

is no reason now why this reproach should continue ; and to overcome the difficulties in the way of the ordinary student, the author has in the first three chapters given a short outline of the morphology and biology of bacteria ; their forms, reproduction, origin, vital manifestations, etc. The nutrient media for bacteria in the oral cavity, such as the normal saliva, the buccal mucus, dead epithelium, dental tissue softened by acids, exposed pulps, exudations of the gums, etc., are discussed ; while the methods of bacteriological investigations are clearly explained. The biological studies on the bacteria of the mouth are so well illustrated, that only the microscope under the eye of an expert could make this part of the work clearer.

Chapter V., "Mouth Bacteria as Exciters of Fermentation," demonstrates the claims of the author, that "all processes of fermentation and putrefaction depend upon the presence of microscopical small living organisms," and that the chief source of nourishment for micro-organisms in the mouth is furnished by the carbohydrates and the albuminous substances in the depressions, in fissures, or in spaces between the teeth, and upon their free surfaces. The author proves that the origin of caries depends upon the action of bacteria upon carbohydrates.

Those of our readers who possess Mr. Sewill's work on "Caries"—and which the author curiously seems to have overlooked in his list of authorities consulted—will appreciate the further emphatic repudiation of the "inflammation theory of decay," revived by three New York contributors. Dr. Miller is quite as trenchant in his remarks as was Mr. Sewill. "It is not quite clear to me how the cases stated by Heitzmann and Bædecker justify the conclusions which they draw from them, . . . to jump at once to inflammation of the dentine is making rather free with logic, to say the least. I cannot help thinking that it is here also perfectly gratuitous to speak of inflammation of dentine. It is not proved by the cases referred to. The second argument of Heitzmann and Bædecker is based upon the utterly mistaken idea that the ivory of elephant's tusks has the property of healing wounds and of encapsuling musket balls without the intervention of the pulp of pericementum." The author shows that Cuvier, Owen, Goodsins, Pluvia, Torres, and all the most recent writers on this subject, dis-