taneous recognition of so many points in space without any succession in time. The sense of hearing, however, brings us into closer relations with time than with space. Helmholtz has shown that in sound the number of the vibrations in the air and in the nerve fibres of the ear are identical. These vibrations in musical tones have a numerical relation to one another. No one will deny that numbers may be learned through the ear, that is, through the perception of the repetition of sounds, or in the Intervals in the musical scale. But the power of abstracting numbers from these is an inherent quality of the human intellect, and this capacity can be exerted by those who never heard a sound, by the blind, and even by those who are both blind and deaf, that is numbers might be learned through touch. Some people rest their conceptions of numbers upon visual objects; others upon sounds. Inaudi, the arithmetical prodigy lately exhibited in Paris, made his calculations through heard numbers working in his mind. Other great calculators work their problems through visualized ciphers, aiding their mental operations by counting on their fingers. The arithmetical faculty is not dependent upon any one sense, although it could not be evolved in the absence of sensation.

A Dictionary of Psychological Medicine, giving the Definition, Etymology, and Synonyms of the Terms used in Medical Psychology, with the Symptoms, Treatment, and Pathology of Insanity, and the Law of Lunacy in Great Britain and Ireland. By D. HACK TUKE, M.D. Two vols. J. & A. Churchill, London. 1892.

The production of the "Dictionary of Psychological Medicine" is an event which ought not to be passed by without mention in the "Journal of Mental Science." For in two large volumes of 1,400 pages of this work nearly one hundred and thirty writers, besides the Editor, have contributed from their special sources of information the latest views and researches on all that concerns psychological and neurological medicine and jurisprudence. The indefatigable editor has gathered together a band of workers, not only from our own and other English speaking countries, but from the continent, and from almost every nationality eminent physicians have sent articles on such subjects as they have made their own. Thus Charcot has written on Hysteria and Hypnotism, Professor Ball on the Insanity of Doubt, Ribot on the Disorders of Will, Bouchereau on Erotomania, Collin and Garnier on Homicidal Monomania, Ritti on Circular Insanity, Legrain on Alcoholism and Dipsomania, Motet on "Les Cérébraux." From Germany there are valuable contributions. Arndt writes on Electricity in Insanity and on Neurasthenia, Erlenmeyer on Morphiomania, Cocomania, etc., and Nostalgia, Kirn on Influenza and Insanity, Mendel on Diagnosis, Ludwig Meyer on Chorea and Insanity, Neisser on Katatonia and Verbigeration, Tuczek on Ergotism and Pellagra. From Austria Benedikt sends contributions on Craniometry and on the Brains of Criminals, and Schwartzer on Transitory Mania. There are also valuable accounts of the state of the insane in various Mierzejewski describes the Provision for the countries. Insane in Russia, Cowan that of Holland, Pontoppidan that in Scandinavia, Morel in Belgium, Tonnini in Italy, and the last physician and Tamburini send articles on the Insanity of Ancient Greece and Modern India. From America also Dr. Tuke has gathered the experiences of several noted Dr. Chapin, the well-known head observers. of the Pennsylvania Hospital for the Insane, contributes an account of the insane in the United States. Dr. Cowles, of the Maclean Asylum at Boston, writes, as we should expect, on Nursing. From the pen of the late Pliny Earle we find a paper on the Curability of Insanity. Dr. Donaldson, formerly of the Johns Hopkins University, sends a valuable article on Psycho-Physical Methods, and Professor Jastrow one on the Reaction Time in the Sane. Dr. Lombard writes on the Temperature of the Head, and Mr. Sanborn on the Boarding-out of the American Insane in Private Families.

