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NEW HAVEN:

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June 8, 1835,	Greenwich	observation,	4h.	51m. 45s.	W. long.
" "	Cambridge	"		40	"
" "	Edinburgh	"		53	"
July 6, "	Greenwich	"		28	"
" "	Edinburgh	"		23	"
July 7, "	Greenwich	"		43	"
Aug. 4, "	Greenwich	"		44	"
" "	Cambridge	"		43	"
Aug. 9, "	τ^1 Aquarii	"		77	"
" "	τ^2 Aquarii	"		58	"
Sept. 17, 1811,	Solar eclipse	"		51	"

The mean of these thirteen determinations is 4h. 51m. 43s., and the mean difference is $\pm$ 10.5s. If we reject the observation of τ^1 Aquarii, as I think we must, the mean longitude will be 4h. 51m. 40.5s., and the mean difference, $\pm$ 8.9s.

I think therefore we may assume for the Observatory of Yale College,

North Latitude, 41° 18′ 28″.
West Longitude, 4h. 51m. 40s.

and I believe these values may be regarded as tolerable approximations to the truth.

Art. V.—*Notice of Warwickite, a new mineral species;* by Charles Upham Shepard, M. D., Prof. of Chemistry in the Medical College of the State of South Carolina.

The mineral here announced, is one which has for many years been known to the mineralogists of this country as occurring at Warwick, Orange county, N. Y., where it exists in limited quantity along with brucite and yellow idocrase, imbedded in a highly crystalline white dolomitic limestone. It has passed under the name of hypersthene, on account of the very brilliant copper-red reflections afforded by its cleavage planes. The size of the crystals at the locality first discovered, is in general very diminutive,—they for the most part being quite slender, and only a quarter or half an inch in length. A second depository of the mineral however, was observed by Drs. Young and Horton in

the vicinity of the first, in which several forms half an inch in diameter have occurred, although the last discovered crystals are wanting in lustre when compared with those first mentioned, and are moreover in a somewhat decomposing condition. They are associated with large crystals of black spinel, which are also dull from partial disintegration, a change apparently induced from the intermixture of serpentine.

A more close attention to the mineral above mentioned, both as relates to its mineralogical and chemical properties, than I have heretofore been able to bestow upon it, has convinced me that it is fully entitled to constitute a new species, which I designate *Warwickite*, from its original locality.

Mineralogical Description.

Primary form. Oblique rhombic prism. M on M = 93° to 94°.

Secondary form. The primary having its obtuse lateral edges truncated, and its acute ones, beveled. The summits rounded.

Cleavage parallel with the longer diagonal perfect. The cleavage planes thus obtained are finely striated vertically, and exhibit very distinct, oblique cross cleavages. Fracture uneven.

Lustre eminently metallic-pearly, of a copper-red color on the perfect cleavage-faces; in other directions, only vitreous in moderate degrees. Color dark hair-brown to iron-gray. Opake, except in very thin fragments, when it is translucent and transmits a reddish-brown light. Streak dark chocolate-brown. Decomposing crystals are nearly iron-black with a faint tinge of purple.

Brittle. Hardness = 5.5 . . . 6.0. Sp. gr. 3.29.

Chemical Description.

When heated on charcoal before the blowpipe, it does not fuse, but simply assumes a lighter shade of color. With borax, it dissolves with effervescence, affording while hot a yellow semi-opake glass, which on cooling changes to a pale green and becomes clear. It renders carbonate of soda opake, at the same time imparting to it a dull yellow tinge. In microcosmic salt, it melts with effervescence, the globule being blood-red while hot, from which it passes through orange-yellow as it cools, and finally becomes reddish-gray and opake. On being pulverized and heated in a glass tube, it emitted moisture and hydro-fluoric acid. The corrosion of the tube became still more distinct on the addition of a few drops of sulphuric acid.

Its powder is feebly attacked by long digestion in dilute hydrochloric acid. Heated for half an hour with five times its weight of anhydrous carbonate of soda in a platina crucible, a light brown, cohering, porous mass was obtained, which was treated with dilute hydro-chloric acid and digested for some time; a bulky, heavy brown precipitate remained undissolved, which grew paler however towards the end of the digestion. The whole was thrown upon a filter: an abundant milky substance continued to pass the paper so long as water was on the filter, and which (considered along with the blowpipe indications) was regarded as titanic acid. A portion of the hydro-chloric acid liquor (obtained clear by decantation) was treated with a saturated solution of sulphate of potassa without obtaining any precipitate, even after twenty four hours standing. Another portion was examined for silica, lime, magnesia, and alumina, but without detecting either of them. Iron and manganese appeared to be the only bases present.

As the result of the foregoing examination, therefore, I conclude that Warwickite is a fluo-titaniate of iron and manganese; but I must add that my chemical trial was made upon a sample in a decomposing state, though it was still endued with considerable hardness and a faint lustre. As my cabinet at Charleston embraces a large and fresh crystal, I purpose on my return to that city to occupy myself still farther with the elucidation of its chemical properties.

New Haven, May 22d, 1838.

ART. VI.—*Considerations upon the Nature of the Vegetables that have covered the surface of the Earth, at different epochs of its formation;* read before the Academy of Sciences of Paris, on the 11th September, 1837, by Mons. ADOLPHE BRONGNIART.

Translated from the French, and communicated for this Journal, by R. W. HASKINS,* of Buffalo, New York.

CURIOSITY is one of the most distinctive faculties of the human mind; one of those that most clearly mark the distance between man and the brute creation; and for this reason it may be desig-

* Mr. Haskins prefers an orthography in some cases peculiar, and retains also certain French idioms.—EDS.