

This work was continued by his son Dr. John C. Warren, and now constitutes the very valuable collection known as the Warren Museum.

His ideas on the value and use of mercurials were given in an address before the State Medical Society in 1805. Eight years later he published a book embodying these views and containing a sketch of the most prevalent diseases and remarkable epidemics of New England. This seems to have been his only contribution to the literature of the profession. His political and occasional addresses and memoirs would, if collected, form a large volume.

As a lecturer his biographer assigns him very high rank. He was able to inspire his hearers with his own fervent enthusiasm, and could command their close attention during a two-hours lecture.

He was a man of very strong feelings. No one had warmer friends, and no one would do more than he to serve a friend. His severe and continuous labours caused him to appear an old man at sixty. He was repeatedly urged to retire and enjoy that repose which he had so fully earned. But it was not in him to decline the calls of those who had trusted to him for years, and he felt anxious as to the pecuniary well-being of his large family. Probably, too, his active temperament alone would have sufficed to keep him at work. At all events, he persisted in his arduous labours after his health had become seriously impaired. Only ten or twelve days before he died did he cease to pay visits. Dyspnoea, great disturbance of the heart's action, and severe febrile symptoms then appeared. These were partially subdued by bleeding and other treatment, but it was manifest that the whole system was broken down. He died quietly on the 4th of April, 1815, at the age of sixty-two. The officers of Harvard College voted to unite with the State Medical Society in a request for a funeral eulogy to be pronounced by his great contemporary, Dr. James Jackson. Both these bodies, with the senior class of the College, students and graduates of medicine, members of various societies, the clergy of the town, and the Grand Lodge of Masons—of which he was the first Grand Master—joined in the procession which followed him to the grave.

As may be inferred from what has been written, the interest of this life is not confined to the medical reader. It gives an instructive view of a career in which exceptional energy, courage, and devotion met with a full reward in respect and esteem as well as wealth. Peculiarly interesting is it in the near and home-like pictures which it gives us of the history of the period. It shows us how men felt, and wrote, and acted, under the immediate influence of events. It is just such memoirs as this that give life, warmth, and colour to the dry facts of the historian. To all who care to know how an educated gentleman lived, mingled with society and politics, and viewed the occurrences and the ideas of that remarkable and most critical period of American history, we heartily commend this volume.

B. L. R.

ART. XXXV.—*The Leprous Diseases of the Eye*, with six Coloured Plates.  
By Dr. O. B. BULL, and G. A. HANSEN. 8vo. pp. 27. Christinnia, 1873.

LEPROSY is fortunately so rare a disease in the United States that few practitioners have ever seen a case of it, and consequently the ravages caused by it in the eye seldom or never figure in the list of diseases treated at our eye infirmaries. We have been assured, however, that it is by no means uncommon among the French Canadians in New Brunswick, and its frequency in

Norway and Sweden is well known. The natural history and pathology of the disease are, however, exceedingly interesting, and our knowledge of the former is chiefly due to the classical work of Boeck and Danielsen, and of the latter to the investigations of Virchow. The able and concise monograph before us is a valuable contribution to our knowledge of the nature and progress of the disease.

Our authors tell us that no other disease so frequently gives rise to disorders of the eye. In treating of these they describe, first, those affections which are the immediate consequence of the leprosy dyscrasia; secondly, those which result from other leprosy manifestations not primarily attacking the eye or its adnexa. They distinguish two forms of the disease, viz., the tuberous and the smooth; in the latter case the leprosy products are spread over a greater surface in a thin layer, in the former they are massed in a more circumscribed area and form tubers.

The progress of the disease can be most readily studied in the cornea, and it there makes its appearance as a thin superficial obscuration which starts usually from the upper outer side of the cornea, and advances gradually towards its centre. With oblique illumination and a magnifying glass, we may usually detect in it fine vessels, continuations of the conjunctival and subconjunctival vessels. They are often so numerous as to give the whole margin a dirty-red appearance, and terminate in capillary points which are surrounded by dull-gray outlines. These advance further towards the centre of the cornea than the vessels themselves. Careful examination shows numerous small whitish spots throughout the obscuration, which often extend beyond it and are separated from it by clear corneal interspaces. The affection remains stationary often for considerable periods, then advances per saltum. The opacity becomes dense and quite vascular; this subsides after a time, to be followed by a new exacerbation at greater or less intervals, each successive attack leaving the cornea more opaque. The centre, however, usually remains free, although in exceptional cases the entire cornea becomes like ground glass. Tubers may form in the cornea either on its surface or in its tissue. They usually commence at the periphery, with marked circumscribed vascular injection, triangular in form, the base turned towards the cornea. This hyperæmia is followed by a yellowish-red spot, which gradually spreads, often involving the whole cornea, and when it softens and shrinks, the hull shrinks with it. Like most new growths they, after a time, soften in the centre. The cut surface of the periphery of the tubes is brilliantly white, and the softened centre is without lustre and yellowish-brown in colour. This is due to a retrogressive metamorphosis of the elements of the leprosy products, which have been minutely described by Hansen in his contribution to the Symptomatology of Leprosy, *Nord. Med. Archiv*, B. I. No. 13; also same, B. II. No. 16.

