

Lambert's equal-surface projection, one to show the Atlantic Ocean, one the Pacific, and one the Indian Ocean, on which all the soundings recorded up to that time, in depths exceeding 1000 fathoms, were laid down in position, and contour-lines of depth drawn in. Since then these hemispheres have been kept up to date by Dr. Bartholomew by the inclusion from time to time of new soundings recorded in depths greater than 1000 fathoms, and the contour-lines have been redrawn. The North Atlantic from one of these hemispheres is shown on Map III., where practically all soundings recorded in depths greater than 1000 fathoms are placed in position, the two last figures being omitted.

Equal-surface projection hemispheres.

The total number of soundings laid down on these charts is 5969, of which 2500 are in the Atlantic (1873 in the North Atlantic and 627 in the South Atlantic), 2466 in the Pacific (1266 in the North Pacific and 1200 in the South Pacific), and 1003 in the Indian Ocean. These figures show that proportionately a great many more soundings have been taken in the Atlantic than in the Pacific, which covers an area so much larger. Of these 5969 soundings, 2516 were taken in depths between 1000 and 2000 fathoms, 2962 in depths between 2000 and 3000 fathoms, and only 491 are laid down in depths exceeding 3000 fathoms, of which 46 exceed 4000 fathoms, and only 4 exceed 5000 fathoms. It may be added that though only four soundings over 5000 fathoms have been laid down on the charts, in reality seven have been recorded, three in the South Pacific in the Aldrich Deep, and the other four taken by the U.S.S. "Nero" in the Challenger Deep in the North Pacific, near the island of Guam, but in such close proximity to one another that only the deepest, 5269 fathoms, could be laid down on the map.

Number of soundings in depths greater than 1000 fathoms.

The deepest sounding hitherto recorded is that of 5269 fathoms just mentioned. This is equal to 9636 metres, or 31,614 feet, or 66 feet less than six English miles, and it exceeds the greatest known height above the level of the sea (Mount Everest in the Himalaya Mountains, 29,002 feet) by 2612 feet. The known range of variation in the level of the earth's crust, from the greatest height above sea-level to the greatest depth below sea-level, is thus 60,616 feet, or about $11\frac{1}{2}$ English miles, but this range is very small when we remember that the diameter of the earth is nearly 8000 miles; in fact, on a six-foot globe a mere scratch one-tenth of an inch deep would represent the extreme variation in the irregularities of the earth's surface.

Deepest recorded sounding.

Range of variation of level of the earth's crust.