

WHO REMEMBERS CRYSTAL SETS ?

A document unearthed in the archives of the Department of Mineral resources relates to the use of crystals in wireless sets. It is a two page leaflet written by the Curator of the Mining Museum, George Card, giving advice on the selection of crystals. The date is October, 1924. The following is an extract:

BUY AUSTRALIAN CRYSTALS

WIRELESS CRYSTALS

Before the electric waves utilized in Wireless Telephony can affect a telephone receiver the alternating current from the transmitting station must be converted to direct current. Certain minerals have the property of producing this effect (it is not known how), and are used very extensively in the simpler forms of wireless receivers. These are known as "crystals". The demand for such minerals is very great, and prices of one shilling and upwards are charged for small pieces.

Until lately, all crystals have been imported; but it has been the object of this Museum to substitute for these minerals obtained locally, and considerable success has been attained. In the case of three of these, material equal to or better can be procured from Australian mines. Local crystals should be asked for.

GALENA: (sulphide of lead). A soft material easily damaged by handling. The surface of even the best crystal is not uniformly sensitive, and search must be made for suitable 'points'. Good galena is available from several places in this and other States. Many of the imported crystals sold under various trade names are really nothing but galena.

PYRITE: (sulphide of iron). Unlike galena, pyrite is hard and not easily damaged. Like galena it is not sensitive all over. Excellent pyrites equal to that imported is procurable from one location in this state.

MOLYBDENITE: (sulphide of molybdenum). A very soft cleavable mineral, the usefulness of which, however, is not impaired by splitting. It is not so well known as galena and pyrite, but has much to recommend it. Most pieces will give good results and it is sensitive practically all over. It is "foolproof" as it were. Excellent molybdenite from a New South Wales mine is obtainable readily.

At present, three brands of New South Wales crystals are on the market, namely, "Molesworth Standardized", "Neibeck" and "Sacrystal".

Buy Australian !. I think Dick Smith would be proud of George Card. What I find surprising is the use of molybdenite, and its apparent efficiency as a wireless crystal. Also, judging by the last trade name, the famous molybdenite mining family, Sachs of Kingsgate, must have seen what the modern promoter describes as a "marketing opportunity". Leadville was probably the source of the pyrite.