

Next to a supply of boatmen, our attention was directed towards the procuring of a house conveniently situated for trying the instruments, and examining the rates of the chronometers. Mr. Geddes kindly offered one of his, which, though in an unfinished state, was readily accepted, being well situated for our purpose, as it was placed on an eminence, had a southern aspect, and was at a sufficient distance from the town to secure us from frequent interruption. Another advantage was its proximity to the Manse, the residence of the worthy and highly respected minister of Stromness: whose kind hospitality and polite attention of his family, the party experienced almost daily during their stay.

For three days the weather was unsettled, and few observations could be made, except for the dip of the needle, which was ascertained to be $74^{\circ} 37' 48''$, on which occasion a difference of eight degrees and a half was perceived between the observations, when the face of the instrument was changed from the east to the west, the amount being the greatest when it was placed with the face to the west. But on the 8th, a westerly wind caused a cloudless sky, which enabled us to place the transit instrument in the meridian, and to ascertain the variation of the compass, to be $27^{\circ} 50'$ west. The sky becoming cloudy in the afternoon, prevented our obtaining the corresponding observations to those gained in the morning; and the next day an impervious fog obscured the sky until noon. On the evening of this day, we had the gratification of welcoming our absent companion, Mr. Back. His return to our society was hailed with sincere pleasure by every one, and removed a weight of anxiety from my mind. It appears that he had come down to the beach at Caistor, just as the ships were passing by, and had applied to some boatmen to convey him on board, which might have been soon accomplished, but they, discovering the emergency of his case, demanded an exorbitant reward which he was not at the instant prepared to satisfy; and in consequence they positively refused to assist him. Though he had travelled nine successive days, almost without rest, he could not be prevailed upon to withdraw from the agreeable scene of a ball room, in which he joined us, until a late hour.