OBSERVATIONS DURING A VOYAGE FROM ENGLAND TO FORT VANCOUVER, ON THE NORTH-WEST COAST OF AMERICA. By Dr MEREDITH GAIRDNER. In a Letter to Professor JAMESON*.

I SEIZE the first opportunity which has presented itself since my arrival on the shores of America, of communicating to you a few short notices of the scenes which have passed under my view since quitting my native country.

Our voyage hither was long, and, by many, would have been considered as tedious; but the atmosphere which surrounded us, and the ocean which we were traversing, presented so many interesting and continually changing objects to our view, that I am tempted to think what is called the ennui of a long seavoyage, is owing rather to the temper of mind of the voyager than to the circumstances in which he is placed. Daily I had a constant source of occupation in noting the oscillations of the barometer (we had a very good marine one on board, constructed by Gilbert), the diurnal changes in the temperatures of the air, and the superficial strata of the ocean ; in carrying on a series of astronomical observations for the determination of the ship's place, in concert with our navigators ; and in observing the habits and structure of the different aerial and aquatic animals which fell in our way in the course of our long traverse. And yet I had daily to regret the omission of many highly interesting observations, from the want of opportunity, and the means of their

* " Fort Vancouver is situated in a plain, about ninety miles from the mouth of the Colombia River, on its north bank. In my journey of about fourteen days into the country of the Walamet River, a tributary of great size which falls into the Columbia opposite to Fort Vancouver, I remarked this country as consisting of a series of extensive plains or prairies, covered with grass, interspersed with belts of fir and oak, and bounded on the east by the maritime chain of snowy peaks, and on the west by the ranges immediately skirting the Pacific. The thick cover of soil prevented my obtaining much information in my favourite geognostic science; but being my first easy at voyaging in NW. America, was highly interesting. One of the most interesting objects which I saw in these plains, were large blocks of granite scattered on the surface, which must have come from a great distance, as this rock is not found fixed in the maritime chain or country between it and the sea-coast to the south of the Colombia,—a tract, as far as I have seen specimens, or have been able to procure information, consisting almost if not entirely of igneous rock from modern cellular lava (as at the falls of the Walamet) or compact block basalt.

"One of the most striking phenomena in the atmospheric constitution of Fort Vancouver, is the extent of the diurnal change of temperature, 35° from sunrise to 3 P. M. is not uncommon. Once I saw the thermometer (Fahr.) at 43° at sunrise, while at noon of the same day it stood at 87°. The highest I ever saw it was one day in July, when at 2 P. M. it stood at 89° in the shade." —Extract from Dr Gairdner's Letter to his father, dated 31st August 1833.