

than epithelial cells in various stages of transformation." Lastly, Messrs. Shattock and Ballance, of London, taking psorospermial material from the livers of rabbits, have inoculated therewith other rabbits, monkeys, dogs, and rats with negative results, the injections into the jugular vein, "vaccination" experiments, etc., producing merely hyperplastic products at the site of injury. These authors claim that Darier's views must be tested according to Koch's postulates, experimental infection of a human being or lower animal being produced by fluids obtained from culture of the products of a carcinomatous lesion, or from the "psorosperme folliculaire végétante" of the French writers.

Dr. Piffard's style is clear and attractive; at times the philosophical amplitude of even his shortest sentences is highly suggestive. He has made here a valuable contribution to the clinical resources of the student of dermatology, and deserves great credit for the manner in which he has produced both text and portraits. There are a few errors in the book, the most conspicuous of which occurs in describing "chromophytosis" as due to the "microsporon Audouini" (p. 113), as this fungus was first named by Eichstedt, of Greifswald, in 1846, as the *microsporon furfur*. The *microsporon Audouini* was named by Gruby after Audouin, and was the fungus supposed to be effective in the production of alopecia areata; but it has since shared the fate of the impostor who claimed to have first discovered the parasite productive of scabies, and whose name survives only among the French, by whom that disease is still called "Gale."

J. N. H.

DIABETES: ITS CAUSES, SYMPTOMS AND TREATMENT. By CHARLES W. PURDY, M.D. With Clinical Illustrations. Pp. viii., 184. Philadelphia and London: F. A. Davis, 1890.

DR. PURDY'S little volume is a meritorious effort to set forth the present status of our knowledge on the subject of diabetes, "in such practical and concise form as shall best meet the daily requirements of practice," and is based upon "a careful study and recorded observation of the disease, extending over a period of twenty-one years." He has "endeavored to bring out prominently the leading features of diabetes as it occurs in the United States, together with the natural resources of the country best suited to the disease, as the waters, foods, and climate, since the very extensive range of these entitles them to rank in point of efficiency for the relief of the diabetic patient as at least equal to those in any other land or clime."

The first section is devoted to Historical, Geographical, and Climatological Considerations of Diabetes Mellitus from the data afforded by mortality statistics of the census of 1880, not including States and Territories furnishing a total death-list of less than 5000. The author has compiled a number of tables illustrative of the comparative mortality from diabetes in different portions of the United States and the relations of the mortality to temperature, rainfall, elevation, population and urban and rural residence. By these tables he apparently demonstrates that, in the United States at least, cold and altitude are the chief climatic features which determine high mortality from diabetes. Thus, for instance, in the State of Vermont we have 6.36 per thousand deaths

attributed to this disease; according to the author, the highest ratio of any place in the world. Vermont is noted for its long continued and severe winters. Maine, the climate of which is very nearly the same as Vermont, gives the next highest mortality in diabetes in the United States, 4.41 per thousand. The difference between Maine and Vermont is attributed to the greater altitude of the latter. A striking contrast is afforded by Alabama, where the mean annual temperature is about 75° F., and the elevation above the sea in considerable. The mortality from diabetes sinks to the lowest ratio in the country, 0.55 per 1000 deaths.

With Dickinson, and against Sir William Roberts, Purdy finds a mortality from diabetes among the rural population greater than among the dwellers in cities. In the North Atlantic coast region the mortality among the rural population is 3.55 per 1000 deaths, and among urban dwellers 1.76. In the Gulf coast region, on the contrary, the rural mortality is 0.49, the urban 1.56. The author advances the following explanation of these facts:

"Cold greatly increases the mortality from diabetes. In cold climates those who are best sheltered from climate suffer least from disease. This fact is brought out in strong contrast in the United States, because there the houses are constructed with a view to greater warmth and comfort than in Europe. In the warm climates of the South the evil effects of cold no longer appear, and the atmospheric conditions affecting the disease are chiefly those of purity. The country people are able to live in the open air the year round without exposure to cold or chill, and oxidation obtains its greatest activity. In the cities more or less confinement and impurity of atmosphere is inevitable, which tends to impede oxidation and give greater impetus to the disease."

