

Mr. van Diest followed with a paper entitled "Some remarks upon the Geology of Sumatra and the manner of conducting Mining Operations there two hundred and fifty years ago."

An outline sketch of the geology of the island was given, derived for the most part from the publications of the present Geological Survey of the island, and several geological maps were exhibited.

[ABSTRACT.]

The coal of Sumatra belongs to the late Cretaceous or early Eocene age, the evidence of plant and vertebrate remains being in conflict upon this point. Upon the coal, and unconformable with it, occur sandstones and limestones, referred by some to the Eocene formation. The Tertiary eruptive rocks, coming largely from the volcanic range on the western coast, are later than these Eocene strata.

Sumatra contains a great variety of metallic ores, many of which were known to the natives before the appearance of the Hollanders, three hundred years ago. Among these were ores of gold, silver, tin, copper, lead and mercury. The method of extracting mercury from cinnabar then used by the natives was not essentially different from that in use today in Bohemia. Gold had been worked by the natives, not only in placers, but also in quartz veins, and the Dutch East India Company, who undertook in 1669 to work some of the rich veins in the Salida valley, found that quite extensive excavations had already been made.

An outline of the history of mining operations in the Salida valley from 1669 to 1738 under the direction of the Dutch trading company was then given, and an interesting parallel drawn between the experiences of stock holders on the one hand and mining superintendents on the other in those days and at the present time.

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**MEETING OF MAY 5TH, 1883.**

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Mr. Cross mentioned that the unknown tetragonal mineral in the gold sand from the Snake River, Idaho Ter., described by him at the March meeting, was undoubtedly zircon, since it agreed in all particulars with some crystals of that mineral recently isolated from a porphyrite of the Ten Mile District, Summit County, Colorado.