When we turn from foreign writers to those of our own country we find that a very large majority of our psychologists have contributed to the Dictionary, and in addition many who are not alienist physicians have brought their stores of knowledge to the elucidation of neurological or physiological problems. Thus, Dr. Clifford Allbutt writes on Insanity in Children, Dr. Wilks on Delirium, Dr. Bristowe on Stammering and other Affections of Speech, Dr. Barnes on Climacteric Insanity and Ovariotomy in Relation to Epilepsy and Insanity, Sir Andrew Clark on the Convulsive Cough of Puberty, Dr. Playfair on Functional Neuroses, Dr. James Anderson on Epilepsies and Insanities, Professor Horsley on Cretinism and on Trephining, Dr. Buzzard on Peripheral Neuritis, Drs. Ringer and Sainsbury on Sedatives, Mr. Dent on Traumatism and Insanity, Dr. Thudichum on the Chemistry and Dr. Beevor on the Physiology of the Brain. The Editor contributes a number of valuable papers, and his colleague, the co-editor of this Journal, sends also a long list. The other contributions of our own psychologists it is difficult to specify when so many are excellent, but mention may be made of Dr. Orange's paper on the Criminal Responsibility of the Insane, Dr. Clouston's on Developmental Insanities, Dr. Bevan Lewis's on Psycho-Physical Methods and Reaction Time in the Insane, Dr. Mickle's on General Paralysis, and Dr. Duckworth Williams's on Baths.

Alienist physicians are brought much into contact with law, and the Editor has enlisted the services of a legal gentleman, who has fully and yet concisely expounded various points which came under this head. The law of trusts in relation to lunacy, testamentary capacity, marriage in relation to insanity, the law of partnership in the same relation, these and many other questions are treated by Mr. A. Wood Renton and the legal authorities cited. These will be found extremely useful, and will obviate the necessity of having recourse to legal text-books. There are also papers on the New Lunacy Law, by Dr. Outterson Wood, and on certificates by Dr. Hayes Newington.

Besides the more lengthy articles, the Dictionary abounds in definitions and explanations of words, including those which are obsolete or little known. And besides these there are four features which deserve to be mentioned. The first is an Historical Sketch of the Insane, by the Editor, which goes back to the earliest ages and traces the history of the disorder from the Egyptians and Israelites to the Greeks and Romans, and thence through the middle ages to our own time. The whole sketch is most interesting.

The second feature is a paper on the Philosophy of Mind, by Mr. W. C. Coupland, which places before the reader the latest theories and views on the subject, and gives a clear *resumé* of the writings of the two chief living exponents of psychological science in this country, Professor Bain and Mr. Herbert Spencer. The third feature is the Bibliography of Dr. Urquhart, compiled with great care and labour, which gives in chronological order, beginning with the year 1584, every book, treatise, or paper which has been written on insanity in the English language not contained in the psychological Journals. As we approach our own times the value of this becomes very apparent. Besides this bibliography it should be said that to many of the papers is appended a bibliography of the special subject with references to home and continental literature bearing thereon.

The last feature, but not the least, is the very full and complete index, which is invaluable to the student, and contains not the words already given in the Dictionary *sub voc.*, but references to every kind of subject touched on in the various papers, and the whole of the names of contributors and others, with the titles of their articles and references to subjects treated by them elsewhere. So full is it, comprised in 65 double column pages of very small type, that it is of the greatest possible assistance to the reader, and it is much to be desired that all dictionaries should be provided with so useful an adjunct. Great credit is due to Dr. Pietersen for his labour in the construction of it.

Dr. Tuke may well be proud of his work. It is doubtful if there is such another dictionary of any special branch of medicine. All must heartily wish it success.

G. FIELDING BLANDFORD.

Festschrift zur Feier des Fünfzigjährigen Jubilaüms der Anstalt Illenau, herausgegeben von den jetzigen und früheren Illenauer Ärzten: Schüle, v. Krafft-Ebing, Kirn, Neumann, Fr. Fischer, Eickholt, Wilser, Landerer, Dietz. Mit einem Lichtdruckbilde von Illenau und zwei lithographierten Tafeln. Heidelberg. 1892.

These essays form a worthy commemorative contribution to the interesting occasion in honour of which they were prepared. Dr. Schüle's article is a Jubilee discourse, and consists of a glance at present and future questions in psychiatry.

We regret that we are unable to give even an abridgment of the historical events connected with this admirable institution, superintended as it has been by able men, and