swan necks and bases for Amplion 15" standard and small 10" speakers. Both types to accept screw-in flare. Alan T. Shaw, 12, Clarendon Rd., Smethwick, Warley, West Midlands. Tel: 021-558-2223.

A replacement pick-up arm for an early Garrard 78 r.p.m. autochange (c. 1933) or complete unit (model RC1). D.C. mains valves: VDS, VDSB, DSB (Marconi-Osram). Steve Sidaway, 32, Cemetery Rd., Lye, Stourbridge, West Midlands DY9 7FF (Lye 3366).

Mains to E.H.T. transformer for 12" H.M.V. T.V. Model 900 or similar. Ken Brooks, 91, Sea Mills Lane, Stoke Bishop, Bristol BS9 1DX. Tel: 0272-685280.

Amplion AR111, AR114, AR43 or AR23 horn speaker drive units. Amplion Radiolux model RS1M in metal cabinet - or metal cabinet only, or any unusual Amplion items. Am specialising in Amplion so any help would be appreciated. Have Amplion and other speakers and parts for exchange or would buy outright ... can arrange collection. Alan Brehaut, 22A Cain Street, Timaru, New Zealand

American radio magazines such as Radio News. Also req'd Gecophone II crystal set and Marconi V2. A.R.Nolf, 7, Cambrian Way, Ewloe, N.Wales, CH53RE. 0244-534-329.

Circuits for GEC BC3130 and Pye PE41. Fibre backs for Philips 834A and Philco 264. Dial glass scales for Philco A535 and Philips 795A & Cossor 71. D.E.Howlett, 23, Grace Rd., Downend, Bristol, Avon BS16-5DY. Tel: 0272-569897.

Output pentode type PT625. R.M.R.Chacksfield, The Old Telephone Exchange, South Town Rd., Medstead, Nr. Alton, Hants. GU34 5ES Tel: Alton 63760

Modern bright emitters (tungsten or thoriated tungsten filament) of moderate fil. current e.g. 801, 801A, 2E25, GE10, 841, VT62, CV621, CV5109, A2087, CV2171. D. Thackeray, 7, Beech Close, Byfleet, Surrey, KT14 7FS. Tel: Byfleet 41023.

Information on Ediswan 'Toovee' wanted. Could owner(s) please contact me. Tony Constable, 18, Ravensbourne Gdns., London, W13 8EW Tel: 01-997-7564

DISPOSAL 248 copies of Wireless World in the period 1929-1937 ... mostly 1931, 32, 33, 38. Offers for the lot preferred or discuss sale of bundles. P. Beckley, Vhurch Farm House, Bettws Hill, Bettws, Newport, Gwent NPT 6AD. Tel: 0633-853906

Valves new and used - all tested 1927-1967. S.A.E with enquiries please. No D.E.R. or bright emitters. Marconiphone speaker typw 120DC moving coil. R. Jones, 2, Rose Ave., Alvechurch, Worc. B48-7PG. Tel: 021-445-3204.

Cossor Melody Maker - 1930 tin model, brown twenties look - complete -needs touching up: £10. Pye 4-valve model 1923 540/50 series 'Panel' more or less complete: £30. C.Sawyer, 210, Gordon Ave., Camberley, Surrey. Tel: 29460.

Pye T10 export model. K.Brooks, 91, Sea Mills Lane, Stoke Bishop, Bristol BS9 1DX. Tel: 0272-685280

H.M.V. 5209 5W/B AC/DC working OK. Murphy B31, Battery TRF, chassis only, with valves, working. Regentone DP2, AC/DC, midget - cream plastic case. D.E.HEWLETT, 23, Grace Rd., Downend, Bristol, BS16 5DY. Tel: 0272-569897.

Quality output transformers for virtually any mains set 1930-40. R.M.R.Chacksfield, The Old Telephone Exchange, South Town Rd., Medstead Nr. Alton Hants, GU 34 5ES. Tel: Alton 63760.

Murphy A38 console c. 1938. Reproduction indifferent, speaker suspect. Cabinet in excellent condition. Frank Brittain, 11, The Fairway, Southgate, London, N14 4PA. Tel: 01-440-3001.

Cardboard box for F type Igranac variometer. Free to somebody who will let me make 'Q' measurement of their variometer. A few valves also for disposal ... such as 5U4G/CV575. U52. A1834/6As7G. ECC83. EL81. EF91.EB41.U141 etc. D.Thackeray, 7, Beech Close, Byfleet, Surrey, KT14 7PS. Tel: Byfleet 41023.

Plug-in coil (J.Nichols), No60., Two Ferranti meters, boxed. Roberts R66, Philco A3214 (tropical). A. Gates, 3B, St. Phillip Square, Battersea, London S.W.8., Tel: 720-5839

VINTAGE WIRELESS COMPANY

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