

Analyses of hematite from Tavetschthal by v. Kobell:—

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| Red oxide of iron | 94.82 |
| Protoxide of iron | trace |
| Titanic acid | 3.57 |
| Protoxide of manganese . . | 1.61 |

In attached crystals; botryoidal, reniform and fibrous masses; scaly, granular and earthy; pseudomorphous after magnetite, pharmacosiderite, fluor, calcite, göthite.

Hematite occurs chiefly in beds and veins in the older rocks, and as an ingredient of some rocks. It is deposited by sublimation in the crevices of active volcanoes, not unfrequently, at the present time; also in pottery furnaces where salt is used for glazing. Is found crystallized in Elba, St. Gotthardt, Caravatti in the Grisons and many other parts of the Alps, Framont in the Vosges, Altenberg and Poberschau in Saxony, Capão in the Brazils, Thurnberg near Flachau in Salzburg; imbedded in the dolerite of the Meissner, near Hedemünden in the valley of the Werra, St. Just and Tin Croft mines in Cornwall, Cumberhead in Lanarkshire, Schabrowski near Katharipenburg in Siberia. Crystals formed by sublimation are found on Vesuvius, Ætna and Stromboli; Puy de la Vache and Puy de la Chopine in Auvergne, Jumilla in Murcia, in crevices of syenite at Meissen in Saxony, Reps and Magyar-Hermany in Transylvania. It occurs in thin scales (micaceous iron) in the Fichtelgebirge in Bavaria, Reichenau in Bohemia, Gölnitz and Dobschau in Hungary, in mica slate (itacolumite) in many parts of the Brazils, near Tavistock in Devonshire, near Dunkeld in Perthshire, Constantine in Estremadura, Hawley in Massachusetts, Stiria, Carinthia, Moravia, the Harz, Sardinia, Siberia. It occurs massive in beds in Elba, in Sweden at Gellivara in Lulea Lappmark, Norberg, Grengesberg, Langbanshytta; Kalstadt mine near Kragerøe in Norway, in the Harz, Salzburg, the Tyrol, Hessa, Westphalia, Saxony, Bohemia, Würtemberg, Lancashire, Cumberland, North America, Asia, Africa. It occurs pseudomorphous after magnetite at Inficionado in Minas Geraes in the Brazils, after calcite at Sundwig near Iserlohn, after göthite at Lostwithiel in Cornwall.

According to Mohs $rr' = 94^{\circ} 2'$, while according to Phillips $rr' = 93^{\circ} 50'$, a value agreeing very closely with the measures obtained from a very good crystal, evidently formed by sublimation, and affording the characteristic red streak of hematite. The latter value has consequently been adopted in the present treatise.

When the vapour of chloro-chromic acid, $CrCl^3Cr^2$, is trans-