

August 25, and spending the night in London. The next day he will go to Liverpool in the company of the Most Rev. Francis Bourne, Archbishop of Westminster, and the Duke of Norfolk, where the three will embark on the Empress of Ireland, in which their cabins are already reserved. On this steamship there will be ten portable altars, on which Masses may be said from 5 to 8 every morning of the voyage. On Sunday there will be Pontifical High Mass at 8 o'clock on the third class deck. His Eminence will be received incognito at Rimouski by the General Manager of the Canadian Pacific Railway, who has invited him and a party of invited guests to visit Niagara Falls on September 1. Thence the Cardinal and his companions will go to Toronto, leaving that city by steamboat on September 4 and arriving in Montreal on the evening of September 5.

## WIRELESS TELEGRAPHY IN AUCKLAND

### A TALENTED MECHANIC

Monsieur Roussel, a middle-aged Frenchman, who is employed as carpenter and general handy man at the Sacred Heart College, Ponsonby, has developed a taste for revelling in the mysteries of electricity that amounts almost to genius (says the *Auckland Star*). In spare moments he has put his industry and talent to good purpose, and quite recently completed and installed a wireless telegraphic plant, practically making everything on the premises and effecting an improvement on the Marconi mechanism in one important particular. The ingenious Frenchman has himself made the battery; the Rhunkorff coil, in which seven miles of delicately thin wire has been absorbed; the spark gap; two condensers which are used to regulate the strength of the sparks; the transformer for treating the current in its passage from the spark gap to the aerial wire; the receiving apparatus; the timing apparatus, and the mast, with aerial wires, which has yet to be erected.

The battery that has been made does not develop sufficient current to transmit messages to a greater distance than 40 or 50 miles. A six-inch spark only can be obtained, and it requires a four or five feet spark to allow the wave travelling a distance of 500 or 600 miles. But the apparatus is admirably adapted for the educational purposes for which it has been designed, and the practical demonstrations that can be given to the college students is more effective and interesting than explanations and theoretical illustrations.

With the exception of the battery, which affects the transmission of messages in the manner stated, the plant can deal quite effectually with the reception of messages at almost any distance, and this fact has been demonstrated in an unexpected manner. Through legislation prohibiting the erection of the poles necessary to carry aerial wires to receive waves the receiving apparatus at present is unconnected, but so sensitive is the magnetic coherer that warships' messages have been intercepted, one especially (though in code) being distinctly recorded, and another, presumably from a much longer distance, being rather faintly recorded.

It is in connection with the receiving apparatus that Monsieur Roussel has made an important departure from the Marconi instrument. With the latter the coherer takes the form of a vacuum tube, with the air exhausted and filled with nickel and silver filings. The local production is a magnetic coherer, with an iron bar running through a glass tube, no air exhausted and the filling consisting of soft iron filings. Not only has the iron filings a better action, but the magnet adjusted to the side can be shifted to any position to increase or decrease the sensitiveness of the receiver. This appliance is so sensitive that it records the slightest electric spark in the same room, and sparks from a Wimshurst influencing machine, located in another room some distance away, were also plainly and separately recorded.

It is also of interest to mention that the Wimshurst machine was made by Monsieur Roussel, and is valued at £20 at least. The whole of the wireless plant is beautifully finished, the brass work being particularly well fitted, and reflects the utmost credit on the industrious and ingenious Roussel, who is not only very unassuming, but most happy to offer explanations, as he did to a *Star* reporter, who inspected the plant.

There is one matter that needs attention before the full benefit of the plant can be obtained. Legislation prescribes a penalty of £500 for erecting apparatus for receiving or transmitting wireless messages, and the college authorities cannot without permission erect the mast for the necessary aerial wires. As the plant is intended only for educational purposes to transmit and receive messages from short distances, and not for the purpose of making a business of it, the authorities are hopeful that it will not be long before the required permission of the Government will be given.

Here's a hint of value to you: If you have to shift be sure you get the NEW ZEALAND EXPRESS COMPANY, LTD., to move your things. Their men are expert at the work, and take as much care of things as if they were their own. Careless carriers can do pounds' worth of damage to your furniture. It's wise, therefore, to get the N.Z. EXPRESS CO., on whom you can thoroughly rely....