The mortality reports of the United States census for 1880 record no death from diabetes among either the Indian or the Chinese population of the country. The Indians are spare eaters and subsist almost exclusively on nitrogenous foods, leading at the same time an active out-of-door life. The exemption from the disease enjoyed by the Chinese bears out the record from their native land, and appears to be due to a race peculiarity. One of the most important features, and the most deplorable one of the careful statistical investigations of the author, is that the relative mortality from diabetes in this country has been very decidedly on the increase during the last forty years. In 1850 it was 0.72 per 1000 deaths, and in 1880 it was 1.91 per 1000 deaths. The most marked increase was between 1860 and 1870—nearly 100 per cent.; from 0.98 to 1.70. The author rationally attributes this to the decided change in the habits of the nation consequent upon the Civil War. Previous to 1860 we were "a frugal and economical people, enjoying but moderate luxuries in living." The inflation of the currency; speculation; political and social demoralization, with its concomitants of luxurious living and extravagance; excessive labor and widespread dissipation, have inevitably increased the morbidity and the mortality of neuroses in general and diabetes among the number.

The sections devoted to Physiological and Pathological Considerations, to Etiology, Morbid Anatomy and Symptomatology, are clear, sufficiently full for the purpose of the work, and on the whole, reliable.

Treatment is considered under three divisions: Dietetic, Medicinal

and Hygienic. After varied and laborious experiments with substitutes for bread the author found the following method most satisfactory. The patient is permitted to use his own regular table bread, but the allowance is limited to half the usual amount. If sugar still appears in the urine the bread is further reduced by one-half, and if the sugar still persists bread is prohibited absolutely. According to the author's experience, if the patient cannot assimilate two to three ounces of bread daily without excreting sugar in the urine he cannot assimilate any substitute therefor, and under such circumstances the sooner all bread is stricken from the diet list the better. The author has never seen good results from an exclusive milk diet, and seems rather inclined to limit the amount of milk allowed to the patient. He gives a useful list of wines which may be permitted and those which should be prohibited, on the basis of analysis for sugar. All mineral waters are permissible as beverages and some of the alkaline waters he considers as curative. Among medicinal agents he discusses opium, antipyrine, the bromides, ergot, arsenic, iodoform, jambul, oxygen, and the alkalies. He finds limited use for opium, codeine being preferable in cases showing a continued high percentage of sugar in the urine despite the institution of strict dietetic measures; but he believes that sooner or later the drug has to be abandoned on account of its damaging effects on nutrition. Antipyrine is unsuitable for lengthy periods of administration in doses of forty-five grains a day, and in smaller doses is not claimed to modify the disease. Moreover, it is likely to cause albuminuria, and therefore cannot be considered a safe agent for use in these cases. Ergot has a useful influence over mild cases in which the patient retains good digestive powers. He has seen little benefit from either Giliford's or Clemens' solution of arsenic bromide, even when combined with Martineau's lithium treatment. The chief benefits he has obtained from arsenical preparations in diabetes have been from arsenite of iron in cases complicated with anæmia or malaria. Iodoform, if used carefully in doses of from one to three grains repeated three times a day or in sufficient doses at bedtime, continued for two weeks and resumed after an interruption of two weeks, seems to cause a diminution of thirst, of polyuria and of the amount of sugar excreted. The use of oxygen by inhalation is highly lauded, from three to five gallons of a freshly made gas being administered twice daily. Hydrogen dioxide water (one to two drachms, largely diluted with water) may be used, but is less efficacious. The alkalies are believed to increase the oxygen-holding powers of the blood. Stress is laid upon the avoidance of constipation, of mental emotion and of fatigue, as these are likely to lead to the production of coma. In addition to avoidance of fatigue, the points to be attended to in the hygienic treatment are proper aëration, proper clothing, and proper temperature. Besides hygienic clothing, in order to preserve the warmth of the body, warm baths followed by thorough rubbing of the skin are recommended. A moderate degree of exercise in the open air is necessary, and habits of regularity must be observed in eating, drinking and sleeping. A number of illustrative cases are recounted. A section is devoted to diabetes insipidus. A short but well-selected bibliography is appended.

S. S. C.

TEXT-BOOK OF OPHTHALMOSCOPY. By EDWARD G. LORING, M.D. Edited by FRANCIS B. LORING, M.D. Part II, Diseases of the Retina, Optic Nerve, and Choroid: Their Varieties and Complications. New York: D. Appleton & Co., 1891.

THE reviewer's task is an agreeable one when he can praise without qualification; when the material presented to his critical analysis is of such real value as to justify him in commending the work to fellow-students; and when he feels that the knowledge gained from it better equips him for his daily work.

