The experiments regarding the degree of saturation of the air with water, were made with the same aspirator; but in the air expired from the nose the water was determined very carefully. It was found to contain 0.18 grams in 5 litres, which corresponds to a complete saturation; accordingly, the whole quantity of water which the air in respiration withdraws from the human body, and which amounts to about 500 grams, is taken from the mucous membrane of the nose, and the whole loss of heat brought about by the evaporation of that water has to be sustained by the nose, and does not lower the temperature of the lungs, as has generally been admitted by physiologists.

As to the retention in the nose of solid suspended matter, Aschenbrandt found, what is well known to everybody, that what he calls chemical dust-e.g., chloride of ammonia, freshly formed by bringing ammonia and hydrochloric acid together in gaseous form-is not retained in the nose. But when he made experiments with fine starch-powder, not a particle was found to pass through the nose; it was kept back, partly in the nose nostril through which the air entered into the nose, and partly in the naso-pharyngeal cavity.

To meet the objection that in his experiments the air passes consecutively through both nostrils, Aschenbrandt modified them in such a manner that the air was introduced through the mouth behind the soft palate by means of a large glass tube: he found the results very nearly the same.

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These experiments seem to have given a more definite proof than we had of the threefold function of the nose in respiration. They are a very welcome confirmation of the theory which regards respiration through the mouth as a source of danger to the whole respiratory system, an opinion which prevails more and more among those who have given their attention to the subject. (See Morell Mackenzie (German translation by Felix Semon), 2., p.517.)

Guye.

Amsterdam, November, 1886.

MANUEL PRATIQUE DES MALADIES DES FOSSES NASALES ET DE LA CAVITE NASO-PHARYNGIENNE, PAR J. MOURE. Paris: Octave Doin, 1886.

If a compilation is ever a desirable production-and for the sake of students we must allow it-the handbook before us can merit little but praise. Written with a terse, concise diction, such as is hardly possible in any but the French language, M. Moure obviously aims at placing before his reader the existing position of his subjects. While referring constantly to Continental authors (whose books and their dates, however, he seldom cites), he hardly does justice to himself in this his special branch of work. Occasionally, however, we have a refreshing assertion as to personal experience, which, perhaps, gains weight from its infrequency. Especially will be valued the author's remarks on atrophic rhinitis, and we grow hopeful from his emphatic assurance of the curability of ozaena (p.104); while two pages further on he promises us, at a future date, the results of his observations concerning the regeneration of the atrophied structures. Are we to infer that the turbinated bones are ever reproduced?

The section styled *Nevroses reflexes d'origine nasale* is interesting as an admirable resume of current experiences and opinions. But we are somewhat sur-

prised that while M. Moure shows considerable familiarity with American work, he seldom quotes an English author. In this very matter of nasal neuroses, one at least of our specialists might consider himself entitled to a passing notice, although on the Continent, as in America, his theories are apparently ignored.

The type is clear, and the illustrations are, for the most part, correct, but the index is quite insufficient, and the list of works referred to in the text is sadly incomplete. We can, however, cordially recommend the book to students and practitioners.

Greville Macdonald.

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LECTURES ON LEPRA, BY T. L. BIDENKAP. Christiania: Huseley Co.; London: Williams and Norgate. 1886.

According to Bidenkap the manifestation of leprosy in the nose, the pharynx, the mouth, the larynx is a frequent but late symptom in that form of leprosy which the author calls *lepra tuberosa* (this form, however, being rarely pure but mixed with the other-*lepra nervorum*). The eruptions in the mucous membranes of the organs just mentioned are the same as in the skin, viz., granulations, in which the characteristic bacillus *leprae*, discovered by Armauer Hausen, is always to be found on microscopical examination, and which is by most authors thought to be the cause of the disease. The leprous deposits in the organs here concerned are generally observed first on the soft palate and uvula, from whence they proceed forward in the form of infiltrations and tubers, reaching the back part of the hard palate and the alveolar process, forming often a wedge-shaped figure. They often also extend over the pillars of the fauces, the tonsils, which, however, never swell much towards the tongue, and the mucous membrane of the cheeks. The tubers formed in these parts, varying in size to that of a pea or more, have a much greater tendency to ulcerate than those of the skin, especially when the patient is cachectic.

Increased secretion and impaired breathing through the nose often indicate that the pituitary membrane is likewise affected. Here the destructive process develops much quicker, causing fetid discharge and large deficiencies of the septum, with consequent disfigurement of the nose, which forms a characteristic feature of the typical aspect of lepers.

The leprous symptoms of the larynx are generally later than the ones just mentioned, and the leprous products here are less destructive. The first symptom is hoarseness, but not unfrequently breathing becomes difficult. Tracheotomy has to be performed, which generally arrests asphyxia for a time. The epiglottitis is much swollen, as are also the vocal cords, which the author describes as having generally a tubercular, uneven, and reddish appearance.

Although the author's description of the leprous symptoms in the organs in which the readers of this journal are particularly interested is neither exhaustive, nor adds much to characterize the leprous deposits in these organs, the book, which is written in English and furnished with good coloured plates, is very interesting and worthy of attention.

Holger Mygind.