

occasionally, owing to the short stay or to a run of bad weather, dependence had to be placed on single sights, but as a rule equal altitudes were successfully obtained.

Owing to the unfavourable state of the weather on leaving England in December 1872, it was necessary to rate the chronometers originally by time-ball, observations not being obtainable; consequently the meridian distance between Greenwich and Lisbon is not of so much value as it would have been had the chronometers been rated at each place by the same observer with the same instrument, as the personal and instrumental errors are not the same at each end of the meridian distance. In all the other distances given in the tables, the observer and instrument used by the observer were the same throughout.

The meridian distances have been in all cases worked by Dr. Tiarks' method as given by him in the voyage of the "Chanticleer."

The following tables give all the particulars requisite, viz., the rates of the chronometers as ascertained at the different ports touched at during the voyage, the meridian distances between the observing stations, and the positions of those observing stations, as determined by our observations with the meridians upon which those positions are based.

It will be noticed from these tables that, with the exception of Bermuda, St. Michael's, Tristan da Cunha, Levuka, Tongatabu, Dobbo, and Ternate, the positions as determined by the Expedition agree well with the positions on the published Admiralty Charts.