The propylitic origin of some gold explains the controversy as to whether dykes enrich or impoverish adjacent lodes. A lode may be poor where in contact with a dyke and rich where separated from it, and *vice versa*. Such apparent inconsistencies are explained by the Ai Mine at Wood's Point in Victoria; it consists of horizontal floors of quartz in hornblende-porphyrite; where that rock is normal the quartz is barren, but where the rock has been altered to propylite the quartz-floors are auriferous. The gold is due to the propylitization and not to the dyke.

The Classification of Gold Ores

Gold, owing to its ubiquitous distribution is found in a great variety of ore deposits. Excluding some of the less important occurrences in contact deposits, and as an accessory constituent in many sulphides the chief ores may be classified as follows :—

Sect. A—*Primary*—

I. *Gold-quartz Fissure Lodes*—

(*a*) In sedimentary rocks. California; Ballarat.
(*b*) In gneisses and schists. Mysore; Brazil; S. Rhodesia.
(*c*) In volcanic rocks. Rocky Mountains; New Zealand.
(*d*) Pneumatolytic. Cripple Creek; Passagem, Brazil.

II. *Isolated Gold-quartz Veins; Saddle and Ladder Lodes*—

(*a*) Saddle-lodes. Bendigo; Nova Scotia.
(*b*) Ladder-lodes. Wood's Point; Little Bendigo, Victoria; Berezovsk.
(*c*) Radial-lodes. Charters Towers.

III. Impregnations and Replacement Bodies. Homestake, N. Dakota; Alaska Treadwell; Kalgoorlie, W. Australia; Porcupine, Ontario.

Sect. B—Secondary enrichments. Londonderry, W. Australia; Mt. Morgan, Queensland.

Sect. C—*Alluvial Deposits*—

Surface drifts and leads.
Deep leads. Victoria and Kanowna.
Marine placers.
Ancient placers. Rand Banket; Gold Coast; S. Dakota; Morro Velho, Brazil.