

The history of the Brazilian geological map and iron mining in Minas Gerais state: the contribution of John Casper Branner

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In 1919, the Brazilian geological map showed a synthesis of the geological units of the whole country, as well as its main mineral resources (Branner, 1919). The final layout of the map was done by John Casper Branner. He had done much of his studies and geological training in Brazil and most of his professional life was spent in successive trips and contacts in this country. Branner interacted with many geologists and experts in mining and metallurgy of that time, who worked in private companies or in governmental agencies. An important result of these activities was the synthesis of the national geological map. Luis Felipe Gonzaga de Campos, Orville Adelbert Derby, João Pandiá Calogeras, Antonio Olyntho dos Santos Pires, Roderic Crandall, E.C. Harder, R.T. Chamberlin were Branner's main interlocutors on iron ores and, in many cases, on the various parts of the map. The map represents a synthesis of early field activities, as well as Branner's work to aid the geological formation of the Brazilian people (Branner, 1915). His *Elementary Geology* of 1915 already brings together many synthetic elements on the geology of Brazil. Two criteria guided the organization of geologic units in the map, stratigraphy and economic geology. The map reveals the main mining activities in the first part of 20th century. Iron and manganese from Minas Gerais state have been given special attention with carefully descriptions. This suggests that the publication of the map is connected with changes in mining and steel legislation since 1915.

Branner, J. C. (1915). *Geologia elementar: preparada com referencia especial aos estudantes brasileiros e á Geologia do Brasil*. Francisco Alves & C., Rio de Janeiro, 396 p.

Branner, J.C. (1919). *Resumo da Geologia do Brasil para acompanhar o Mappa Geológico do Brasil*. Escola Superior de Agricultura de Mossoró, Mossoró (RN), 152 p