

has been a grievous disappointment. I find the lectures to be a concentrated digest of the technical application of chemical—and other—principles, such as one finds and expects to find in treatises on such subjects. No one who possesses a copy of Wagner's Chemical Technology, or other work of a similar kind, need refer to the text of Professor Lassar-Cohn's lectures. Contrariwise, however, it must not be supposed that these lectures take the place of an extended treatise; for they are necessarily a mere skimming of the surface of so vast a subject. Much better trust to a volume of Cooley's Receipts or Spon's very valuable Encyclopædic work.

Let it not, however, be imagined that I hold the learned professor in the very least to blame. He has performed, and very well performed, the task he set himself. Every reader of this work will learn, in a general way, the *modus operandi* of the manufacture of soap, sugar, leather, starch, shoeblackening and ten thousand other things—and that is something, is it not? Whether the language, simple as the author has tried to make it, will convey any clear meaning to him, is often doubtful; as, for example, where he is told that cellulose and starch resemble each other chemically, in each having a molecule of 21 atoms, 6 of carbon, 10 of hydrogen, and 5 of oxygen, and that by the addition of two more atoms of hydrogen and one of oxygen—the equivalent of one molecule of water—the Starch molecule is changed into a molecule of glucose. He is much more likely to remember the bare fact that by boiling starch with an acid it is turned into glucose; a fact, the knowledge of which to him is of no use for manufacturing purposes, unless he adds to it a hundred others, regarding details of manufacture, which he can only learn by a long apprenticeship to the business, or by years of experiment at his own cost; a fact, moreover, which I hold, is of no more value to him as a thinking human being, than that ethyl alcohol boils at 174° F. under normal conditions of temperature and pressure.