Dr. Loring's work is original and practical; it is a record of thorough and painstaking care in the observation of abundant clinical material. Not satisfied with the description of the coarse lesions so often exclusively given in text-books, his investigations have included subjects slighted or altogether neglected by other writers, subjects which to careful practitioners are matters of the highest importance. His studies, for example, of the minute changes in the light-reflex, color, pulsation, etc., of the retinal vessels taught him, and through his book teaches us, the grave systemic disturbances of which they are the forerunners. By diligent care in the use of the mirror, changes of diagnostic and prognostic significance are detected which escape the superficial and routine observer. Thus the field of ophthalmology is broadened by Dr. Loring's work. He teaches us how to diagnose by the mirror heart and blood irregularities, valvular disease, splenic, kidney, cerebral, and spinal affections in their incipency, and proves the ophthalmoscope to be indispensable to the physician. The ophthalmic surgeon who absorbs the knowledge contained in this book is something more than an "eye doctor"—recognizing, as he must, that the eye is a connected part of the whole organism, he becomes an expert in the observation and interpretation of its signs. The fine distinctions between the healthy and unhealthy appearances of the eye-ground are especially noticed and emphasized, and it is in this particular that the eminently original studies of Dr. Loring are of great value.

The book contains 253 pp., divided into seven chapters. The first considers the vascular disturbances in the retina, such as changes in the length, breadth, and walls of the arteries and veins; vessels of new formation, aneurism, embolus, thrombus, stasis, hemorrhage, and anemia, and of their causative relation to general disease. Chapter II. deals with an intermediate stage between purely vascular changes and those associated with signs of inflammation, designated by Jaeger as "irritation" of the retina. The importance of this chapter is well expressed in its opening paragraph. "This form of congestion, although chiefly distinguished from hyperæmia by the presence of functional disturbances, has yet some physical characteristics and features of its own which it is important to notice, especially in these days when all symptoms of asthenopia are referred to an error of refraction, should any chance to exist, even of an infinitesimal degree." Chapter III. treats generally of the characteristics of retinal inflammation, while Chapter IV. classifies and describes minutely the specific forms of inflammation. Particularly clear and instructive are the sections devoted to a description of albuminuric retinitis, retinitis pigmentosa, and detached retina. A classical account of diseases of the optic nerve, which leaves nothing unsaid, is

given in Chapters V. and VI. Chapter VII. concludes the book with original observations in diseases of the choroid. It will be noticed that the author has not adhered to that generally accepted classification of retinal and choroidal diseases which would seem to have been based largely upon the changes in the pigment coat. He has noticed alterations in the pigment in both retinal and choroidal disease, as they seemed to him dependent upon coexisting inflammation of one or the other membrane, and has described specific changes—hypertrophy and atrophy—of the pigment layer in separate sections.

The illustrations are numerous and well executed. Many are after Dr. Loring's own sketches and others are reproductions from Jaeger and Liebreich. In addition to the black-and-white prints in the body of the book there are at the end six plates, each containing two chromolithographs. The fault common to most attempts to portray diseases of the fundus—exaggeration of the abnormal conditions showing too great a contrast between healthy and unhealthy structures—is found in many of these illustrations.

The editor has done well to limit his duties chiefly to the arrangement and classification of the material of the author, and as he says in the preface, "I found there was so much original matter in it, so much that from its very nature must provoke discussion and argument, that I determined to publish it as it stood, without addition or correction." The wording throughout clearly conveys the author's meaning, and the ideas are purposely clothed in a conversational rather than a polished literary garb. Indeed, in his effort to be concise, the author has in a few instances fallen into the error of colloquial expression. Thus on p. 105 he uses the following language: "Not a single case of the slightest retinitis or neuro-retinitis can I find in all the literature of these cases, *let alone a choked disc.*"

The type is of good size, the paper white and thick, typographical errors are few; in short, the book is in all respects admirably printed.

The reviewer earnestly commends the work to students of ophthalmoscopy as the best treatise in the English language on the subject.

H. F. H.

HYPNOTISME ET CROYANCES ANCIENNES. Par le DR. L. R. REGNIER, Lauréat de l'Académie de Médecine, etc. Avec 46 figures et 4 planches. Paris, 1891.

HYPNOTISM AND ANCIENT BELIEFS. By DR. L. R. REGNIER, Laureate of the Academy of Medicine.

THIS book has a distinct and special value. It differs from the common run of works on hypnotism, and has a literary merit which few of them possess. This is partly because it leaves the beaten track. It does not deal altogether with the modern "craze" called hypnotism, but pursues its subject in the distant past. It introduces us to the mysteries of the Rig-Veda of the Hindoos and of the Zend-Avesta of the ancient Persians. It culls little items of interest from a papyrus found under the ruins of Thebes and from the cuneiform inscriptions of the ancient