

sections on cognition do not seem to be very happily arranged; but a double index—an index of names and an index of subjects—renders it easy to make use of the volume as a dictionary. It would have been well, however, if a synoptical table of contents had also been added.

Turning now to one or two points of more special interest to the man of science, we think that the promise in the preface that “a fair representation has been secured of the teaching of the physiological and evolutionary psychologists of our own time,” is by no means fully redeemed. Barely a page and a half is devoted to “The Brain and Nervous System.” The page on “Sensibility and Muscularity” is not very satisfactory; while the information conveyed in the three pages or so devoted to “The Five Senses” is sufficiently meagre. Such observations as Goldscheider’s on “pressure-spots” and “temperature-spots” are not alluded to. We have come across no mention of Lotze’s theory of local signs. But it would be easier to enumerate the few elementary points that are mentioned than the many important generalizations that are ignored.

Looking up *evolution* under “Modern Philosophical Schools,” we find Mr. Herbert Spencer’s well-worn definition preceded by that given by Mr. Sully in his article in the “Encyclopædia Britannica,” an extract happily chosen. Two or three paragraphs on mental evolution from “The Principles of Psychology” are then cited. Mr. Sully’s criticism of the Spencerian position is succeeded by Mr. Stirling’s sweeping and not very acute criticism of the evolution theory in general. A paragraph from Mr. Fiske, on evolutionary religion, concludes the two pages and a quarter devoted to this subject. There are indeed other incidental quotations, but we cannot say that the doctrine of evolution is adequately represented.

Nothing, however, is easier than to find fault with the execution of a work of this kind. We trust the labours of the editor and of the “collator of experience” have not been expended in vain. There are in this “Dictionary” a great number of well-selected passages from philosophers of all shades of opinion; and there must be many men with but little leisure for philosophic study who will be glad to make or to renew acquaintance with the thoughts and the speculations here presented.

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OUR BOOK SHELF.

Hay Fever and Paroxysmal Sneezing. By Morell Mackenzie, M.D. Fourth Edition. Pp. 96. (London: J. and A. Churchill, 1887.)

PERHAPS none of the minor ills to which humanity is prone has given rise to so much discussion as the subject under review. We have the views of those who regard it as a complaint due to “pollen”; of those, again, who look upon it as a neurosis, in which the much maligned and little understood “sympathetic system” is considered to play the chief part; and of others who attribute this and kindred disorders to the hurtful consequences of the presence of swellings, exostoses, bony ridges, &c., in the nasal cavities. The latter school relies on a mode of treatment which in its endeavours to clear the nose of all so-called obstructions, by the free use of the saw, the drill, the gouge, the dental engine and electric motor, &c., reminds one more of the efforts of a mechanic, anxious

to bring the nasal cavities into comparison with a polished eburnated cylinder, than of the intelligent practitioner. This kind of thing is being carried to excess, and an earnest protest must be made against the officious and meddling surgery of the nasal passages which is advocated amongst a certain class of modern specialists.

It is an old idea that hay-fever is produced in persons having a certain nervous erethism, or predisposition, by the contact of the pollen of certain flowering grasses with some portion of the upper respiratory tract, or the conjunctiva. Dr. Mackenzie is an advocate of this view, and he regards the action of this pollen as more dependent upon its “vital, than chemical or physical characteristics.” Those grains with the longest pollen-tubes (Liliacæ) are less irritating than the pollen of Gramineæ, the pollen-tubes of which are quite rudimentary. Pollen rubbed into the noses of hay-fever patients is exceedingly irritating, and is more active than alum or tannin. Dr. Mackenzie thinks that the absence of vibrissæ, or want of mobility of the *alæ nasi*, or dryness of the mucous membrane, leads to the entry of pollen into the nasal cavities. Many interesting facts are referred to in this book which substantiate the author’s views; and it is difficult to come to any other conclusion, in the face of such an able exposition, than that, whatever may be the condition of the sympathetic or central nervous system, which in a word constitutes the necessary “predisposition,” the introduction of pollen into the eyes, nose, or throat, is necessary for the production of “hay-fever.” Some interesting experiments are related by Dr. Mackenzie on dredging the atmosphere during the hay-fever season, with the object of counting the pollen-grains floating in the air. While these were enormously increased during the month of June when hay-making was general, and diminished during July in the country, even the air of the streets of London was only on one or two days during this season found to be free from pollen-granules. Thus persons, even in the heart of a large town, are not free from this external irritant.

The section on paroxysmal sneezing is very good. The author regards the affection as one of the respiratory centre, the afferent impulse of which is conveyed by the trigeminal nerve-fibres. Dr. Mackenzie rightly condemns much of the unscientific jargon written about the power of isolated ganglia, such as Meckel’s ganglion, to be directly concerned in these conditions, and justly refers the nervous mechanism to the cerebro-spinal centres, quoting at length Gaskell’s recent researches on the sympathetic nervous system, on which, indeed, he founds his views. The author’s ideas are set forth with great ability and moderation, and this book forms a valuable contribution to the discussion of this much-vexed subject. The treatment of these complaints is fully dealt with in the book.

The Owens College Course of Practical Organic Chemistry.

By Julius B. Cohen, Ph.D., F.C.S. (London: Macmillan and Co., 1887.)

WHATEVER may be the failings of this little book, there is no doubt it is a step in the right direction—that of making what is called organic chemistry really a practical study, as is the case with inorganic. The introducers of the author, in a short preface, seem to imply that the practical study of organic chemistry should of necessity be connected with, and indeed lead up to, research. Now, however desirable it may be that a considerable number of people should do organic research, there are a great many cases where the student of chemistry will gain as much as will be useful to him by simply making some careful preparations, just as is done with ordinary quantitative analysis, with no intention of making analysis a profession.

It has no doubt been a standing disgrace in this country that, up to within the last few years, organic chemistry