

MODERN commercialism is rapidly absorbing the fruits of the efforts of radio research workers. One of the latest developments is an iceberg detector. Recent experiments showed that the photo electric cell could be used in conjunction with a parachute to "hear" the rays of light reflected from the berg. Because this was too much at the mercy of the winds a microphone was employed underneath the ship to pick up the sounds of a milling iceberg. This was effective up to six miles.

AN American exchange states:—"Radio television amateurs are now building apparatus to transmit motion pictures as well as receive them. A radio engineer of Seattle, Washington, has designed and built his own television transmitter and receiver. With this apparatus he broadcasts motion pictures, which are regularly received by his neighbours." The transmission of motion pictures does not involve the intricacy of ordinary television. The pictures are usually in silhouette.

AN unusual way in which fog causes damage is reported by an American radio station situated at Long Island. On several occasions during the winter months dense fog banks, rolling in from the Atlantic, have enveloped the transmitting aerials. The moisture, freezing to the wires, has weighed them down until they have snapped, thus interrupting the transmissions. To relieve the strain on the wires in such emergencies, the aerials are now equipped with counterweights, like those in a window sash, which rise as the weight of the wires increases.

WHAT is believed to be a record in aeroplane radio work has been established by the flying radio laboratory of a well-known radio manufacturing company, of Brooklyn, N.Y. The signals from its five-watt transmitter have just been reported by Mr. A. Feith, a radio amateur living in the city of Wein, in Austria. This unusual reception was accomplished on March 9, 1929, when engineers of the company were making a flight over Long Island to test the operation of a newly-installed bank of batteries. A wavelength of sixty-five metres was being used at the time, and both voice and telegraph transmission employed.

A VALVE shortage in the shadow of the South Pole has been averted by a special shipment of thirty valves for the Byrd Antarctic Expedition. These have been forwarded as the result of a request by radio from Malcolm Hansen, chief radio engineer of the expedition. The valves were placed aboard a Norwegian whaler, which will transfer them to a communicating ship when the Antarctic is reached. Imperative haste was called for as radio communication is the only means by which the expedition may contact with the outside world.

ESTIMATES as to the number of receiving sets that have been manufactured during 1929 vary from three and a half to eight millions, while actual sales are estimated at from two and a half to four millions, this being slightly higher than estimates of 1928 sales. To secure accurate figures, the Radio Manufacturers Association of America will make a survey of production and sales of radio receivers for the past two years.



AUTHORITY to adopt the radio system of Chicago police has been granted to eight large cities of the United States by the Federal Radio Commission. All police radio services are assigned to a single frequency, 1,712 kc/s (175.2 m), which has been reserved for this particular type of work. Since the power outputs of the stations are low, it is assumed there will be little interference. The system adopted from three central broadcasting stations, each using 500 watts power. The system, although a broadcasting service in the sense that the transmission will be by voice instead of by code and will be on short waves, as will the other services, will be outside the range of reception of the broadcast receiving set. Specially constructed short-wave receivers must be used.

A NEW system for dispensing radio programmes has recently come into prominence in many towns in England. All the apparatus necessary in each house is a loud-speaker and a push-button. The latter is connected to a central receiving station, which is in operation each day from six o'clock in the morning till midnight. At the central station is located a microphone which enables those in charge to acquaint listeners with news concerning programmes, etc. The fee charged for the use of the system is half-a-crown per week.

HUGE crowds flocked to the opening of Montreal's sixth annual Radio Exhibition, which was held during September. The show was officially opened by the Mayor of Montreal. "Radio," he said, "is at once the mysterious messenger bringing like lightning from the ends of the earth a call of distress or a message of joy. To-day the invalid, kept at home, can find in the radio the palliative that he needs for his misfortune." Mentioning various other uses to which radio can be put, the Mayor reminded his audience how, on the occasion of the recent thanksgiving service at Westminster Abbey, for the King's recovery, the words and music had been broadcast round the world so that all parts of the Empire could listen to it. In Canada to-day, said the Mayor, 300,000 homes enjoy the benefits of radio, while in the United States 12,000,000 families can tune in, and 630 stations use the air.

ALTHOUGH the solder on the receiving set had scarcely hardened, the new Tatsfield station of the B.B.C. played a distinguished part in the reception and relaying of the running commentary on the Prime Minister's arrival in New York. The relay was primarily intended as an experiment to ascertain whether the use of aerials spaced over several miles would have any appreciable effect in overcoming fading. This system was invented two years ago, when trans-Atlantic relays

were first proposed. Then, to a greater extent than now, fading was the great obstacle to trans-Atlantic programmes, and it was with this object of obtaining constancy of aerial input that the experiment was tried of feeding one receiver from a number of widely separated aerials, which would not all be subjected to fading at the same moment. The success of the relay was such that the B.B.C. intend in the near future to erect a much more elaborate spaced aerial system, than the one at present in use.

FOLLOWING the singing shovel, the philharmonic radiator and the pan of beans which broke into melody, we now hear from Manchester of the self-playing telephones (states "Popular Wireless"). The report says that a Mr. J. Pennéy and Mr. T. Butterworth can contrive to give you a programme if you will but wear the 'phones. The set is in another room, and there is guaranteed no connection. Maybe! But I am disappointed. Why drag in the 'phones? Who will invent a jazz-playing jelly for a Christmas novelty?

THE latest "tall" American story of radio is to the effect that shortly after midnight not long ago Chicago's eighty-seventh bomb outrage (1929 vintage) took place in the building, the top floor of which is occupied by the broadcasting station WEDC (states "Popular Wireless"). The explosion was heard all over the Middle West by an appreciative and discriminating audience. The engineer of the station

alleges that at the time they were broadcasting, "I Faw Down and Go Boom," and that the "boom" of the story and the boom of the bomb synchronised perfectly. All right, Hans Andersen!

MOTION pictures are now being broadcast nightly by shore waves over a powerful radio station located ten miles outside of Washington, U.S.A. These broadcasts are being made over the new television transmitting station of C. Francis Jenkins. This station is powerful enough to be capable of covering the Eastern United States with radio pictures.

IT is something of a disappointment to learn that the new cable which is said to be capable of permitting telephony across the Atlantic will not be suitable for use in relaying broadcast music. "Perminvar," the new metal which is to be employed for this cable, will permit speech frequencies to pass without "repeaters," but apparently cannot do the same for the wider band of frequencies necessary for music.

IT was reported in the Press fifty years ago that Professor Loomis, of West Virginia, claimed to have demonstrated "that at certain elevations there is a natural electric current by taking advantage of which telegraphic signals may be sent without the use of wires." So near and yet so far! Twenty-five years ago came the sad news that the Indian Government made unsuccessful attempts to establish wireless telegraph communication between Diamond Island and Amherst, a distance of 212 miles! The dare-devils!

OWING to the gradual expansion given to radio advertisements in the German programmes, it has now been decreed that no microphone publicity shall be carried out in future on Sundays and holidays. It is also foreseen that such broadcasts will shortly be confined to the morning transmissions only.

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