

from the centre, the copper conductor stripped clean of its insulation for a foot in length, and in this condition lowered over the vessel's side till it rested on the ground. Yet through this the clearest signals have been sent—so clear, indeed, as at one time to raise the question whether it would not be worth while to grapple for the first old Atlantic cable ever laid, and with these new instruments working gently through it for a year or so, at least make it pay cost."

As other things were on the same gigantic scale, by the time the big ship had her cargo and stores on board, she was well laden. Of the cable alone there were two thousand four hundred miles, coiled in three immense tanks as the year before. Of this seven hundred and forty-eight miles were a part of the cable of the last expedition. The tanks alone, with the water in them, weighed over a thousand tons; and the cable which they held, four thousand tons more; besides which she had to carry eight thousand five hundred tons of coal and five hundred tons of telegraph stores, making fourteen thousand tons, besides engines, rigging, etc., which made nearly as much more. So enormous was the burden, that it was thought prudent not to take on board all her coal before she left the Medway, especially as the channel was winding and shallow. It was therefore arranged that about a third of her coal should be taken in at Berehaven, a