

sea, runs northwards and eastwards, and connects, as with a long bridge, the north of Iceland with the north of Newfoundland; thus constituting a natural isothermal line, which shows that the European island has a not severer climate than the American one, though it lies more than ten degrees further to the north. And be it remembered that, did climate depend exclusively on a country's latitudinal position on the map, and its distance from the sun, it is the climate of Northern America that would be deemed the ordinary and proper climate, and that of Northern Europe the extraordinary and exceptional one. Great Britain and Ireland owe the genial, equable warmth that ripens year after year their luxuriant crops, and renders their winters so mild that the sea never freezes around their shores, *not*, at least directly, to the distant sun. Like apartments heated by pipes of steam or hot water, or green-houses heated by flues, they derive their warmth from a heating agent laterally applied: they are heated by warm water. The great Gulf Stream, which, issuing from the Straits of Florida, strikes diagonally across the Atlantic, and, impinging on our coasts, casts upon them not unfrequently the productions of the West Indies, and always a considerable portion of the warmth of the West Indies, is generally recognised as the heating agent which gives to our country a climate so much more mild and genial than that of any other country whatever similarly situated. Wherever its influence is felt,—and it extends as far north as the southern shores of Iceland, Nova Zembla, and the North Cape,—the sea in winter tells of its meliorating effects by never freezing: it remains open, like those portions of a reservoir or canal into which the heated water of a steam-boiler is supposed to escape. In some seasons,—an effect of unknown causes,—the Gulf Stream impinges more strongly against our coasts than at others: it did so in 1775, when Benjamin Franklin made his recorded observations upon it,—the first