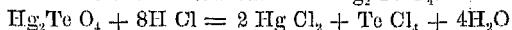


In exceedingly fine needles, which under the microscope appear in bundles or tufts, sometimes radiating; some of the groups seem to have crystallized around a globule of mercury, which latter, in breaking the specimen, has fallen out, leaving a round empty space in the centre of the crystals. Color white; lustre silky.

Readily soluble in *very dilute* nitric acid, the solution yielding a precipitate of Hg Cl by hydrochloric acid; the mineral is also soluble in hydrochloric acid, the solution contains Hg Cl₂ and Te Cl₄, which proves that its composition is "mercurous tellurate" = Hg₂ Te O₄. —



The mineral is also blackened by ammoniac hydrate.

Name after "Magnolia" District.

7. FERROTELLURITE, A NEW MINERAL.

A crystalline coating upon quartz, associated with native tellurium. Under the microscope it appears in very delicate tufts, sometimes radiating or, when in cavities, as very minute prismatic crystals of a color between straw and lemon-yellow inclining to greenish-yellow.

Insoluble in ammoniac hydrate; some of the mineral, which had been treated with ammoniac hydrate for the purpose of removing the tellurous oxide present, was dissolved in hydrochloric acid. The solution contained tellurous oxide, ferric oxide, and a trace of niccolous oxide; the mineral is therefore probably a ferrous tellurate = FeTeO₄, hence the name. The quantity at hand is too small for a fuller investigation.

It occurs at the Keystone Mine, Magnolia District, Colorado, associated with native tellurium, tellurite, and a peculiar iron sulphide, in which a part of the sulphur is replaced by tellurium. A preliminary examination of it gave Fe = 41.01, Ni = 0.72, Te = 4.06 and S = 41.73 = 87.52. The material for analysis was slightly oxidized, but the difference of 12.48 % is too great to be covered by this. I shall repeat the analysis, if ever I should succeed to get this mineral again.

8. ROSCOBELITE.

It will be remembered, that almost simultaneously, Prof. H. E. Roscoe and I investigated the mineral, which now bears his name, his paper having been received by Royal Society on May 10th, 1876, (Proc. Royal Soc. XXV, 109.) whilst mine was written and sent to the editors of the American Journal of Science on May 16th, 1876.

I regret to say that in some of the essential points our results do not agree.

From the nature of the material and the information received from Dr. James Blake of San Francisco, no doubt can exist that, that, which he had sent to me, was as good and pure as it could be obtained. In my examination (Am. Journ. of Sc. [3] XII, 32) I showed that even the apparently purest scales, selected with the greatest pains, were not altogether free from admixtures. With the greatest difficulty I obtained enough of almost