

1910-5-24 Journal of Commerce

NORTH SEA TO IRISH SEA.

Suggested New Ship Canal.

At a meeting of the members of the North-east Coast Institution of Engineers and Shipbuilders held at Newcastle, last evening, Mr. J. Watt Sandemann outlined a project for a ship canal between the Tyne and Solway Firth. He stated that of the various schemes brought forward since the middle of the seventeenth century for the construction of waterways across Great Britain from sea to sea, only two had been carried into effect, namely, the Forth and Clyde Canal for ships up to 120 tons, and the Caledonian Canal for ships up to 500 tons. The most important of recent schemes was the proposed Forth and Clyde Canal for the largest class of ships, and in view of the interest which had recently been awakened in the project in connection with Rosyth naval base, the present seemed an opportune time to revive a similar project in the district in which he spoke. The proposals for such a canal between the Tyne and Solway Firth had been made at various times since 1795, and a company was promoted for the purpose. These proposals, however, were for barge canals, and appeared to have been abandoned when the Newcastle and Carlisle Railway was constructed in 1850. The present scheme was prepared by the author in 1883 for the late Mr. Andrew Leslie, of Hebburn, and was now revised, and brought up to date.

The Tyne occupied a most central position in the North Sea, and the canal would provide the safest route for ships, and would shorten by an average of 345 miles the distance between the chief east and west coast ports, viz, Aberdeen, the Forth, the Tyne, and the Humber, Cardiff, Liverpool, Barrow, Clyde, Belfast, and Dublin; between the Thames and the same west coast ports except Cardiff the distance would be shortened by an average of 155 miles between the Baltic, Hamburg, Amsterdam, and Rotterdam and the same west British and East Irish ports the saving would average 295 miles. The canal would doubtless increase and develop British inter-coastal trade, and also the trade of the Baltic and Continental ports with the West British and East Irish ports. The saving in time by the shorter routes would enable a greater number of voyages to be made per annum, with correspondingly increased profits. The cost of insurance would also be reduced by a safer route. The coasting trade of the ports near to the proposed canal, that is between the Forth and Humber, the Clyde and the Mersey, and Belfast and Dublin, amounted in 1908 to 54,000,000 tons, or nearly 47 per cent of the whole coasting trade of the United Kingdom.

The canal's value for strategical purposes would be greatly enhanced by the facilities which existed on the Tyne for the repair and outfit of warships, facilities which could be readily increased by utilising Jarrow Slake. The project would not be worth entertaining unless it provided for the safe passage of the largest ships afloat. The safest type of canal, and that which should afford the quickest passage for ships would be one of a uniform water level throughout, with locks at each end just above the highest tide level. As to its construction, the natural formation of the Tyne Valley lent itself very favourably, without involving the construction of costly properties.

The length of the canal between locks would be 66 miles, its depth 36 feet, and its bottom width 148 feet. A vessel would pass through the canal in about 10 hours. He estimated its cost at about £55,800,000, but if the canal were reduced to 100 feet in width at the bottom, as was proposed for the Forth and Clyde canal, the cost would be about £50,000,000. A canal to suit only the ordinary mercantile marine could probably be constructed for about £22,000,000.

1910-5-25 Newcastle Daily News

TYNE-SOLWAY SHIP CANAL.

Once more the idea of a ship canal between the Tyne and the Solway has been revived by a paper that was read before the North-east Institution of Engineers and Shipbuilders, the author being Mr. J. Watt Sandeman. M.Inst.C.E. For the people of Tyneside the project of a canal along the valley of the Tyne is of recurring interest, even although, as in the latest instance, there does not seem to be any probability of its realisation either in the near or remote future. It is a great possibility—that is

all—but projects which at first looked fanciful and chimerical have sometimes developed into concrete facts. It has been so in the case of the Suez Canal, connecting the Mediterranean with the Red Sea. It promises to be so in the case of the Panama Canal, connecting the Atlantic and Pacific oceans. The Manchester Ship Canal, providing a waterway from the Mersey to Manchester, is also an accomplished fact. Like all great undertakings involving a huge expenditure of capital and tremendous risks of failure, arising from unforeseen obstacles, each of these schemes encountered strong opposition and adverse criticism for a time. If there is any new factor which promises to give greater promise of eventual realisation to the project for a canal from the Tyne to the Solway it is the change in the naval situation. In the event of a conflict in the North Sea it would appear from the disposition of the British Fleet and the new naval base at Scapa Flow, in the Orkney Islands, that the plan of the Admiralty would be to seal the North Sea so as to prevent a descent upon our shipping in the Atlantic and protect the main routes of our food supplies; but there is always the possibility of a surprise which would upset prearranged strategical plans, and the possession of a quick route from the west coast to the North Sea would, in certain easily conceivable eventualities, be of enormous advantage to this country.

Supposing for the moment that a ship canal, capable of carrying the largest warships were deemed to be necessary for purposes of national defence as well for the rapid transit of mercantile vessels from sea to sea, The question would then arise as to which of the two isthmuses—from the Forth to the Clyde or from the Tyne to the Solway—the waterway should traverse. The upper isthmus would be the shorter and cheaper, and could place repairing yards on the west coast within easy reach of Rosyth, the new naval base, A squadron of war vessels might be cooped up in Rosyth, as the Russian ships were locked up in Port Arthur, by the destruction of the Forth

Bridge, and if there was no way of escape to the west coast they would be practically useless. On the other hand, by constructing a canal through the lower isthmus the same facilities for inter-communication between the east and west might be provided, while, at the same time, Rosyth might be assisted in case of emergency. The facilities on the Tyne for the repair of warships, too, are second to none of any of our commercial waterways. Those are points which would have to be considered by naval experts if the project of such a canal should ever be taken seriously in hand by the Government, but we are afraid that, as a purely commercial undertaking, the matter is at present of little more than academic importance. Mr. Sandeman estimates the cost of a low level canal at about 56 millions sterling. Schemes for canals west of Newcastle have occupied public attention since the beginning of the 18th century. The first project was to make the Tyne navigable from Newburn to Hexham, and in 1711 the matter came before the House of Commons in the shape of a petition from the county justices. In 1794 the agitation for a canal from sea to new commenced, but it was subsequently abandoned in favour of a railroad, and from time to time since then the question of a navigable waterway has reappeared at irregular intervals, only to fizzle out again for want of adequate support.

1910-6-4 Journal of Commerce

Proposed Tyne-Solway Ship Canal

To the Editor of the Journal of Commerce.

Sir —With reference to the notice in your journal regarding the above project, as it is freely admitted by its able engineer that it is not put forward as a rival to the Forth and Clyde scheme, with which it cannot compete on account of the natural advantages of the latter route and the very much greater cost of construction of the Solway and Tyne route, my object in writing is to call attention to the fact that the interest which the new proposal is exciting is additional evidence of the widespread and ever-increasing public recognition, first, that a direct ship waterway between our eastern and western shores is absolutely necessary, and, secondly, that the only feasible route for such a waterway is that selected for the Mid-Scotland Ship Canal project.

I expect soon to be in a position publicly to intimate that a large model of the proposed Mid-Scotland Ship Canal, and the district which it traverses, will be exhibited in the 1911 Glasgow Exhibition of History, &c.—Yours,

CHILTON L. ADDISON SMITH. 19, Heriot-row, Edinburgh, June 2, 1910.