for example, when in a noisy ward a patient hears herself being called a witch, it is difficult to decide whether she is experiencing an hallucination or an illusion. When, however, the morbid perception occurs in absolute silence we may feel reasonably certain that the patient experiences an hallucination. It was shown that in those cases in which the patient is suspected of endeavoring to conceal the fact that he experiences hallucinations, considerable work may be necessary before their presence or absence can be definitely determined. Careful observation of the patient when he is unaware that he is being watched is, of course, necessary in many cases. Turning the head in a certain direction to listen, gazing at a certain portion of the wall and speaking to it, stuffing the ears with cloth or paper —these and many other "symptoms" lead us to suspect the existence of hallucinations. Evidence of strong emotion, expressions of hate, fear, etc., though not of themselves evidence of hallucinations, warrant further search. The entire test consisted of the following: (1) An examination of the patient's "history." (2) Conversation with the physician and attendants in charge. (3) Various questions and tests varied to suit the case. The question concerning the extent to which we should try to elicit hallucinations in an experiment of this nature was taken up in detail.

Tables were then presented showing the results of the tests and conclusions drawn. Of the 173 cases of dementia præcox 100, i. e., 58 per cent., had fallacious perceptions; of these, 87 were hallucinations; 8, illusions, and 5 hallucinations and illusions. Of the 188 cases of manic depressive insanity 64, i. e., 34 per cent., had fallacious perceptions; of these, only 9 were hallucinations, whereas 51 were illusions. Space does not permit a tabulation of the 18 groups into which the speaker assembled his cases. Suffice it to say that hallucinations and illusions of hearing come first—comprising as they do, over one half of all cases. Then come hearing combined with sight, and then those of sight alone. The other senses, either alone or in combination, were but sparsely represented.

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REVIEWS AND ABSTRACTS OF LITERATURE

A Short History of Logic. ROBERT ADAMSON. Edited by W. R. SORLEY. Edinburgh and London: William Blackwood and Sons. 1911. Pp. vii + 266.

The philosophical world is greatly indebted to the editor and publishers of this little book for preserving to us in a convenient form and in its entirety the article written by Professor Adamson for the ninth edition of the "Encyclopedia Britannica." The information which the reader of this review is most likely to desire regarding the new edition is given us in the editor's preface:

"The manuscript of the article has been fortunately preserved—alone among the manuscripts of the author's published writings. It is much fuller than the printed article, a number of passages—some fifty in all—having been struck out by the editor with a view to economy of space. These passages affect both text and notes; they vary in length from a few words to whole sections; they vary also in importance; but the author's own opinion was that the value of his work had suffered by their omission; and with this opinion I agree. In the present book these passages have been restored to their place, so that the article as it left the author's hands is now, for the first time, placed before the reader.

"It should be borne in mind that the article on Logic was written and published in 1882. The supplementary articles, by which it is followed in this volume, are all contributions to the history of logic; but the first of these—that on the Category, also reprinted from the 'Encyclopedia Britannica,'—dates from six years earlier; and only the last carries the story on towards a more recent development of logical theory. Readers of the author's works do not need to be reminded that his own point of view underwent modification, and that there are some things here which he might have expressed differently had he revised the work himself."

The part of the book which seems to-day especially valuable is the long (58 pages) and admirable chapter on the Aristotelian logic, a chapter which could well be used as an introduction to the Aristotelian philosophy. Besides the article on the Category the other articles included in this book and referred to above by the editor were published originally in *Mind*. Their titles are: "Lotze's Logic," "Lotze's Metaphysics," and "Mr. Bradley's Logic."

Among Professor Adamson's conclusions regarding logic the following seem to be the most general and should be recalled to mind. "Logical theory must of necessity be formal, i. e., abstract and general." It can not consider the specific knowledge of the sciences and include scientific method or the various processes by which the sciences have gained their results. In short, it can not include more than the most general scientific methodology. Again, logic can be identified with the theory of knowledge. "Logical laws, forms, and problems are hardly capable of statement; certainly incapable of satisfactory treatment, except in the most intimate connection with the principles of a theory of knowledge." Hence, of course, the conclusion (a lamentable one for any real progress in formal logic): "It has been imagined that a symbolic logic might be developed which should be independent in all its fundamental axioms of any metaphysical or psychological assumptions; but this is an illusion. No logical method can be developed save from a most definite conception of the essential nature and modus operandi of thinking." To which the reply can in the present day be given: "But it has been done, such a symbolic logic actually obtains." WALTER T. MARVIN.

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