

MANY uses are predicted for a new metal known as "Konel," which has been developed by the Westinghouse Electric and Manufacturing Company of America. Originally prepared as a substitute for platinum in the manufacture of filaments for wireless valves, the new metal has been found to be harder to forge than steel and to be very tough at high temperatures. The Westinghouse Company state that as a substitute for platinum, Konel is already saving £50,000 monthly in the manufacture of wireless valves, and that the life of a Konel filament is approximately ten times longer than that of others. Valves with the new filaments are operated 175 degrees cooler than those with platinum filament, but it is stated that the emission remains the same.

THE wireless communication with the Byrd Antarctic Expedition has recently been so good that the New York short-wave stations have been transmitting special programmes to cheer up the members of the expedition during their lonely vigil at the South Pole. Famous artists have been engaged at Schenectady and some of the "gags" that were sent over the air must have been very amusing to the gallant explorer and his party. One humorist commenced: "This story I am going to tell you now is considered pretty hot in New York, so I don't know what it will seem like to you." Another wag began, "Commander Byrd, if you meet anybody I know, say 'Howdy' for me."

THE Federal Radio Commission of America has had a demand made upon it that the licenses of 38 stations of the National Broadcasting Company be revoked, because of broadcasts from these stations to institute a vast child market for cigarettes. This demand has been made by representatives of over 1500 associations connected with the American Food Industry. They maintain that such broadcasts are against the public interests. This instance is but one of the many disadvantages which accompany a broadcasting system maintained solely by advertising interests.

ACCORDING to a French newspaper, a street in Utrecht was recently the scene of a new form of robbery. An enterprising resident who possessed a radio set, but no aerial, made a secret connection to his neighbour's aerial. Thereafter surprising his friends with the range and excellence of his reception. The owner of the aerial has intimated his intention of taking action in court, but his case is not regarded very optimistically by his legal advisers.

DURING a lecture given recently by Dr. Meissner to a scientific society in Germany, the audience were astounded when the doctor announced that he had trained a crystal to blow out a candle! "Hoch der Doc!" cried the excited scientists—or words to that effect—and then the lecturer explained how it was done. Apparently Dr. Meissner had placed a quartz crystal between electrodes excited by a powerful oscillator. When in resonance, air currents are produced at the sides of the crystal, and these are strong enough to extinguish the flame of a small candle. Moreover, the doctor states, if in the mood, the crystal will sometimes rapidly rotate between the



electrodes when the E.M.F. is high enough! In fact, there seems to be no end to the possibilities of crystals, and now we should never be surprised to hear of one that not only rotated, oscillated, and blew the candle out—but got into bed as well!

ANOTHER form of television was recently demonstrated in America, and despite the fact that it is limited in its application, yet it is decidedly interesting. By utilising ultra-violet light waves instead of radio waves as the transmitting medium it was possible to transmit motion pictures a distance of 100 feet. Although this system is limited to a distance of not more than 25 miles, and cannot penetrate physical obstructions, it is directional; a factor of importance for certain fields of development. The apparatus, aside from the oscillator, is based upon the same principles as are used in radio television. As the number of radio channels available for television is decidedly limited, any method which relieves that situation is well worth while.

A SYSTEM whereby radio programmes can be transmitted over telephone wires was perfected in America recently. Without interfering with the present point-to-point wiring, and without changing equipment, the millions of ordinary telephone installations in the United States could be used to bring all types of programmes into the home. The low power used in the transmission is one of the important advantages claimed for the system; fifty watts, for instance, will supply 5000 telephone subscribers with broadcasts. No tuning is required when operating the telephone-connected set, as the mere turning of a switch gives a different programme. Static effects and other kinds of interference are completely eliminated. The principle involved is the same as that used for the simultaneous sending of multiple telephone or telegraph messages over the one line.

A MAP showing the prevailing weather conditions throughout the British Isles is now broadcast twice weekly by the Fultograph method. The map, which is prepared by the Meteorological Office, has proved of great value to those possessing sufficient knowledge of the weather to be able to base forecasts upon it for their own locality. A written inference of the weather to be anticipated from the chart is also broadcast.

THE idea of detecting and amplifying tiny sounds has inspired two American companies to design an apparatus with which to detect the presence in citrus fruits of the larvae of the Mediterranean fruit fly (states

"Popular Wireless.") The theory is that while these chaps feed they are bound to kick up some sort of row—a top plate clicks here, or the peas roll off the knife there—and the microphone is bound to hear it. So we may expect to see American ads, bearing the slogan: "Is Your Grape-fruit Silent?"

A MERCHANT vessel, the "Athelking," was recently navigated all the way from Finisterre to Liverpool through a thick fog solely by the means of wireless bearings. The good ship "Athelking" carries a Marconi direction finder, and the captain's report emphasises very strongly the valuable aid rendered to navigation by the wireless beacon stations. A chain of these stations around the coast of England is rapidly nearing completion, and the above instance affords an excellent illustration of the immense service rendered by them to all navigation, both by air and water.

TOPICAL films cannot at present be transported physically over great distances because of the loss of time involved, which renders the film, on arrival, no longer topical. Transmission of the film by radiovision methods would eliminate time loss, and enable audiences in any part of the world to see a topical film within a few hours of the actual event. These and other applications of Baird's latest development will un-

doubtedly be perfected in the not far distant future.

AT a time when wireless amateurs throughout the world are showing that distance can so easily be annihilated and that communication from one end of the world to the other is now possible even with very simple wireless apparatus, it would seem to us (says the "Wireless World") that the importance of wireless to the Scout movement cannot be overstated. The Scout movement would be enormously strengthened if a knowledge of wireless and of how to construct and operate transmitting and receiving apparatus were included as an essential part of the Scouts' training. Every Scout headquarters could have its short-wave station capable of communicating with other headquarters in almost every part of the world, and the interchange of messages through their own short-wave network would maintain as a permanency that personal contact which it has been the aim of the recent Scout Jamboree, held in England, to bring about.

PLANS for a simultaneous polar exploration in 1932-33, in which Australia and New Zealand will co-operate with America in the Antarctic, include the use of a new Russian invention, already tested, whereby a balloon is fitted with a camera taking photographs at a height of twelve miles. Immediately the picture is taken, the image is automatically wireless to the base.

NOT to be outdone by the manifest enthusiasm and enterprise shown by the wireless trade during the recent radio exhibition in England, the B.B.C. exhibited an interesting novelty in the form of a diorama. This was a kind of multi-dimensional panorama, in "papier mache," which portrayed the story of a broadcast transmission from the studio, through the control room to the transmitter, and thence to the aerial and loud-speaker of the listener.

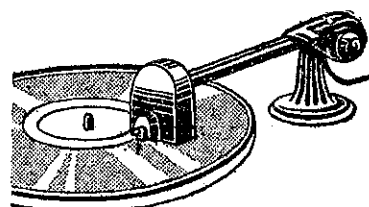
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