

large second

Ramsay

PLATE XIII.
THE VERTEBRAL COLUMN OF THE MUSICAL SCALE.
Major and Minor.

The **Octave** being divided into 53 **commas**, the **intervals** are measured, as usual, by these, the **large second** having 9-commas, the **medium second** having 8, and the **small second** 5. These **measures** are then made each the **radius** by which to draw **hemispheres** showing the various and **comparative areas** of the **seconds**. The **comparative areas** of the **thirds** are shown by the **hemispheres** of the **seconds** which **compose** them facing each other in pairs. The **comma-measures** of the various **thirds** thus determined are then made the radii by which to draw the two **hemispheres** of the **fifths**. The **areas** of the **three fifths** are identical, as also the **attitudes** of their unequal **hemispheres**. The **attitude** of the **six thirds**, on the other hand, in their two kinds, being reversed in the upper and under halves of the **scale**, their **attitude** gives them the appearance of being attracted towards the **center** of the **tonic**; while the **attitude** of the **three fifths** is all upward in the **major**, and all downward in the **minor**; their **attraction** being towards the **common center** of the **twelve scales** which **Nature** has placed between the **second** of the **major** and the **fourth** of the **minor**, as seen in the **two D's** of the **dual genetic scale**, - the two **modes** being thus seen, as it were, revolving [**Scientific Basis and Build of Music**, page 113]