The sclerotic assumes a yellowish-dirty colour, caused by the chronic hyperæmia, but otherwise, except by the infiltration of the submucous tissue in the vicinity of superficial corneal tubers, is but rarely affected.

About 30 per cent. of the cases present traces of iritis either in fringes round the pupillary margin or spots in the capsule of the lens. It occurs with equal frequency in the tuberous and smooth forms. In the former it is developed comparatively early in the affection as a direct consequence of the leprosy dyscrasia, and the formations of tubers in the substance of the iris; in the latter it is usually a secondary affection, caused by the corneal ulceration consequent upon paralysis of the orbicular muscle, and is never found till eight or ten years after the outbreak of the disease. The ciliary muscle and processes and the anterior part of the choroid are also not infrequently attacked. The

retioa, in like manner, is affected, but only in the neighborhood of the ora serrata, and its implication in the disease cannot, therefore, be diagnosticated by the ophthalmoscope. The ciliary nerves are often infiltrated, and the pressure of the new-formed cells often causes atrophy of the medullary sheaths, and occasionally of the axis cylinders.

*Leprous Affections of the Adnexa of the Eye.*—The region of the eyebrows is so constantly affected, and at so early a stage of the disease, that "the falling of the eyebrows is a good pathognomonic symptom of leprosy." The eyelids are occasionally the seat of tubercles, where they may, by their ulceration and the subsequent cicatrization, cause ectropion. One of the most serious complications is paralysis of the orbicular muscle, as a consequence of the infiltration of the facial nerve where it bends round the maxilla. It is never complete, and sometimes affects only the nasal or the temporal half of the muscle.

Its progress is slow, and usually several years elapse between the development of the first symptoms and the production of a paralytic ectropion. The corneal inflammation supervening, as in ectropion from other causes, depends on the irritation of that membrane by foreign bodies. The authors have never seen anaesthesia of the cornea, inasmuch as that branch of the fifth pair supplying the cornea is rarely affected. They have also taken the opportunity to study the microscopic changes in inflammation of the cornea, both by pieces cut out of the living cornea and by examination of others soon after death. The tissue was examined after preparation by the usual processes, viz., fresh—in  $\frac{1}{2}$  per cent. solution of salt, and after the action of chloride of gold. The results go to show that the presence of young cells in the inflamed cornea is not due exclusively to the migration of white corpuscles from the bloodvessels, but that the corneal cells contribute actively to their formation.

In the treatment of the leprosy iritis the early and prompt instillation of atropin, to prevent posterior synechia and closure of the pupil, is indicated. In neglected cases it is frequently necessary to perform iridectomy, and thus establish an artificial pupil. When a tumor forms in the iris it may sometimes be removed by a broad iridectomy. Where there is paralytic ectropion the patient should wear protective spectacles in the early stages, and in the latter the authors suggest the raising of the borders of the upper and lower lids from the lacrymal punctum inwards towards the canule, and the bringing together of the raw surfaces by suture—care being taken to avoid injuring the canaliculi. This has always proved successful where the inner half of the orbicular muscle is mostly affected. Where, however, there is complete paralytic ectropion it is sometimes necessary to repeat the same process at the outer canthus. A well-executed plate, showing the appearance of an eye before and after a successful operation, is appended.

W. F. N.

ART. XXXVI.—*Du Traitement des Rétrécissements de l'Urètre par la Dilatation Progressive.* Par T. B. CURTIS, Docteur en Médecine de la Faculté de Paris, etc. 8vo. pp. 111. Paris: J. B. Baillière et Fils, 1873.

DR. CURTIS, who is, we believe, a resident of Boston, Mass., maintains in this essay (to which was awarded the Civille prize for 1872) the superiority of dilatation over more heroic methods, as a general mode of treatment in cases of urethral stricture. We should have thought it hardly necessary to undertake the proof of this proposition, as dilatation is, so far as we know, given the first