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PROBLEMS IN BRAZILIAN DEVONIAN GEOLOGY

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(Setembrino Petró)

THE DEVONIAN OF THE PARANÁ BASIN (*)

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I — ABSTRACT

Knowledge on the Devonian of the Paraná Sedimentary Basin is updated. Recent investigation provided the basis for a refinement of the physical and biostratigraphical subdivision of the Devonian in the Brazilian part of this basin and for a reevaluation of the age of the units. The stratigraphical nomenclature is revised and a threefold subdivision of the Ponta Grossa Formation is presented for practical purpose. A new name, Jaguariaíva, is proposed for the lowermost member. The names of the other two members — Tibagi and São Domingos — had already been proposed by earlier writers. The distribution of the fossils in the different stratigraphical units is listed for each outcrop region.

Exploratory wells recently drilled in the central part of the basin gave further evidence of a vertical and lateral interfingering between the Furnas and the Ponta Grossa formations, as previously supposed on consideration of the gradational contact between these two formations.

The age of the Furnas Formation, due to lateral facies change, may range from Lower to Middle Devonian, while the Ponta Grossa Formation may span the interval from late Lower to Middle and even to early Upper Devonian.

The attached paleogeographic map of Devonian transgression in South America differs somewhat from previously published ones; the areas covered by the Devonian sea are generally more restricted. The Pantanal-Central Paraguay peninsula, the Araguaia-Tocantins sea-way,

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