BRITISH wireless licenses continue to increase. The latest figures show that the number of wireless licenses in force on October 31, 1931, was about 4.101.000. That is: England. 3.682,000; Wales, 140,000; Scotland. 244,000; and Northern Ireland. 35,000. At the beginning of 1931 there were 3,411,910 licenses.

EQUIPMENT for the new 6WF Perth station is now being assembled in Melbourne, to be later shipped to West Australia. The chief engineer of the Postmaster-General's Department will superintend operations on what is promised to be one of the most efficient and highest powered stations in Australasia.

THE "Columbia Broadcasting System" stated that the "American School of the Air," commenced on November 9 the third season of school broadcasting. Lessons in history and geography will be broadcast from the Atlantic to the Pacific, and lectures will be given on music, poetical art, etc. Moreover, civil servants will give lectures about agriculture, export trade, etc.

"SKY waves," were shot 200 miles high against the surface of the upper atmosphere known as the Heaviside layer, then bounced down Honolulu with the opening of trans-Pacific radio-telephone service tween Dixon, California, and Hawaii. The receiving and sending divisions at each end of the system cost a total of The largest approximately £150,000. valve in the Dixon station has a capacity of 10,000 watts and is water-cooled. Water and air heated by the 10.-000 volts necessary to operate the station are cooled by three fans, each three feet in diameter.

THE inauguration of the Scottish regional station at Westerglen will mark a new step in the organisation of the British radio on the hasts of alternative programmes. Each district will be so arranged that listeners will be able to hear at will the National programme and local programme. The stations of London, Midlands (Daventry) and in the north are working at present and giving full—satisfaction. Only the Scotch station and the Western station remain to be finished.

TURKEY apparently holds the record as regards wireless "pirates." for, according to the latest estimate. the pirates outnumber the licenseholders by 300 per cent. Actually there are some 5000 persons holding Turkish licenses, but it is believed that the number enjoying radio programmes is in the neighbourhood of 20,000. The pirates' principal excuse seems to be that reception in Asia Minor is extraordinarily poor. According to a correspondent, "the Stamboul and Angora stations have carpets that dazzle the visitors much more than do their programmes."



WITH a wave of her hand Mile.
Josette Lava, the French Premier's daughter, floodlit the giant statue of Liberty by releasing from an aeroplane, via radio, a flashlight bomb which operated an "electric eye" held in the statue's hand. This, in turn, switched on the new floodlight system.

A HAPPY reversal of the now old device whereby the cries of a baby at the top of the house can be heard on a loudspeaker in the basement is reported from Greenwich, Conn., U.S.A. According to a correspondent, a canine enthusiast has been having trouble with his dogs barking in the night and wakening the neighbourhood; the kennels being some distance from the house, he has installed a microphone at his bedside and amplifiers and loudspeakers in the "dog houses." A gentle admonition from the bedroom becomes a crisp, commanding shout in the kennels and is quickly obeyed.

NEW YORK daily recently published curious statistics contributed by one of its readers. According to this correspondent, between July 1. 1930, and March 31, 1931, a total of 663.065.445 musical notes had been transmitted through the microphone of WABC. New York, the key station of the Columbia broadcast system. addition, the "mike" has also dealt with 13,096,200 words. Of these, roughly one-third had been emitted by politicians and clergymen, and represented a talk of 1889 hours at an average of 115 words per minute. not stated whether these statistics were put to any use or whether any doubting Thomas took the trouble to check them up!

THE German gramophoue "war" has ended. It will be remembered that the gramophone manufacturers sent an ultimatum to the broadcasting authorities forbidding the use of gramophone records in the programmes after December 6. In an agreement just concluded the use of records is authorised on condition that gramophone concerts do not absorb more than two hours per day. Records may be freely used to illustrate talks, but the gramophone companies are determined that their records shall not be used for the compilation of "whole programmes."

Mullard THE · MASTER · VALVE

Embodies all improvements known to Valve Manutacturers.

A REMARKABLE fight on the issue of "free speech on the air" is being fought by the Rev. R. P. Shuler, of Los Angeles, whose station, KGEF, was recently suppressed by order of the U.S. Federal Radio Commission. The charge was that Mr. Shuler had used his station to "incite religious strife and antagonism." with the result that the transmissions were undesirable and obnoxious to the listening public. Shuler contends that the commission's action is a direct challenge to the right of free speech guaranteed by the constitution of the United States, and he is prepared, if necessary, to take the case to the Su-

Irish Concerts

commemorating St. Patrick's Day,

will be broadcast from all stations

on

Thursday, March 17

preme Court. Meanwhile, KGEF is silent, and its spirited owner, in order to collect funds to conduct his ease, must perforce make his appeal from the pulpit.

BY means of the new visual type course indicator, aircraft nearing and leaving Croydon aerodrome on the Continental route will be automatically guided. The pilot has only to watch a dial with a black background, on which appear two vertical white lines. If the aircraft deviates to either side of the correct course the white line on that side of the dial increases in length and the white line on the other side decreases.

WIRELESS communication between important railway centres is to be set up in India, and the Government Railways Board has ordered four sets of shortwave apparatus already. These sets will cover long distances and are expected to be reliable alternatives to the normal channels—if telegraph lines are cut, for example.

TRANSMISSIONS from the German station at Berlin are being seriously heterodyned by the new 100-kilowatt station at Moscow, separated from it on the wave-band by only 8 kilocycles. No sooner has this station (Moscow-Stalin) closed down than the anguished Berlin engineers hear: "Hullo! Hullo! Here is the new Stalin station—we are making experiments." The German Foreign Office has been requested to ask that the Russian wavelength be changed,

but it seems scarcely likely that a station which is maintained especially to broadcast propaganda in French, German and Spanish will change its wavelength when it can so easily jam German national programmes off the air

TOWARD the close of last year British radio manufacturers were viewing with alarm a concerted attempt by American interests to "corner" the radio market in England with second-grade receivers and components selling, in many cases, at but a fraction of the English counterparts. As an instance of this, it is reported that England's radio imports for last September were valued at £177.375, but for October they amounted to £347,631, nearly 100 per cent, increase. However, the situation was greatly relieved in November by the placing of an ad valorem tax on imported sets and components, including loudspeakers and telephone receivers and parts thereof, but not including valves, permanent magnets or batteries.

IN the annual report of the American Federal Radio Commission for 1931 General Charles Saltzman, the chairman, declares that the last year has seen almost a complete revolution in the type of equipment used. plying with a technical order of the commission, all stations are now supposed to have equipment capable of better than 75 per cent. modulation. On June 30 last there were exactly 612 broadcasting stations in the United States. The report calls attention to the new set of rules and regulations which will be promulgated within the next few weeks. Among them will be relaxation of the present rigid requirements regarding the description of recorded programmes or "electrical transcriptions." though their character must still be made clear to the listening public. Call letters announced at thirty-minute now he intervals instead of every quarter of an hour.

IN the broadcasting building of the "Reichs Rundfunk Gessellschaft" in Berlin, a permanent exhibition will be instituted at which all modern devices for the elimination of radio interference will be exhibited. The manufacturers of electrical apparatus fitted with an antiinterference device have sent in a specimen of these products. In this manner the visitors will obtain a good impression of what has been achieved in this respect, and will be able to see for themselves what means are available for the elimination of interference.

