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dizer in such cases, yet, in the presence of nascent hydrogen, it does possess such power; and this latter is always the case in putrefactive processes. There is an opinion, as yet very widely diffused, that these lower organisms comport themselves throughout otherwise than the higher plants and animals. Differences not a few are to be observed, but, just as these lower organisms contain the same substances in their protoplasm as the highest (globulin substance, lecithin, cholesterin, nuclein, and potassium) so do they in their chemical processes show a remarkable agreement in the fundamental types. If we suppose (and there is no fact opposing it) that also in the highest organisms indifferent oxygen in the same manner as in the lowest succeeds in oxidizing, so might the general protoplasmic phenomena in plants and animals be thus formulated :

Distinction must be made between (1) the protoplasm incapable of stimulation, as it continues to be in the absence of oxygen, acting with a ferment-like decomposing power on albuminous matters and many other substances, and (2) the protoplasm capable of stimulation, of less density than the first, of greater capacity for attracting water and not inciting fermentation. In the presence of water the second is changed into the first, through addition of the elements of water in chemical combination, in consequence of the weaker or stronger shocks of the so-called stimulation, through different modes of motion-electrical, thermal, chemical. or mechanical mo-The first protoplasm is again changed into the second tion. BY THE PRESENCE OF OXYGEN, since, by the decomposing action of the first protoplasm, oxygen is rendered active, and through the active oxygen the second anhydrated protoplasm arises. If, under such circumstances, substances present themselves which can be easily anhydrated, they pass over into The anhydride formation happens, accordingly, anhydrides. through the reformation of anhydride protoplasm in conse-