globe uninhabitable. We are too ignorant of the laws governing the direction of subterranean forces, to determine whether such a crisis be within the limits of possibility. At the same time, it may be observed, that no distribution of land can well be imagined more irregular, or, as it were, capricious than that which now prevails; for at present, the globe may be divided into two equal parts, in such a manner, that one hemisphere shall be almost entirely covered with water, while the other shall contain less water than land (see Map, Pl. 1.)*; and, what is still more extraordinary, on comparing the extratropical lands in the northern and southern hemispheres, the lands in the northern are found to be to those in the southern in the proportion of thirteen to one!† To imagine all the lands, therefore, in high, and all the sea in low latitudes, as delineated in the annexed plate (Pl. 2.), would scarcely be a more anomalous state of the surface.

Position of land and sea which might give rise to the extreme of heat.—Let us now turn from the contemplation of the winter of the "great year," and consider the opposite train of circumstances which would bring on the spring and summer. To imagine all the lands to be collected together in equatorial latitudes, and a few promontories only to project beyond the thirtieth parallel, as represented in the annexed map (fig. 1. Pl. 2.), would be undoubtedly to suppose an extreme result of geological change. But if we consider a mere approximation to such a state of things, it would be sufficient to cause a general elevation of temperature. Nor can it be regarded as a visionary idea, that, amidst the revolutions of the earth's surface, the quantity of land should, at certain periods, have been simultaneously lessened in the vicinity of both the poles, and increased within the tropics. We must recollect that even now it is necessary to ascend to the height of fifteen thousand feet in the Andes under the line, and in the Himalaya mountains, which are without the tropic, to seventeen thousand feet, before we reach the limit of perpetual snow. On the northern slope, indeed, of the Himalaya range, where the heat radiated from a great continent, moderates the cold, there are meadows and cultivated land at an elevation equal to the height of Mont Blanc.‡ If then there were no arctic lands to chill the atmosphere, and freeze the sea, and if the loftiest chains were near the line, it seems reasonable to imagine that the highest mountains might be clothed with a rich vegetation to their summits, and that nearly all signs of frost would disappear from the earth.

* This is shown by projecting a map on the horizon of London, that is to say, by supposing the eye of the observer to be placed above that city, and to see from thence one half of the globe. For it so happens that from that point, and no other, we should behold the greatest possible quantity of land; and if we are then transferred to the opposite or antipodal point, we should see the greatest possible quantity of water. (See Plate I.) A singular fact, first pointed out by Mr. James Gardner, namely, that only one twenty-seventh part of the dry land has any land opposite to it, is intimately connected with this excess of land in one of the two hemispheres above alluded to. See Gardner, Geol. Soc. Proceedings, No. 32. p. 488.

† Humboldt on Isothermal Lines.

‡ Humboldt, Tableaux de la Nature, tom. i. p. 112.