ture of the eruptive rocks is dependent upon the conditions of their geological occurrence, and classified them accordingly in three chief groups: deep-seated or "plutonic" rocks, intrusive or "dyke" rocks, and eruptive flows or "sheets." This new standpoint assumed by Rosenbusch re-acted upon the whole newer development of petrography. By subordinating in his new system all considerations of the chemical and mineralogical composition, and the geological age, to the mode of occurrence of eruptive rocks in nature, Rosenbusch removed as it were the final judgment of petrography from the laboratory to the field. The petrographer was made to feel that the microscope and chemical re-agents were to be regarded as aids to field observations, but that systematic interest was to be concentrated upon the problems dealing with rock-structure in its relation to particular conditions of stratigraphical occurrence. In this direction original research seemed to give most promise of enlightenment in the immediate future.

Rosenbusch introduced a number of new descriptive terms, *e.g.*, holocrystalline, hemicrystalline, hypidiomorphic, panidiomorphic, etc., for the purpose of defining all structural modifications with scientific accuracy. According to Rosenbusch, the deep-seated eruptive rocks are all distinguished by holocrystalline and hypidiomorphic granular structure. They have originated at great depths of the crust by slow processes of cooling and consolidation. He divides them into sub-groups which are based upon the presence and relative amount of quartz and felspar; in this respect, therefore, Rosenbusch adopted the system of MM. Fouqué and Michel-Lévy.

Rosenbusch includes in his group of intrusive rocks those eruptive masses which occur in the form of typical dykes, yet are to be regarded only as particular facies of deep-seated eruptive rocks, and may probably be associated with the latter in their genesis and their distribution in the crust. The intrusive group is sub-divided into three series—a granitic, a syenitic, and a dioritic, whose characteristic types of structure are quite independent of their mineralogical composition.

Porphyritic structure is said by Rosenbusch to be characteristic of eruptive sheets; the constituents belong to at least two successive generations. He thinks it probable that the older constituents represented by the larger crystalline elements are intra telluric in origin, and may have formed at