

From Dundee Warder of 20 April 1841:

We have much pleasure in being enabled to present our readers with the following remarks from the pen of John Rooke, Esq. of Akehead, Cumberland. Mr Rooke is already favourably to fame by his able work 'Geology as a Science', which has reached a second edition, and which we some time ago had the pleasure of introducing to the notice of our readers.

The subject of Mr. Rooke's present communication is one of the greatest interest to Dundee and includes the information that the River Tay pours the largest volume of water to the sea of an river in Great Britain; and when we consider what has been effected on the Clyde, and other quarters, we cannot but suppose, that, were proper attention paid to correct the natural channel, by confining it within proper bounds, and giving a due degree of parallelism to its banks were needed, by a judicious system of embankments, all obstacles to the easy and secure navigation of the river at all times might be removed.

#### IMPROVEMENT OF THE PERRY PASSAGE AND NAVIGATION OF THE TAY

Note: The early part of the document, and a later section, refer only to the ferries crossing River Tay.

(Referring to the tidal stream affecting River Tay) the tide wave of its channel comes off the coast of Norway and the Shetland Isles, rounds Peterhead and the coast of Aberdeenshire until it is in some measure drawn off in a south-west direction by the extension of the Firth of Forth, and thereby caused to flow almost literally along the waters of the Firth of Tay, from east to west, as is clearly shown by the positions and trending of the sands of Abertay, Elbow-End, and Buttonness. This is much very good. It precludes the action of cross-currents, greatly obviates the presence of a bar, gives the finest navigable channel on the eastern shores of our island, and place and being to the prosperous and spirited town of Dundee – fortified as the entrance to the basin of the Tay is by the iron bulwarks of Ferryport-on-Craig, and those of Fort Hill and Dundee Law.

As the flow of an advancing tide wave is thus buttressed on the outer portals of the Firth of Tay, and lineal with a powerful effusion of back-water, the immediate shores of the Firth preserve that parallelism, and consequent equality in the depth of water, which are so well adapted for the formation, preservation, and security of a good navigable channel.

Conspicuous as these advantages are in contributing to the super-excellence of Dundee as a port, there are, nevertheless, as concerns the subject-matter immediately before me, some striking defects which require to be fully reconciled, as I shall be do here to the ferry question in hand.

From Ferryport-on-Craig and Broughty Castle, to Northfield and Mayfield, the lineal bearing and parallelism of the channel of the Firth of Tay are tolerably well preserved. An even depth of water, divested of obstructions, is the result thereof.

Were a railway line carried from Ferryport-on-Craig within the tidal line of high water, at the receding point of Northfield, and continued westward in the direction of Middle-bank, on the parallelism of Dundee, and to a sufficient extent, the port of Dundee would thereby do more than regain all that defective engineering has lost.

This may seem a bold project; yet it is attainable, as the pier proposed would not face a current, press only its parallel, and therefore regular masonry, would be not much needed.

Preserving the parallelism of the Firth of Tay, by projecting a similar wall from the advanced point of the Ferry harbour at Dundee [at Broughty Ferry], in a south-western

direction [to a position opposite Mayfield,] and by those means of restoring the original incidents and figure of the Bay of Dundee.