FOR THE JOURNAL OF THE FRANKLIN INSTITUTE.

Notice of three specimens of Garnet. By THOMAS ELDER, JR.

1st. *Melanite*.—The chief localities of the black garnet, or melanite, hitherto known, have been Vesuvius, where it is imbedded in lava, and near Rome. Specimens of the same have lately been found on the Round Top mountain, about a quarter of a mile N. E. of Hummelstown, Dauphin county, Pa., in a trappean rock belonging to the range of the Conewago hills. The crystals are very distinct, presenting the usual dodecahedral form of garnet, with their edges sometimes replaced by a plane, and are therefore a combination of the dodecahedron with the icositetrahedron. They are generally of a rich velvet black colour, opaque, and with a resplendent lustre; a few, however, are greenish brown and translucent on the edges. The irregularities of their cleavage distinguish them from other varieties of garnet.

2d. *Cinnamon Stone*.—This beautiful mineral from Ceylon, has long been known and classed with the garnet from its chemical composition, its crystalline form having never been observed. I lately saw a specimen obtained from Mr. Nuttall, found on the line between New Jersey and New York, which is well worthy of particular notice, in consequence of its form. The crystals are remarkably distinct, with the brilliant surfaces and sharp edges of the dodecahedron, which in most cases are replaced by planes, and in a few instances the edges of this new plane are replaced by minute faces. They present, therefore, a combination of the dodecahedron and icositetrahedron, with small planes of the hexaicositetrahedron. The lustre is more brilliant than that of the precious garnet, and the colour much lighter than the cinnamon stone from Ceylon, while the well formed crystals are nearly transparent. Experiments by the blowpipe prove that the quantity of iron present is smaller than is found in any other variety of garnet, excepting the Grossular.

3d. *Colophonite*.—This mineral is generally found in the form of irregular coarse grains, aggregated together; but I lately saw a specimen distinctly crystalized and presenting an unusual combination. It has the form of trapezoidal garnet, (icositetrahedron,) but where the faces of the dodecahedron should appear, may be observed a low four sided pyramid, which would make a solid of $12 \times 4 = 48$ planes. It is therefore a combination of the icositetrahedron with the hexaicositetrahedron, and without a single plane of the dodecahedron,—a combination of very rare occurrence, excepting in the diamond.

Philadelphia, January 27, 1838.

Melanites rivaling in beauty those of Frascati, have been found at Franklin, New Jersey. They have also been found at Germantown. An analysis of the Franklin Melanite was made by Henry Seybert, and published in Silliman's Journal, Vol. VIII, p. 300. G.

Franklin Institute.

Committee on Science and the Arts.

At a stated meeting of the committee on Science and the Arts, held April 15th, 1837, a circular letter from the Hon. Levi Woodbury, Secretary
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