

same time, are changed in color to a dark brownish black. On fracturing one of the crystals of amethyst, we obtained a portion of the fibres, which, on examination with the microscope, showed a reddish brown substance, with specks of a brass yellow, which we recognised as sulphuret of iron, the color being very speedily changed to brownish black by exposure before the blow-pipe, when it became magnetic, as did the surrounding brown substance. We are then led to conclude that the yellow is iron pyrites, and the brown fibres red oxide of iron, which doubtless had its origin from the decomposition of the former. The amethyst, traversed by this substance, is of a much deeper color than that in which it is not present, and the color appears deepest in the immediate vicinity of the fibres; hence we should be led to think that a portion of its color was derived from this mineral. The fibres are so minute, that we are unable to ascertain if manganese be present in them.

Large masses of red jasper, weighing more than a ton each, lie scattered along the base of Titus' Hill, which rises abruptly from the shore of St. Mary's Bay. This jasper is frequently of a fine texture, and is banded by stripes of various colors. Sometimes it appears to have been made up of rounded fragments of red jasper, cemented by chalcedony, thus being converted into brecciated agate; but this is not uniformly the case, for the fragments are more frequently encrusted with druses of quartz, which unite them to each other. Cavities of considerable size are found in these masses of jasper, having their interior surfaces lined with a covering of crystallized quartz, which projecting in stalactites from the superior part of the geode, to which they are attached by a slender neck, hang down into the centre, having the dependent extremity enlarged by a radiation of crystals.