

selves as being more shut in and isolated, the *Mare Crisium* (12,000 square miles) and the *Mare Tranquillitatis* (23,200 square miles).

The color of these so-called seas is not in all cases gray. The *Mare Crisium* is gray mixed with dark green; the *Mare Serenitatis* and *Mare Humorum* are likewise green. Near the *Hercynian* mountains, on the contrary, the isolated circumvallation *Lichtenberg* presents a pale reddish color, the same as *Palus Somnii*. Circular surfaces, without central mountains, have for the most part a dark steel-gray color, bordering upon bluish. The causes of this great diversity in the tints of the rocky surface, or other porous materials which cover it, are extremely mysterious. While, to the northward of the Alpine mountains, a large inclosed plain, *Plato* (called by Hevel *Lacus niger major*), and still more *Grimaldus* in the equatorial region, and *Endymion* on the northwest edge, are the three darkest spots upon the whole Moon's disk, *Aristarchus*, with its sometimes almost star-like shining points, is the brightest and most brilliant. All these alternations of light and shade affect an iodized plate, and may be represented in *Daguerreotype*, by means of powerful magnifiers, with wonderful truthfulness. I myself possess such a *moon-light picture* of two inches diameter, in which the so-called seas and ring-formed mountains are distinctly perceptible; it was executed by an excellent artist, Mr. Whipple, of Boston.

If the circular form is striking in some of the seas (*Crisium*, *Serenitatis*, and *Humorum*), it is still more frequently—indeed, almost universally, repeated in the mountainous part of the disk, especially in the configuration of the enormous mountain-masses which occupy the southern hemisphere from the pole to near the equator, where the mass runs out in a point. Many of the annular elevations and inclosed plains (according to Lohrmann, the largest are more than 4000 square miles in extent) form connected series, and, indeed, in the direction of the meridian, between 5° and 40° south latitude.* The northern polar region contains comparatively few of these crowded *mountain circles*. In the western edge of the northern hemisphere, on the contrary, they form a connected group between 20° and 50° north latitude. The North Pole itself is within a few degrees of the *Mare Frigoris*, and thus, like the whole level northeastern space, including only a few isolated annular mountains (*Plato*, *Mairan*, *Aristarch*, *Copernicus*, and *Kepler*), pre

* Schumacher's *Jahrbuch* for 1841, p. 270.