

Exceedingly complicated examples occur in some coal-fields, where the connected faults become so numerous that no one of them deserves to be called the main or leading dislocation. By a series of branch-faults, the effect of a main fault may be neutralized or reversed. Suppose, for example, that a main fault at its eastern portion throws down 60 fathoms to the north, and that at intervals three

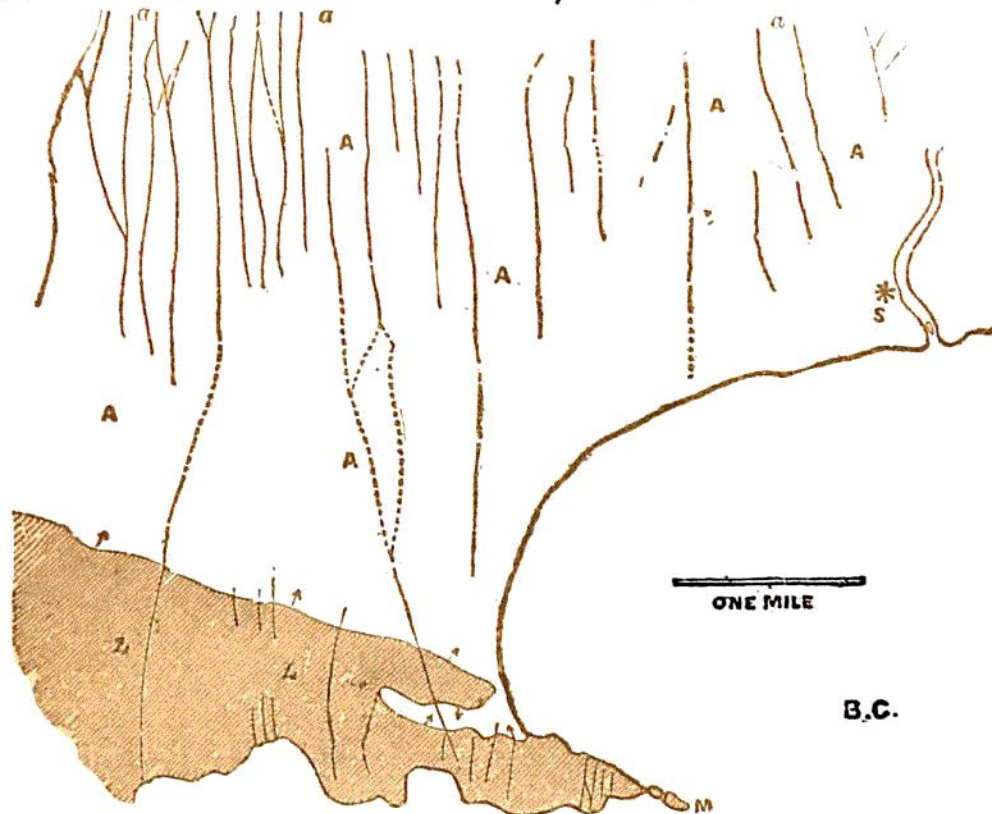


Fig. 272.—Map of part of the South Wales Coal-field.

▲ A, Coal-measures; L L, Carboniferous limestone dipping beneath the coal-measures as shown by the arrows; *a a*, dip-faults; S, Swansea; M, the Mumbles; B. C., Bristol Channel.

faults on the same side strike off from it, each having a downthrow of 25 fathoms to the east; the combined effect of these branch-faults will be to reverse the throw of the main fault toward its western end, and produce a downthrow of 15 fathoms to the south.

**Groups of Faults.**—The subsidence or elevation of a large mass or block of rock has usually taken place by a combination of faults. Detailed maps of coal-fields, such as those published by the Geological Survey of Great Britain on