

transmitting and receiving messages. With regard to that part of my duties relating to the instructions of officers and cadets in the technical details of practical telegraphy, I am not so sanguine of success. Any intelligent youth of fair education can, in a few weeks, become a tolerably expert operator: but to acquire a really useful knowledge of technical details demands, in addition to a slight knowledge of the principles of electricity and magnetism, an actual propensity or liking for the subject. Even after many years' experience as operators, and with the opportunities of observation open to them of acquiring an useful amount of practical skill and knowledge, the per centage of officers in the Department so improving themselves is unfortunately exceedingly small.

The number of miles of telegraph in operation is 1,183.

The number of miles of wire is 2,223.

The number of instruments in operation is fifty.

The number of cells (battery) in operation is 2,090.

Appended to this is a map of the two Islands, showing the course of the telegraph, and a plan showing the circuits and instruments, while below is given a list of stations now open—their calls, number of instruments, and batteries at each station.

LIST OF STATIONS.

Name.	Call.	Instru- ments.	No. Cells.	Name.	Call.	Instru- ments.	No. Cells.
Balclutha	Bl.	1	70	Kaikoura	Kk.	1	60
Bealey	By.	1	30	Lyttelton	Ln.	1	20
Blenheim	Bm.	1	50	Napier	Na.	1	40
Bluff	B.	2	70	Nelson	Nn.	2	60
Castle Point	C.P.	1	40	Oamaru	Ou.	1	70
Cheviot	Ct.	1	50	Picton	Pn.	1	50
Christchurch	Ch.	6	300	Port Chalmers	P.C.	1	20
Dunedin	Dn.	5	190	Selwyn	Sw.	2	70
Featherston	Fn.	1	40	Tokomairiro	Ti.	1	70
Government Buildings	G.B.	1	10	Timaru	Tu.	1	70
Greymouth	Gm.	1	30	Waikouaiti	Wk.	1	70
Greytown	Gn.	1	40	Waipukerau	W.	1	40
Havelock	Lk.	1	50	Wellington	Wn.	3	80
Hokitika	Hk.	2	75	White's Bay	W.B.	6	205
Invercargill	In.	1	70				
Kaiapoi	Ki.	1	50			50	2,090

I have, &c.,

C. V. DE SAUTY,
Electrician.

To Charles Lemon, Esq.,
General Manager, Telegraph Department.
Wellington, New Zealand.