

projection is to give the central parts accurately, but towards the circumference to diminish the countries in size.

In the *stereographic*, the eye is assumed to be placed on the surface of the sphere *opposite* the one to be represented. The centre of the map is, therefore, contracted, and the circumference enlarged.

The *globular* is a modification of the two former, and supposes the eye to be removed from the surface to a distance equal to the sine of 45° .

The *conical projection* is, however, the more accurate, because the cone approaches nearer to the character of the sphere. Any portion of the sphere between two parallels not very remote from each other corresponds closely with a similar conical zone.

Mercator's projection is based on the fact that as all meridians on the globe are great circles passing through the poles, consequently the north and south points at any place correspond with the poles of the earth. In Mercator's chart all the meridians are drawn as straight lines *perpendicular* to the equator, and all the parallels of latitude as straight lines *parallel* to the equator. This necessarily gives a disproportionate magnitude to the polar regions; but the distortion is rectified, as far as the position of places is concerned, by increasing the degrees of latitude commensurately with those of longitude.]