

in a disproportional way, and forced to build themselves up within the limits of too small a space. The outermost of the three ranges, *viz.*, the Kanchung-gangri, has been more exposed to the lateral compression than the two others. To these it has formed a protection. The Lapchung Range has therefore been less compressed, and forms a less pronounced semicircle. The Teri-nam Range, the innermost one, has been protected by the two others and therefore suffered least. Its convexity towards the south is so small that this range may be said to form a normal fold parallel with the great folds in Southern Tibet.

This is not the only disturbance that has taken place in the central portion of Central Transhimalaya. Under the influence of strains caused by the violent compression from the sides, meridional fractures or faults have been produced. A nearly meridional series of faults has caused the chain of depressions existing on about  $86^{\circ} 30'$  East Long., forming a feature that indeed may be said to be extremely rare in the morphology of Tibet. From Tang-yung-tsaka to Amchok-tso, a distance of 250 km., there is a strip of the earth's crust which has been let down between more or less parallel faults, thus forming a sunken area, or a rift-valley; what the Germans call a *Grabenversenkung*. The Angden-la (5643 m.) which here is on the water-parting of the Transhimalayan system, is the only point in this rift-valley that still stands up, and that has, together with the strip of land just north of it, been able to resist the general sinking of the rest. On my route from Bogtsang-tsangpo to Ngangtse-tso I could see the Tang-yung-tsaka like a pool in a deep hole, nearly everywhere, except to the S. S. W., surrounded by high mountains (cf. the sketch-map). At a greater distance to the S. S. W. one could clearly see the rift-valley which is filled by the Dangra-yum-tso, though the lake itself was not visible; only the surrounding mountains, which, especially to the N. E. of the lake, were of considerable height. Then the meridional depression makes a turn to the S. S. E., and here contains the lower course of the Targo-tsangpo. Near my Camp 150 the rift-valley continues S. W. as a very flat and open valley joining the depression of Shuru-tso. From the southern shore of this lake to a little south of Angden-la the crust has not in the same degree as elsewhere taken part in the sinking process. But south of Angden-la the depression continues in the valley Amchok-tang, Amchok-tso, and the valley of the outlet from this lake to the Raga-tsangpo. Even south of this river the Chotrang-tso of Ryder is situated on the same line of sunken ground.

Our second line, the one of  $84^{\circ} 35'$  East Long., may also be said to be a rift-valley, though less clearly marked than the third line, the one of Dangra-yum-tso just dealt with. It begins to make its appearance at nearly the same latitude as the third line, *viz.*, at  $31^{\circ} 30'$  North Lat., in the district of Bongba-changma. Here there are in the meridional valley points of no greater altitude than 4628 and 4612 m. Then follow the Lake Chunit-tso and the meridional valley which is