

A cursory inspection of the foregoing Table will evince to the reader, how nearly the general composition of sugar and of starch agree together; and that the agreement extends even to their several varieties. Vinegar, or acetic acid, has not, at present, any known representative, among other organic principles; though it is not improbable that several substances exist of conformable proportions. The composition of vinegar, or acetic acid, is intermediate to the composition of sugar, and of Lignin; while among crystallizable organic substances, there is no known compound analogous to Lignin. It may, at the same time, be remarked, that both starch and wood can, by different artificial processes, be converted either into sugar, or into vinegar. We can also convert wood into a sort of starch, as we may convert sugar into vinegar; but we are unable to reverse the process, and convert vinegar into sugar, or starch into wood; though these, and innumerable changes of a similar kind, are easily effected by organic agency.

We proceed now to consider briefly the question we have already stated,

2. *How does it happen that substances, so nearly allied in their composition, exhibit sensible properties so entirely different?*—This question, in all its bearings, is probably beyond our powers of investigation: at least the extent of the requi-