

accepted that there is a most violent rush of air from under rain-drops in a squall. Computation has shown that this cause for the observed wind is purely imaginary, and the air-motion caused by the heaviest possible rainfall is entirely inappreciable. In seeking for an explanation of changes of pressure-distribution, our author, at p. 389, suggests as a cause, "the general circulation of the atmosphere from the hot equator to the cold poles." This statement is hardly borne out by the observations of air-currents.

On the whole, the book is a most admirable and practical exposition of weather-changes, and will repay careful perusal by all interested in the weather and the progress of meteorology.

A Study of the Histological Characters of the Periosteum and Peridental Membrane. By G. V. BLACK. Chicago, W. T. Keener. 8°.

THE contents of this volume appeared in serial form in the *Dental Review*. They include a thorough study of the peridental membrane and its tissue elements, and also of the periosteum, which is so closely related to it. Very little has been written on the subject of the peridental membrane, and until recently there has been very little interest in the subject among dental specialists. Within a short time, however, attention has been directed toward this membrane and its structure, and a great and wide-spread interest has been awakened. There are several reasons for this, among which the following may be mentioned: there is a greater and a more general interest felt now than ever before in the correction of irregularities of the teeth, in which changes in this membrane, and the relation of the parts which it unites, are brought about; and then, too, there is a greater interest manifested by the masses of the dental profession in the retention of pulpless teeth, and roots which have lost their crowns, and which are dependent upon the continued health of the peridental membrane under modified conditions. Another reason which the author advances for the renewed interest in the subject is the revival, under varied forms, of the ancient methods of replanting and transplanting teeth, the success of which is supposed to be dependent, in whole or in part, upon the reconstruction of the peridental membrane, in its re-attachment to the teeth. Dr. Black has made a thorough, and, as it seems to us, an exhaustive study of the subject from an histological standpoint. The illustrations, of which there are sixty-seven, are admirably drawn, and reproduced in a most satisfactory manner. For dentists and those who desire the latest researches into the histology of the periosteum and peridental membrane, this book is invaluable.

The Mind of the Child. Part I. The Senses and the Will. By W. PREYER. Tr. by H. W. Brown. (International Educational Series, Vol. VII.). New York, Appleton. 12°. \$1.50.

DR. HARRIS is performing a useful service in the editing of the series of which this work is a volume, and nowhere more so than in the publication of this issue. The work itself is well known, and it will be sufficient to say that it is the very careful and detailed record of the development of Professor Preyer's own child, corroborated by observations from the literature of the topic. The growth of the powers of the senses are studied, and the results controlled by experimental methods. The gradual control of the muscles as the organ of the will is no less carefully pictured, and the work has long been recognized as the most complete contribution to the growing science of 'infant psychology.' The American edition is presented under the most favorable auspices. It is prefaced by an introduction from the pen of Professor Stanley Hall, in which he points out the great educational significance of the work, and demonstrates the practicability of this kind of work in the normal school by a reference to the system in vogue in the Worcester school, of which Mr. E. H. Russel is the principal. Here part of the course in psychology consists in gathering observations of child-life under various rubrics, and studying from this material the psychology of the child-mind. Not only is a valuable material thus gained, but the students are taught to see the meaning of what they are apt to let pass unnoticed, and to enter more intelligently and sympathetically into the thought-habits of the young pupil. The system has been an entire success, many of the normal-school graduates taking such original observations of children as the bases of their graduat-

ing theses. The work is creditably translated from the second German edition, and is a very essential contribution to the further spread of useful educational ideas. This is only the first part of Professor Preyer's work. The translation of the second part will soon be ready, and will be anxiously waited for.

Der Tierische Magnetismus (Hypnotismus) und seine Genese. Von JOH. G. SALLIS. Leipzig, 1887. 8°.

De la Suggestion et de ses Applications à la Pédagogie. Par Dr. EDGAR BÉRILLON. Paris, 1888. 8°.

THESE pamphlets are but samples illustrative of the wide-spread interest in the study of hypnotism, that forms so notable a feature of the scientific activity of France, and, to a far less extent, of other European countries. The first of these essays is devoted largely to the historical aspects of the subject; and, in addition to the usual account of Mesmer and his successors, the author brings into connection with hypnotism many of the pseudo-sciences of former centuries, and thus surrounds the history of mesmerism with a suggestive philosophical interpretation. A second leading point in the essay is in the form of a warning as to the dangers of hypnotism, urging that it is a purely technical acquisition, to be used only by experts, and that, above all, is it unsuited for public exhibition by money-making adventurers. The practices of the latter should everywhere (as they have been in many European countries) be forbidden by law. This feeling that Dr. Sallis so forcibly expresses is gaining wider and wider sympathy; and it seems necessary, for the maintenance of the good name that this young science has with difficulty acquired, that it should be placed entirely in the hands of reliable scientists.

Dr. Bérillon's essay contains what at first sight is an alarming proposition: it is nothing less than 'hypnotic moralization.' Unruly, vicious, or lazy children are to be put into the hypnotic condition, and then to have impressed upon them the reformation of their faults. In support of the good that can be thus accomplished, cases are cited in which bad habits of a very perverse type were cured, children backward and sluggish were aroused to a more normal activity, and the benefits thus brought about were shown to be quite permanent. Such a proposition naturally and properly arouses an objection, not only because such an interference with the normal development of the child seems unwarranted, but because we do not as yet know enough of the after-effects of hypnotization to make such an application of what must be a semi-morbid state justifiable. On the other hand, it must be remembered that Dr. Bérillon recommends this treatment only for cases in which ordinary educational means fail, and that it is only to be practised with the consent of the parents and by a skilled physician. He reminds us, too, that many of our reformatory methods interfere with the child's moral freedom, and are equally artificial. We have simply become accustomed to them. He claims, that, if carefully applied, the danger of harmful results is practically *nil*, and has succeeded in gaining the indorsement of several prominent physicians and educators to his plan. It is of course wrong to measure the utility of a project by its liability to abuse; but the abuse is an important factor, and it is at least an open question whether the varied abuses to which the practice here proposed is evidently open does not seriously interfere with its general adoption. The author has at least succeeded in convincing many capable of forming an opinion, that his project is worth a serious consideration.

NOTES AND NEWS.

THE sixteenth annual meeting of the American Public Health Association will be held at Milwaukee, Wis., Nov. 20-23, 1888. The executive committee have selected the following topics for consideration at the meeting: the pollution of water-supplies; the disposal of refuse matter of cities; animal diseases dangerous to man; maritime quarantine, and regulations for the control of contagious and infectious diseases, and their mutual relations. The topics given indicate the subjects which it is desired to consider, yet they are not to be regarded as the exclusive topics of the meeting. Mr. Henry Lomb of Rochester, N.Y., now well known as the originator of the 'Lomb Prize Essays,' offers, through the association, two prizes for the current year, on the following subject: 'Practical Sanitary and