

torical development. Our tribes, or phyla, according to this idea, essentially coincide with those few "great classes," or "main classes," of which Darwin also thinks that each contains only organisms related by blood, and of which, both in the animal and in the vegetable kingdoms, he only assumes either four or five. In the animal kingdom these tribes would essentially coincide with those four, five, or six main divisions which zoologists, since Bär and Cuvier, have distinguished as "main forms, general plans, branches, or sub-kingdoms" of the animal kingdom. (Compare vol. i. p. 53.) Bär and Cuvier distinguished only four of them, namely :—1. The vertebrate animals (Vertebrata); 2. The articulated animals (Articulata); 3. The molluscous animals (Mollusca); and 4. The radiated animals (Radiata). At present six are generally distinguished, since the tribe of the articulated animals is divided into two tribes, those possessing articulated feet (Arthropoda), and the worms (Vermes); and in like manner the tribe of radiated animals is subdivided into the two tribes of the star animals (Echinodermata) and the animal-plants (Zoophyta). Within each of these six tribes, all the included animals, in spite of great variety in external form and inner structure, nevertheless possess such numerous and important characteristics in common, that there can be no doubt of their blood relationship. The same applies also to the six great main classes which modern botany distinguishes in the vegetable kingdom, namely :—1. Flowering plants (Phanerogamia); 2. Ferns (Filicinæ); 3. Mosses (Muscinae); 4. Lichens (Lichenes); 5. Fungi (Fungi); and 6. Water-weeds (Algæ). The last three groups, again, show such close relations to one another, that by the name of "Thallus plants" they may be contrasted with the three first main classes, and consequently