On the 29th August, 1927, the facility for communicating with the South Island was extended between the hours of 10 p.m. and 7 a.m. on week-days and at all hours on Sundays to certain exchanges in the Hamilton, Thames, and Bay of Plenty districts, and to exchanges as far north as Waitara on the western side of the North Island and Gisborne on the eastern side. The facility for communicating with the North Island during the same hours was extended as far south as Greymouth and Dunedin. In addition, Auckland's range was extended to exchanges as far south as Dunedin.

The extension of the range of communication in July was made possible by the installation of special trench cables between the extremities of the submarine cable and the Wellington and Seddon exchanges respectively, the construction of a new aerial trunk circuit between Seddon and Christchurch, and the installation of telephone repeater equipment (valve amplifiers) at Wellington and Seddon. Besides being used for improving telephone facilities between the two Islands, the repeating-apparatus at Wellington is used for amplifying speech between Wellington and Auckland.

In view of the heavy expenditure incurred in providing the special telephone-cable and the repeating-apparatus at the terminal point in each Island, it has been necessary to impose a surcharge of 3d. on all inter-Island telephone calls. With this exception, the inter-Island rates are the same as for ordinary toll communications, the charge varying according to the length of circuit.

## EFFECT OF HIGH-TENSION POWER LINES.

The issuance by the Public Works Department of the Electrical Supply Regulations, 1927, has resulted in the introduction of greater standardization in the construction of power lines, and in certain respects in the erection of more substantial lines, particularly at crossings of communication circuits. This will effect a reduction in expenditure in the protection of toll circuits. The Department's main consideration in future will be to ensure that parallelism between extra-high-tension power lines and toll circuits, which results in serious inductive interference, is confined to the lowest possible limits.

With the advent of extra-high-tension lines in the Gisborne district, a condition has been introduced which seriously interferes with the operation of toll lines and subscribers' circuits. The interference is similar to that experienced in Taranaki some little time ago, and is apparently due to a like cause. The work of removing the trouble is in the hands of the power authorities concerned, and it is expected that a satisfactory solution of the difficulty will shortly be applied.

## CABLES UNDER FOOTPATHS.

Legislation amending section 145 of the Public Works Act, 1908, was enacted last session, preserving existing rights and conserving future requirements of the Crown in regard to the placing of telephone and power cables under footpaths.

## REMOVAL OF POLES ON ACCOUNT OF ALTERATIONS TO ROADS.

The sum of £2,014 was expended by the Department during the year ended the 31st December, 1927, in removing departmental poles consequent upon the deviation, widening, and reconstruction of roads by local authorities and Highway Boards. This is a heavy and ever-increasing but inevitable tax on the Department.

## ERECTION OF TELEGRAPH AND TELEPHONE LINES BY CONTRACT.

It has been suggested that the construction of telegraph and telephone lines would cost less if carried out under contract. As an experiment, arrangements have been made for the calling of tenders for the erection of new lines where conditions are deemed to be suitable. When a number of works have been carried out under contract a comparison will be made between contract works and works carried out by the Department with a view to determining whether the contract system should be continued.

For works performed under contract the material will be supplied by the Department, the contractor providing labour and appliances. Works for which tenders will be invited will be confined to new telephone pole-lines and reconstruction works involving the erection of an entirely new line clear of the working-lines. It is considered that the erection of wires on existing poles and the reconstructing and rearranging of working-lines by other than departmental officers is impracticable.