LUMINIFEROUS ÆTHER.

In the preceding impression of this JOURNAL, page 129, Prof. Pliny Earle Chase writes as follows: "Prof. De Volson Wood writes under the same misapprehension, overlooking the precaution which Herschel had taken to define his hypothesis, 'that an amount of our ethereal medium equal *in quantity of matter* to that which is contained in a cubic inch of air (which weighs about one-third of a grain) were enclosed in a cube of an inch in the side.'" I do not understand how Professor Chase could, deliberately, make this charge of overlooking Herschel's hypothesis in the face of the fact that in the immediate connection of my reference to Herschel's computation, I stated (*Phil. Mag.*, 1885, p. 390): "But his analysis was founded upon the *assumption* that the density of the æther was the same as that of the air at sea-level."

The closing paragraph of Professor Chase is questionable as to the correctness of the facts.

The temperature of space is, at the present day, generally assumed to be much less than the lowest temperature yet produced by artificial means; and it is interesting to note the efforts made to produce extreme cold. Stewart on "Heat," p. 110, gives an example in which a temperature of -140° C. (-220° F.), was obtained, but very recently (Van Nostrand's *Eng. Mag.*, xxxv, p. 87), in solidifying oxygen, a temperature of -200° C. (-330° F.) is said to have been produced, which is only 131° F. above absolute zero.*

DE VOLSON WOOD.

MODIFICATION OF PLANTS BY CLIMATE.—Mr. A. A. Crozier, of the University of Michigan, has published a thesis bearing this title. It has brought together a great amount of scattered material upon this interesting subject and, not the least valuable part of the paper, a full bibliography is given. Summing up the whole matter, the conclusion reached is as follows: "It seems to be established that as plants move from the locality of their largest development toward their northern limit of growth they become dwarfed in habit, are rendered more fruitful, and all parts become more highly colored. Their comparative leaf surface is often increased, their form modified, and their composition changed. Their period of growth is also shortened and they are enabled to develop at a lower temperature."—*Botan. Gazette*, Sept. and Oct., 1885.

[* See this JOURNAL, *ante* art., BOLTON, p. 213.—COM. PUBL.]