

ON THE  
GEOGRAPHICAL DISTRIBUTION  
OF  
CRUSTACEA.

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I. PRELIMINARY CONSIDERATIONS ON THE TEMPERATURE  
OF THE OCEANS.

THE temperature of the waters is well known to be one of the most influential causes limiting the distribution of marine species of life. Before therefore we can make any intelligent comparison of the Crustacea of different regions, it is necessary to have some clear idea of the distribution of temperature in the surface waters of the several oceans; and, if we could add also, the results of observations at various depths beneath the surface, it would enable us still more perfectly to comprehend the subject. The surface temperature has of late years been quite extensively ascertained, and the lines of equal temperature may be drawn with considerable accuracy. But in the latter branch of thermometric investigation almost everything yet remains to be done: there are scattering observations, but none of a systematic character, followed through each season of the year.

The Map which we have introduced in illustration of this subject, presents a series of lines of equal surface temperature of the oceans. The lines are isocheimal lines, or, more properly, *isocrymal* lines; and where they pass, each exhibits the mean temperature of the waters along its course for the coldest thirty consecutive days of the year.