by the Variscian potential field led, thus, to a transformation of this older fissuring and the creation of the new symmetry relations of the Freiberg vein system (s_1/s_2, F_1/F_2).

Except for some regional peculiarities, the veins of the Freiberg marginal deposits can largely be compared with the fissure systems of the central part. It results from this for the whole Freiberg ore district (central part plus marginal areas) a common and uniform tectonic structural scheme. There can be distinguished in the two main directions — the north—south (s_1-system) and west—east (s_2-system) systems — several larger main ranges of veins (enclosure 2).

In the Freiberg marginal deposits, too, diagonally arranged feather systems (F_1, F_2) have formed between the ranges of veins of the shearing systems s_1 and s_2. A certain proportionality between the distances of the adjoined tectonic systems (s_1/F_1; s_2/F_2) can be stated. According to the tectonic intensity on the s_1- and s_2-structures, which decreases continuously from the central part towards the marginal areas, there decreases also the number of the feather joints, formed between the corresponding shear joints (= tectonic formation of floors!).

The mechanism of solidification led, finally, to a regular interaction between joint opening (vein tectonics proper) and mineralization (= 1st cycle of mineralization).

By more recent tectonic processes, mainly in the period Trias-Tertiary, the Erzgebirge was once more influenced by fracturing processes, causing in one part of the Freiberg veins new reopenings (especially in the s_2-system). A more recent mineralization on the reopened vein fissures (= 2nd cycle of mineralization) took place and, by this, the final fixation of the modern Freiberg ore lodes.

In the Freiberg marginal areas, both the rock exfoliation and the strongly marked inhomogeneous composition of the rocks themselves had an increasing influence on the specialstructure of the veins. In this, an important part was played by petrographic limits of inhomogeneity for the formation of ore concentrations in the veins (= zones of optimal passableness in the lying wall of contact surfaces of different rocks). Furthermore, the intersections of lodes caused intensified mineralization in some areas. Between the vein textures several tectonically and regionally conditioned basic types (Ruscheltype, eq-[noble-quartz] type, normal kb-[pyrite-blende], and eb-[noble brown spar] types, layer type) can be distinguished.

Following on the geological-tectonic part, the mineral composition of the Freiberg marginal deposits is treated in detail. The five "classic" Freiberg vein formations (kb, eb, eba, fba [fluoritic-baryte], BiCoNi) can be found in the whole ore district, though in different, locally conditioned varieties. The sequences of the kb- and eb-formations belonging genetically to the 1st cycle of mineralization have to be ascribed to the Variscian magmatism, whereas the more recent 2nd cycle of mineralization (eba [iron-baryte], fba, BiCoNi) may be deduced from a simatic magmatism of mesozoic-tertiary age (saxonisch). The