

But even this is not all. A noble family of over a thousand genera, a well-marked "Natural Order," the "*Composita*," is the one of which our Aster is a good representative. An order possessing in all its genera the "headed" flowers, the adherent, united calyx, the superior corolla, the anther-united stamens, the two-cleft style. An order with four well-marked sub-orders, namely :—

1. With all corollas tubular, as the thistle, the burdock, the tansy.

2. With the disk-corollas tubular, the ray-corollas strap-shaped, as the aster, the daisy, the golden-rod, the sunflower.

3. With all corollas strap-shaped, as the chicory and the dandelion.

4. With all corollas two-lipped.

These peculiarities fit the order for world-wide distribution ; the first and the fourth sub-orders, the latter in particular, for the inter-tropical regions, the second and the third for northern climes. And it comes to pass that the wind-swept summits of the White and of the Adirondack Mountains, the gloomy Laurentian coast of Labrador, the far-stretching prairies of the west and north-west, the sunny clime of the Pacific slope, the fastnesses of the "Rockies," lonely Newfoundland, tilled Prince Edward, sea-girt Nova Scotia, wooded New Brunswick, picturesque Quebec, agricultural Ontario ; the Eastern, the Middle, the Southern, the Western States ; sub-tropical and tropical Mexico and Central America ; the Llanos, the Sylvas and the Pampas of the Southern Continent ; "the happy homes of England ;" the orange and vine-growing shores of the Mediterranean, level Holland, rocky Switzerland, bleak Lapland, the fjords of Norway, the Tundras of Siberia, the glowing, fervid India, sunny "Cathay," the Southern Cape, solitary Saint Helena—all these and many other places offer them a home. The city with its roar, its

glare and its glitter, the quiet country village, the lonely hillside, the rank, steaming swamp, the meadow, the forest, and that pretty walk "down by the river side"—all furnish their quota of representatives. From the lofty tree to the diminutive, weak-stemmed herb one gathers individuals of this noble family.

Secondly. Such varied geographic distribution combined with such a persistent uniformity of structure, deviating in minor points from a well-marked Ordinal type, leads us to expect a *persistence in time*. A highly respectable, eminently conservative family are these composites, neither too high nor too low in the vegetable world, retaining their persistency in all regions of the earth, and why not also through a long period of its history ? Why may not the order date back to the Carboniferous, or even to the Devonian age ? Persistent animal types, such as the Lingula and the Nautilus have maintained such an unaltered generic structure since the Cambrian Age, that the veriest tyro may at once determine the fossil from the living species of either. Just as of old the little Lingula, neither too high nor too low a Brachiopod, goes on secreting bone-earth and not limestone from the sea. Just as of old, the Nautilus, a high Cephalopod, annually increases its shell by a new chamber, and neither advances nor retrogrades ; while the more highly-developed Orthoceratites of the Palæozoic and the Ammonites of the Mesozoic time have perished ages ago. Just as of old, among plants, world-wide ferns, horsetails, and club-mosses, flowerless plants it is true, yet the highest in their series, grow and die. Is it then too great a speculation, is it merely a conjecture that in some coaly bed of the Carboniferous Age, or mayhap earlier, the ancestral Composite may be discovered ? If one may entertain this view, is he not