http://www.geology.19thcenturyscience.org/books/Bridgewater-Treatises/index.html

pounds readily, with many other bodies; but in its most concentrated state, is itself also crystallized. Now, it is not less worthy of note than in the case of sugar, that vinegar, altogether so different from sugar in its properties, is generally considered to be precisely analogous in its composition; that is to say, vinegar is a binary compound of water and carbon; but the proportions of water and carbon are different from those that form sugar. There is however, a characteristic distinction between these two substances, inasmuch as vinegar can be formed artificially; not indeed, any more than sugar, by directly associating its elements: but, by the process of fermentation, and by other means, this acid may be formed from sugar, and from the allied substances to be presently mentioned. Yet we cannot work backwards, and by any artificial process again form sugar from vinegar; though the organic agent seems to possess this power, as we shall have occasion to notice more particularly hereafter.

We now proceed to consider the composition of a totally different class of substances, which under no circumstances, natural or artificial, ever assume the crystallized form; and the structure of which, in the common and strict sense of the term, may be said to be *organized*. *Starch* is a well known instance of these uncrystallizable or organized substances.