## Domestic

By MAUREEN

### Cleaning Leather Chairs.

To clean leather seats of chairs a sponge saturated with alcohol should be passed over the chairs, after which apply with a little wadding a coat of varnish composed of the white of an egg dissolved in a third of its volume of alcohol.

### To Clean Black Lace.

Soak it for some hours in a solution of vinegar and water (two tablespoonfuls of the former to a pint of the latter is about the right proportion), then rinse in cold coffee, and iron while damp between two pieces of flannel. It is wonderful how this treatment improves shabby lace.

### Cleaning Silver and Gold Lace.

Since silver and gold thread and lace are used so much upon embroideries, and the braid is used for dress trimming, it is well to know what will brighten it when it becomes dull. Place lace or braid upon a woollen cloth, after freeing lace of all dust. Burnt powdered alum should then be applied with a soft brush. This will remove tarnish, and restore former brightness, if lace and braid are not too worn.

### A Perfect Draught Preventer.

Many doors through shrinkage of the wood are quite two inches from the floor, causing dust and draught to enter. Fold about three thicknesses of paper just the width of the door and about two inches deep; cover with baize or serge, as nearly as possible in color to the door. Sew on three small rings, one about a quarter of an inch from each end, and one in the middle. Fasten into the door three small screw hooks, with well turned-up ends. Hang on by the rings, and you will have a perfect draught preventer, which moves with the door, keeps in its place, yet is easily removed and brushed.

### The Nutritive Value of Cream.

Very few house-mothers fully realise the nutritive value of cream, or understand its superiority to any other solid fats, in permitting the gastric juices to mix with it in the most perfect manner, and in this way aiding and hastening digestion. It is invaluable in the case of invalids, for it serves as nutriment in a very valuable form. It is superior to butter, because it contains more volatile oil than butter made from it. It is frequently ordered by physicians for persons consumptively inclined, for those with feeble digestions, for aged persons, and for those who suffer from impaired circulation, cold feet, and those who feel chilly from want of nutriment. No other article of food gives such satisfactory results.

### Care of the Feet.

People who suffer from tired feet may note that a good deal of their discomfort is caused by the fact that they wear stockings that do not fit. Indeed, the fit of stockings is almost as important as that of shoes, and, in order that they may fit, it is necessary that they shall have a right and left to the pair. They should have as few seams as possible, as these cause corns. The feet should be bathed at night, and this treatment is an excellent sleep producer. The water should be salted. The feet should be scrubbed all over with a nail brush, which will often prevent the formation of corns; whilst hard spots on the soles may be reduced with a piece of fine emery paper or fine file before the feet are placed in water.

### Treatment of Nervous Children.

Intelligent people are coming to understand the importance of protecting the nervous system in infancy and the danger of a shock to childish nerves. As a rule, the quieter a baby is kept during the first year of its life, the better chance it has for a life of health and happiness. The fact that so large a proportion of the human family die in infancy is due largely to the folly of nurses and the ignorance of mothers. Over bright babies do not commend themselves to physicians, who know that the first year of a child's life should be entirely spent in sleep. All efforts to arouse the dormant mind of a child at this time are attended with danger. The foolish practice of tossing a helpless baby in the air, while it screams both with fright and delight, is a most dangerous one, and should not be indulged in by any sensible person, as the excitement thus produced in the child often paves the way for those fatal brain diseases against which medical science is so helpless.

*Maureen*

### WITCH'S HERBAL OINTMENT (Registered).

Every family requires some kind of ointment to be kept in the house to be used in the treatment of burns, scalds, chilblains, bruises, ulcers, scalp sores, inflammatory skin diseases (particularly of parasitic origin)—in fact, in any case in which an emollient antiseptic dressing is required. WITCH'S OINTMENT acts soothingly and curatively in all cases of hæmorrhoids or piles. Price, 1s 6d and 3s 6d; all chemists and stores. Tussicura Manufacturing Company, proprietors.